D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-3-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 70

Quality Assurance

Meter Name	Serial #:	Calibration: NO			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-28	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 15 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 13.08		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.): 16.92	1 casing volume (CV = LWC x C) (gals.): 2.7		3 casing volumes (3 x CV) (gals.): 8.12

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)		2.7	5.4	8.1				
Time (military)	0945	0950	0953	0955				
PH (s.u.)	5.81	5.29	6.15	6.11				
Specific Conductivity (µS/cm)	221.8	231.8	230.7	255.9				
Water Temperature (°C)	21.7	21.7	21.7	21.6				
Turbidity (NTU)	75.4	Over	Over	Over				
Dissolved Oxygen (mg/L)	3.84	4.49	5.55	6.09				

Sampling Data

Sampled By: BE, MP, WH	Sampling Time: 0955	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-3-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: WH, BE, MP
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: overcast	Ambient Air Temp (°F): 70

Quality Assurance

Meter Name	Serial #:	Calibration: NO			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-29	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 15 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 13.19		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 16.81	1 casing volume (CV = LWC x C) (gals.): 2.69		3 casing volumes (3 x CV) (gals.): 8.07

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)		2.69	5.38	8.07				
Time (military)	0930	0932	0935	0940				
~~PH (s.u.)~~	~~6.29~~	~~5.06~~	~~5.39~~	~~5.29~~				
Specific Conductivity (µS/cm)	192.2	179.4	205.0	183.7				
Water Temperature (°C)	21.8	21.6	21.7	21.3				
Turbidity (NTU)	26.1	500	252	333				
Dissolved Oxygen (mg/L)	5.42	5.40	5.75	5.15				

Sampling Data

Sampled By: BE, MP	Sampling Time: 0940	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-3-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: BE, WH, MP
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 70°

Quality Assurance

Meter Name	Serial #:	Calibration: No			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-30	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW	Screened Interval (ft.): 15 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 17.43		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)								
Time (military)	1020							
~~PH (s.u.)~~	6.22							
Specific Conductivity (µS/cm)	280.3							
Water Temperature (°C)	23.7							
Turbidity (NTU)	543							
Dissolved Oxygen (mg/L)	5.56							

Sampling Data

Sampled By: BE, WH	Sampling Time: 1020	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-3-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 70

Quality Assurance

Meter Name	Serial #:	Calibration: ~~Yes~~ Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0 (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-31	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 22.53		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)								
Time (military)	1140							
~~PH (s.u.)~~	4.94							
Specific Conductivity (µS/cm)	152.6							
Water Temperature (°C)	21.1							
Turbidity (NTU)	9.30							
Dissolved Oxygen (mg/L)	4.77							

Sampling Data

Sampled By: WH, BK	Sampling Time: 1140	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge

Signature: T. [illegible]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-2-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: WH, BE, MP
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 70°

Quality Assurance

Meter Name	Serial #:	Calibration: ~~N~~ Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-32	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 15 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 19.12		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)								
Time (military)	1030							
~~PH (s.u.)~~	6.13							
Specific Conductivity (µS/cm)	230.2							
Water Temperature (°C)	24.5							
Turbidity (NTU)	93.8							
Dissolved Oxygen (mg/L)	4.78							

Sampling Data

Sampled By: WH, BE	Sampling Time: 1030	Duplicate: Y or N	If yes, Duplicate Time:

Notes: No Purge

Signature: T. Wheeler

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-3-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 70

Quality Assurance

Meter Name	Serial #:	Calibration: ~~Yes~~ Yes, Normals			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-33	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
___MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 21.48		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)								
Time (military)	1040							
~~PH (s.u.)~~	5.54							
Specific Conductivity (µS/cm)	216.4							
Water Temperature (°C)	24.2							
Turbidity (NTU)	37.7							
Dissolved Oxygen (mg/L)	3.57							

Sampling Data

Sampled By: BE, WH	Sampling Time: 1040	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge

Signature: T. Ward

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-3-15	Site ID #: 07584	Site Name: Claud's Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: ~~Rain~~ Overcast	Ambient Air Temp (°F): 70

Quality Assurance

Meter Name	Serial #:	Calibration: ~~Yes~~ Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-31	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 22.38		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)								
Time (military)	1110							
PH (s.u.)	5.22							
Specific Conductivity (µS/cm)	134.0							
Water Temperature (°C)	23.1							
Turbidity (NTU)	34.9							
Dissolved Oxygen (mg/L)	3.48							

Sampling Data

Sampled By: BE, WH	Sampling Time: 1110	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Buried, No Purge

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-3-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 70

Quality Assurance

Meter Name	Serial #:	Calibration: ~~NO~~ Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-35	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ~~X~~ Bailer ___ Pump
~~X~~ MW ___ IW ___ RW ___ Other_____ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 21.37		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)								
Time (military)	1115							
~~PH (s.u.)~~	5.10							
Specific Conductivity (µS/cm)	235.7							
Water Temperature (°C)	23.4							
Turbidity (NTU)	26.7							
Dissolved Oxygen (mg/L)	2.96							

Sampling Data

Sampled By: BE, MP, WH	Sampling Time: 1115	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: J. Hall

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-3-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 70

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-36	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 15 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 21.36		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)								
Time (military)	1035							
~~PH (s.u.)~~	5.58							
Specific Conductivity (µS/cm)	257.8							
Water Temperature (°C)	24.4							
Turbidity (NTU)	68.5							
Dissolved Oxygen (mg/L)	1.76							

Sampling Data

Sampled By: BE, WH	Sampling Time: 1035	Duplicate: Y or N	If yes, Duplicate Time:

Notes: No Purge

Signature: T. [illegible]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-3-15	Site ID #: 07584	Site Name: Cloud's Chevron		Field Personnel: WH, BE, MP	
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast		Ambient Air Temp (°F): 70	

Quality Assurance

Meter Name	Serial #:	Calibration: ~~No~~ Yes			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-37	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 21.36		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)								
Time (military)	1130							
PH (s.u.)	5.39							
Specific Conductivity (µS/cm)	155.4							
Water Temperature (°C)	24.0							
Turbidity (NTU)	20.3							
Dissolved Oxygen (mg/L)	3.44							

Sampling Data

Sampled By: BE, WH	Sampling Time: 1130	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-03-15	Site ID #: 07584	Site Name: Clouds Chevron	Field Personnel: WA, BE, MP
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 70

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Midday			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-38	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW		Screened Interval (ft.): to 20' 35'	Total Well Depth (TWD) (ft.): 35'
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 22.69		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1545							
~~PH (s.u.)~~	5.3							
Specific Conductivity (µS/cm)	132							
Water Temperature (°C)	23.2							
Turbidity (NTU)	39.4							
Dissolved Oxygen (mg/L)	3.96							

Sampling Data

Sampled By: WA, BE, MP	Sampling Time: 1545	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: WH, MP, BE
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Raining	Ambient Air Temp (°F): 60

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-39	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 22.89		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	830							
~~PH (s.u.)~~	5.69							
Specific Conductivity (µS/cm)	42.1							
Water Temperature (°C)	22.1							
Turbidity (NTU)	26.9							
Dissolved Oxygen (mg/L)	3.68							

Sampling Data

Sampled By: BE, MP, WH	Sampling Time: 830	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge, No Bubs

Signature:

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Raining	Ambient Air Temp (°F): 60

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0 (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-40	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 23.43		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	840							
~~PH (s.u.)~~	5.58							
Specific Conductivity (µS/cm)	134.5							
Water Temperature (°C)	21.5							
Turbidity (NTU)	11.5							
Dissolved Oxygen (mg/L)	4.72							

Sampling Data

Sampled By: BE, MP, WH	Sampling Time: 840	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No purge

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-41	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 22.77		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	850							
~~PH (s.u.)~~	4.95							
Specific Conductivity (µS/cm)	47.8							
Water Temperature (°C)	22.0							
Turbidity (NTU)	13.4							
Dissolved Oxygen (mg/L)	4.68							

Sampling Data

Sampled By: BE, MP, WH	Sampling Time: 850	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15 | Site ID #: 07584 | Site Name: Cloud's Chevron | Field Personnel: BE, MP, WH

County: Richland | Project Manager: Dan Fisher | General Weather Conditions: Raining | Ambient Air Temp (°F): 60

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-42 | Well Diameter (ft.): 2 | Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652 | Method of Purging/Sample Collection: X Bailer ___Pump

X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW | Screened Interval (ft.): 20 to 35 | Total Well Depth (TWD) (ft.): 35

Depth to Free Product (DFP) (ft.): N/A | Depth to Groundwater (DGW) (ft.): 23.46 | Free Product Thickness (ft.): N/A

Length of water column (LWC = TWD – DGW) (ft.): | 1 casing volume (CV = LWC x C) (gals.): | 3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	845							
~~PH (s.u.)~~	5.34							
Specific Conductivity (µS/cm)	69.8							
Water Temperature (°C)	21.8							
Turbidity (NTU)	78.1							
Dissolved Oxygen (mg/L)	4.45							

Sampling Data

Sampled By: MP, BE, WH | Sampling Time: 845 | Duplicate: Y or (N) | If yes, Duplicate Time:

Notes: No Purge

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C. (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-43	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 40		Total Well Depth (TWD) (ft.): 40
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 22.21		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	915							
~~PH (s.u.)~~	7.01							
Specific Conductivity (µS/cm)	127.3							
Water Temperature (°C)	24.6							
Turbidity (NTU)	40.0							
Dissolved Oxygen (mg/L)	4.65							

Sampling Data

Sampled By: BE, MP, WH	Sampling Time: 915	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge

Signature: T. [illegible]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Clouds Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-44	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 16 to 31	Total Well Depth (TWD) (ft.): 31
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 20.33		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	920							
~~PH (s.u.)~~	4.36							
Specific Conductivity (µS/cm)	145.6							
Water Temperature (°C)	23.7							
Turbidity (NTU)	6.29							
Dissolved Oxygen (mg/L)	3.79							

Sampling Data

Sampled By:	Sampling Time: 920	Duplicate: Y or N	If yes, Duplicate Time:

Notes: No Purge

Signature: T. Rose

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Clouds Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C. Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-45	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW		Screened Interval (ft.): 15 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 19.45		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	925							
~~PH (s.u.)~~	6.48							
Specific Conductivity (µS/cm)	112.7							
Water Temperature (°C)	24.3							
Turbidity (NTU)	236							
Dissolved Oxygen (mg/L)	3.68							

Sampling Data

Sampled By:	Sampling Time: 926	Duplicate: Y or N	If yes, Duplicate Time:

Notes: No Purge

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07884	Site Name: Clouds Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-46	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 21.84		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	930							
~~PH (s.u.)~~	4.39							
Specific Conductivity (µS/cm)	140.1							
Water Temperature (°C)	23.7							
Turbidity (NTU)	73.0							
Dissolved Oxygen (mg/L)	3.95							

Sampling Data

Sampled By:	Sampling Time: 930	Duplicate: Y or N	If yes, Duplicate Time:

Notes: NO Purge

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Clouds Chevron	Field Personnel: MP, BE, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-51	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 21.87		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1050							
PH (s.u.)	8.42							
Specific Conductivity (µS/cm)	122.8							
Water Temperature (°C)	22.0							
Turbidity (NTU)	33.7							
Dissolved Oxygen (mg/L)	3.83							

Sampling Data

Sampled By:	Sampling Time: 1050	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Cloud's Chevron		Field Personnel: WH, MP, BE	
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast		Ambient Air Temp (°F): 65	

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-53	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
___MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW	Screened Interval (ft.): 5 to 20		Total Well Depth (TWD) (ft.): 20
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 8.49		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1105							
PH (s.u.)	7.73							
Specific Conductivity (µS/cm)	99.2							
Water Temperature (°C)	24.8							
Turbidity (NTU)	16.8							
Dissolved Oxygen (mg/L)	2.40							

Sampling Data

Sampled By:	Sampling Time: 1105	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Cloud's Chevron		Field Personnel: WH, MP, BE	
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast		Ambient Air Temp (°F): 65	

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0 (Y) or N	S.C. (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-55	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW		Screened Interval (ft.): 4 to 14	Total Well Depth (TWD) (ft.): 14
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 1.19		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 12.81	1 casing volume (CV = LWC x C) (gals.): 2.05		3 casing volumes (3 x CV) (gals.): 6.15

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	2.05	4.10	6.15				
Time (military)	1025	1027	1030	1035				
~~PH (s.u.)~~	6.17	6.21	6.21	6.44				
Specific Conductivity (µS/cm)	203.2	215.3	257.8	228.4				
Water Temperature (°C)	23.4	23.9	24.9	24.3				
Turbidity (NTU)	137	Over	Over	Over				
Dissolved Oxygen (mg/L)	2.18	2.51	2.06	2.46				

Sampling Data

Sampled By:	Sampling Time: 1035	Duplicate: (Y) or N	If yes, Duplicate Time: 1035

Notes: Dup 2

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65°

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-54	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW	Screened Interval (ft.): 5 to 20		Total Well Depth (TWD) (ft.): 20
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 9.83		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1040							
~~PH (s.u.)~~	6.17							
Specific Conductivity (µS/cm)	954							
Water Temperature (°C)	24.5							
Turbidity (NTU)	49.9							
Dissolved Oxygen (mg/L)	2.20							

Sampling Data

Sampled By:	Sampling Time: 1040	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07884	Site Name: Cloud's Chevron		Field Personnel: WH, BE, MP	
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast		Ambient Air Temp (°F): 65	

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C. (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-56	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 5 to 20		Total Well Depth (TWD) (ft.): 20
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 6.40		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1045							
~~PH (s.u.)~~	6.68							
Specific Conductivity (µS/cm)	244.0							
Water Temperature (°C)	24.2							
Turbidity (NTU)	994							
Dissolved Oxygen (mg/L)	1.62							

Sampling Data

Sampled By:	Sampling Time: 1045	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: T. [illegible]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: WH, MP, BE
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C. (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: MW-58	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 4 to 19		Total Well Depth (TWD) (ft.): 19
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 4.52		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1155							
PH (s.u.)	6.41							
Specific Conductivity (µS/cm)	40.1							
Water Temperature (°C)	20.8							
Turbidity (NTU)	67.5							
Dissolved Oxygen (mg/L)	2.40							

Sampling Data

Sampled By:	Sampling Time: 1155	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Clods Chevron	Field Personnel: UH, MP, BE
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 67

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-69	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 2 to 17	Total Well Depth (TWD) (ft.): 17
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 5.04		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1110							
PH (s.u.)	6.01							
Specific Conductivity (µS/cm)	449.2							
Water Temperature (°C)	21.9							
Turbidity (NTU)	35.1							
Dissolved Oxygen (mg/L)	2.55							

Sampling Data

Sampled By:	Sampling Time: 1110	Duplicate: Y or N	If yes, Duplicate Time:

Notes: ___

Signature: ___

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Clouds Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (A) or N	pH 7.0: (A) or N	pH 10.0: (A) or N	S.C. (A) or N
YSI 55 (Dissolved Oxygen)		(A) or N			
LaMotte (Turbidity)		0.0 NTU: (A) or N	1.0 NTU: (A) or N	10.0 NTU: (A) or N	

Well Information

Well ID: MW-63	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 22.72		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	915							
PH (s.u.)	6.03							
Specific Conductivity (µS/cm)	157.8							
Water Temperature (°C)	21.6							
Turbidity (NTU)	20.2							
Dissolved Oxygen (mg/L)	5.03							

Sampling Data

Sampled By:	Sampling Time: 915	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge

Signature: T. [illegible]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Clouds Chevron	Field Personnel: WH, MP, BK
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, MD day			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: DW-1	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 65 to 70		Total Well Depth (TWD) (ft.): 70
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 43.75		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 26.25	1 casing volume (CV = LWC x C) (gals.): 4.2		3 casing volumes (3 x CV) (gals.): 12.6

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.2	7.0-DRY					
Time (military)	1315	1325	1330					
PH (s.u.)	6.41	6.73	7.19					
Specific Conductivity (µS/cm)	86.3	76.3	87.9					
Water Temperature (°C)	22.1	22.2	22.1					
Turbidity (NTU)	8.20	161	OVER					
Dissolved Oxygen (mg/L)	2.23	2.26	2.03					

Sampling Data

Sampled By:	Sampling Time: 1330	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Clouds Chevron	Field Personnel: WH, MP, BE
County: Richland	Project Manager: Pam Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Midday			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW-2	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW	Screened Interval (ft.): 70 to 75		Total Well Depth (TWD) (ft.): 75
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 43.07		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 31.93	1 casing volume (CV = LWC x C) (gals.): 5.1		3 casing volumes (3 x CV) (gals.): 15.32

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	5.1	10.2	15.3				
Time (military)	1350	1355	1405	1415				
PH (s.u.)	5.59	6.55	7.12	6.85				
Specific Conductivity (µS/cm)	51.6	58.6	60.1	56.7				
Water Temperature (°C)	21.9	21.8	21.7	21.5				
Turbidity (NTU)	Over	Over	Over	Over				
Dissolved Oxygen (mg/L)	2.74	2.58	2.81	2.77				

Sampling Data

Sampled By:	Sampling Time: 1415	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

_____

_____ Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/03/15	Site ID #:	Site Name: Clouds - Chevron	Field Personnel: WH, BE, MJ
County:	Project Manager:	General Weather Conditions: Overcast / Rain	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning & Midday			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		Y or (N)			
LaMotte (Turbidity)		0.0 NTU (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: DW-3	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW	Screened Interval (ft.): 47 to 52		Total Well Depth (TWD) (ft.): 52
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 21.29		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 30.71	1 casing volume (CV = LWC x C) (gals.): 4.91		3 casing volumes (3 x CV) (gals.): 14.74

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.91 G	5.0 G	5.0 g				
Time (military)	1438	1445	1458	1508				
PH (s.u.)	6.52	6.32	6.11	6.24				
Specific Conductivity (µS/cm)	367.3	269.5	262.8	269.3				
Water Temperature (°C)	23.6	23.0	22.4	22.7				
Turbidity (NTU)	152	137	84.8	48.1				
Dissolved Oxygen (mg/L)	2.9	3.16	4.42	3.78				

Sampling Data

Sampled By: WH, BE, MP	Sampling Time: 1500	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/03/16	Site ID #:	Site Name: Clouds Chevron	Field Personnel: WH, BE, MP
County:	Project Manager:	General Weather Conditions: Overcast/Rain	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration: Yes. Midday			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N ORP			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: DW-4	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer X Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 105 to 110		Total Well Depth (TWD) (ft.): 110
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 43.34		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 66.66	1 casing volume (CV = LWC x C) (gals.): 10.67		3 casing volumes (3 x CV) (gals.): 32.01

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)								
Time (military)	1315	1415	1500	1540				
PH (s.u.)	8.56	6.57	6.09	5.91				
Specific Conductivity (µS/cm)	393.2	307.2	281	252.3				
Water Temperature (°C)	22.2	22.10	21.8	21.8				
Turbidity (NTU)	125	240	233	212				
Dissolved Oxygen (mg/L)	3.69	2.77	3.82	4.16				

Sampling Data

Sampled By: WH, BE, MP	Sampling Time: 1540	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Cloud's Chevron	Field Personnel: WH, BE, MP
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 60

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: DW-5	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 65 to 70		Total Well Depth (TWD) (ft.): 70
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 42.89		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 27.11	1 casing volume (CV = LWC x C) (gals.): 4.34		3 casing volumes (3 x CV) (gals.): 13.01

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)		4.34	2.0					
Time (military)	810	815	DRY					
PH (s.u.)	9.23	6.26						
Specific Conductivity (µS/cm)	194.2	146.2						
Water Temperature (°C)	21.5	21.3						
Turbidity (NTU)	115	79.1						
Dissolved Oxygen (mg/L)	3.40	3.47						

Sampling Data

Sampled By: WH, BE, MP	Sampling Time: 830	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Clouds Chevron	Field Personnel: WH, MP, BE
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: DW-6	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other_____ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 65 to 70		Total Well Depth (TWD) (ft.): 70
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 44.59		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 25.41	1 casing volume (CV = LWC x C) (gals.): 4.07		3 casing volumes (3 x CV) (gals.): 12.19

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.07	DRY					
Time (military)	855	900	905					
PH (s.u.)	5.54	6.09						
Specific Conductivity (µS/cm)	136.0	140.2						
Water Temperature (°C)	20.8	20.7						
Turbidity (NTU)	9.64	134						
Dissolved Oxygen (mg/L)	4.28	4.31						

Sampling Data

Sampled By: BR, MP, WH	Sampling Time: ~~905~~ 905	Duplicate: (Y) or N	If yes, Duplicate Time:

Notes: No Purge

Signature:

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Clouds Chevron	Field Personnel: WH, MP, BE
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C. Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW-7	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 50 to 55		Total Well Depth (TWD) (ft.): 55
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 22.97		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 32.03	1 casing volume (CV = LWC x C) (gals.): 5.12		3 casing volumes (3 x CV) (gals.): 15.36

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	5.12	10.24	15.36				
Time (military)	1050	1100	1105	1110				
PH (s.u.)	9.93	10.31	7.60	6.77				
Specific Conductivity (µS/cm)	549	410.0	155.4	153.9				
Water Temperature (°C)	22.3	22.2	22.1	22.0				
Turbidity (NTU)	Over	969	Over	Over				
Dissolved Oxygen (mg/L)	2.27	2.93	3.04	3.01				

Sampling Data

Sampled By:	Sampling Time: 1110	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Clouds Chevron	Field Personnel: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		(Y) or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: DW-8	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 50 to 55		Total Well Depth (TWD) (ft.): 55
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 19.43		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	DRY						
Time (military)	~~1138~~ 1140	~~1143~~ 1145						
PH (s.u.)	6.28	6.10						
Specific Conductivity (µS/cm)	108.0	110.2						
Water Temperature (°C)	19.8	19.8						
Turbidity (NTU)	75.2	Over						
Dissolved Oxygen (mg/L)	0.93	1.33						

Sampling Data

Sampled By:	Sampling Time: 1145	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11-4-15	Site ID #: 07584	Site Name: Clouds Chevron	Field Personnel: MP, BG, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Morning			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: ~~X~~ or N	pH 7.0: ~~X~~ or N	pH 10.0: ~~X~~ or N	S.C.: ~~X~~ or N
YSI 55 (Dissolved Oxygen)		~~X~~ or N			
LaMotte (Turbidity)		0.0 NTU: ~~X~~ or N	1.0 NTU: ~~X~~ or N	10.0 NTU: ~~X~~ or N	

Well Information

Well ID: DW-9	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW		Screened Interval (ft.): 60 to 65	Total Well Depth (TWD) (ft.): 65
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 23.62		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 41.38	1 casing volume (CV = LWC x C) (gals.): 6.62		3 casing volumes (3 x CV) (gals.): 19.86

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	6.62	13.24	19.86				
Time (military)	1120	1125	1130	1150				
PH (s.u.)	6.85	6.48	6.18	6.03				
Specific Conductivity (µS/cm)	46.1	37.8	93.3	67.9				
Water Temperature (°C)	20.6	20.4	20.7	20.7				
Turbidity (NTU)	82.0	80.7	218.1	153				
Dissolved Oxygen (mg/L)	2.01	1.47	1.38	4.72				

Sampling Data

Sampled By:	Sampling Time: 1150	Duplicate: Y or ~~N~~	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/03/15	Site ID #:	Site Name: Clouds Chevron	Field Personnel: WH, BE, MP
County:	Project Manager:	General Weather Conditions: Overcast	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration: Yes Morning & Midday			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: (Y) or N	pH 7.0: (Y) or N	pH 10.0: (Y) or N	S.C.: (Y) or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: (Y) or N	1.0 NTU: (Y) or N	10.0 NTU: (Y) or N	

Well Information

Well ID: PW-1R	Well Diameter (ft.): 4"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 45' to 50'		Total Well Depth (TWD) (ft.): 50'
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 21.14		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.): 28.86	1 casing volume (CV = LWC x C) (gals.): 18.81		3 casing volumes (3 x CV) (gals.): 56.45

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0.00	18.81	37.62	56.45				
Time (military)	1506	1527	1542	1600				
~~PH (s.u.)~~	5.79	6.04	6.08	5.54				
Specific Conductivity (µS/cm)	3.2	226.5	237.3	237.8				
Water Temperature (°C)	19.9	23.7	22.6	23.8				
Turbidity (NTU)	52.1	OOR	OOR	OOR				
Dissolved Oxygen (mg/L)	5.30	2.71	3.35	3.27				

Sampling Data

Sampled By: WH, BE, MP	Sampling Time: 1600	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

APPENDIX C

Groundwater Laboratory Analytical Report

CRAWFORD ENVIRONMENTAL SERVICES

ACCESS ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT

Crawford Environmental Services
15 Church Ave, SW
Roanoke VA 24011

ATTENTION
West Hubard

PROJECT ID
Cloud's Chevron

LABORATORY REPORT NUMBER
1511103

DATE
November 16, 2015

Primary Data Review By

Chantelle Kanhai
Project Manager, AES

Secondary Data Review By

Ashley Amick

Project Manager, Access Analytical
aamick@axs-inc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Analytical Environmental Services Inc. (AES Inc), 3080 Presidential Drive, Atlanta, GA 30340.**
- **AES is SCDHEC certified laboratory # 98016, NCDENR certified lab # 562, GA certified lab # FL-E87582, NELAP certified laboratory # E87582**
- Local support services for this project are provided by Access Analytical, Inc. Access Analytical is a representative of AES serving client in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll fee at 883.315.4243

Access Analytical - Chain of Custody Record

LAB USE ONLY

Project Work Order # 1511103

Sales Order # _____ PO # _____ Access Quote # _____ Laboratory ID: _____

Company Name: CRAWFORD ENV. | Preservative: (*see codes) 1 | Container Type: (*see codes) G

Report To: WEST HUBARD

Address: 15 CHURCH AVE SW

City: ROANOKE State: VA Zip: 24011

Phone: 540-343-6256 Fax: 540-343-6259

Email: whubard@crawfordenvironmental.com

Project ID: CLOUD'S CHEVRON

Sampled By: W. HUBARD, B. FEWING, M. PRICE

↓ REQUESTED LAB ANALYSIS →

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	# of containers collected per analysis	BTEX/MTBE/MOXY
MW-25	10-30-15	800	G	GW	SHW	3	3	3
MW-23		815						
MW-19		825						
MW-5AR		855						
MW-20		905						
MW-22		920						
MW-29		940						
MW-28		955						
MW-27		1015						
MW-30		1020						

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7478 Carlisle Street Phone: (803) 781-4243
Irmo, SC 29063 Fax: 781-4303
www.axs-inc.com

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*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

NOTES / COMMENTS
(if sample is a composite please use space below to note start/finish times & dates)

Turnaround Time:
X Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:
X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
T. [illegible]	J. Stutts	11-4-15	1540	LY ___N	___(°C)	___(N/A)
J. Stutts	FedEx	11-4-15	1700	LY ___N	___(°C)	___(N/A)
[illegible]	[illegible] (FedEx)	11/5/15	9:45 AM	Y ___N	3.6 (°C)	___(N/A)
				___Y ___N	___(°C)	___(N/A)

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Phone: 540-343-6256 Fax: 540-343-6259

Email: whubard@crawfordenvironmental.com

Project ID: CLOUD'S CHEVRON

Sampled By: W. HUBARD, B. EWING, M PRICE

↓ REQUESTED LAB ANALYSIS ↓ BTEX / MTBE

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	# of containers collected ↓ per analysis	
MW-32	11-3-15	1030	G	GW	SHW	3		3
MW-36		1035						
MW-33		1040						
MW-18		1050						
MW-34		1110						
MW-35		1115						
MW-37		1130						
MW-31		1140						
DW-3		1500						
DW-4		1540						

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Project Location:
X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
T. [illegible]	J. Stu	11-4-15	1540	✓Y ___N	___(°C)	___(N/A)
J. Stu	FedEx	11-4-15	1700	✓Y ___N	___(°C)	___(N/A)
[illegible]	[illegible] (FedEx)	11/5/15	9:45AM	✓Y ___N	3.6 (°C)	___(N/A)
				___Y ___N	___(°C)	___(N/A)

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Access Analytical - Chain of Custody Record

LAB USE ONLY

Sales Order # _____ PO # _____ Access Quote # _____

Project Work Order # ~~15710~~ MP 11/5

Laboratory ID: 1511103

Company Name: CRAWFORD ENV.

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City: ROANOKE State: VA Zip: 24011

Phone: 540-343-6256 Fax: 540-343-6259

Email: whubard@crawfordenvironmental.com

Project ID: CLOUD'S CHEVRON

Sampled By: W. HUBARD, B. EWING, M. PRICE

Preservative: (*see codes) 1

Container Type: (*see codes) G

REQUESTED LAB ANALYSIS: BTEX/N/M/OXY

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MW-38	11-3-15	1545	G	GW	SHW	3		3	
PW-1R	↓	1600	↓	↓	↓	↓			
DUP 1	↓	1600	↓	↓	↓	↓			
FIELD BLANK	↓	1615	↓	↓	↓	↓			
TRIP BLANK	↓		↓	↓	↓	↓			
DW-5	11-4-15	830	↓	↓	↓	↓			
MW-39	↓	830	↓	↓	↓	↓			
MW-40	↓	840	↓	↓	↓	↓			
MW-42	↓	845	↓	↓	↓	↓			
MW-41	↓	850	↓	↓	↓	↓			

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___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
[signature]	[signature]	11-4-15	1540	✓ Y ___ N	___ (°C)	___ (N/A)
[signature]	Fed Ex	11-4-15	1700	✓ Y ___ N	___ (°C)	___ (N/A)
	[signature] (FedEx)	11/5/15	9:45AM	✓ Y ___ N	3.6 (°C)	___ (N/A)
				___ Y ___ N	___ (°C)	___ (N/A)

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MW-67	11-4-15	855	G	GW	SHW	3		3
MW-70	↓	900	↓	↓	↓	↓		↓
DW-6	↓	905	↓	↓	↓	↓		↓
MW-43	↓	915	↓	↓	↓	↓		↓
MW-63	↓	915	↓	↓	↓	↓		↓
MW-44	↓	920	↓	↓	↓	↓		↓
MW-45	↓	925	↓	↓	↓	↓		↓
MW-46	↓	930	↓	↓	↓	↓		↓
MW-17	↓	935	↓	↓	↓	↓		↓
MW-16	↓	940	↓	↓	↓	↓		↓

NOTES / COMMENTS
(if sample is a composite please use space below to note start/finish times & dates)

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Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
[signature]	J. Stit	11-4-15	1540	✓Y ___N	___(°C)	___(N/A)
J. Stit	Fed Ex	11-4-15	1700	✓Y ___N	___(°C)	___(N/A)
	[signature] (Fed Ex)	11/5/15	9:45AM	✓Y ___N	3.6° (°C)	___(N/A)
				___Y ___N	___(°C)	___(N/A)

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MW-9	11-4-15	1010	G	GW	SHW	3		3	
MW-10	↓	1015	↓	↓	↓	↓		↓	
MW-13		1030							
MW-55		1035							
MW-54		1040							
MW-56		1045							
MW-51		1050							
MW-11		1100							
MW-53		1105							
MW-59	↓	1110	↓	↓	↓	↓		↓	

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Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
[signature]	J. Stit	11-4-15	1540	✓ Y ___ N	___ (°C)	___ (N/A)
J. Stit	Fed Ex	11-4-15	1700	✓ Y ___ N	___ (°C)	___ (N/A)
	[signature] (FedEx)	11/5/15	9:45 AM	✓ Y ___ N	3.6 (°C)	___ (N/A)
				___ Y ___ N	___ (°C)	___ (N/A)

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Project Work Order # 157103

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Preservative: (*see codes) 2

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DW-7	11-4-15	1110	G	GW	SHW	3		3	
MW-12	↓	1115	↓	↓	↓	↓			
DW-8	↓	1145	↓	↓	↓	↓			
DW-9	↓	1150	↓	↓	↓	↓			
MW-58	↓	1155	↓	↓	↓	↓			
SW-1	↓	1205	↓	↓	↓	↓			
MW-3	↓	1350	↓	↓	↓	↓			
MW-26	↓	1345	↓	↓	↓	↓			
MW-2	↓	1345	↓	↓	↓	↓			
MW-4	↓	1340	↓	↓	↓	↓			

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Preservative: (*see codes) 1

Container Type: (*see codes) G

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MW-8	11-4-15	1320	G	GW	SHW	3		3	
MW-7		1325							
DW-1		1330							
MW-6		1330							
DUPLICATE 2		1035							
FIELD BLANK 2		1430							
TRIP BLANK 2									
DW-2		1415							

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[signature]	J. Stit	11-4-15	1540	✓ Y ___ N	___ (°C)	___ (N/A)
J. Stit	Fed Ex	11-4-15	1700	✓ Y ___ N	___ (°C)	___ (N/A)
	[signature] (Fed Ex)	11/5/15	9:45AM	✓ Y ___ N	3.6 (°C)	___ (N/A)
				___ Y ___ N	___ (°C)	___ (N/A)

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Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project: Cloud's Chevron
Lab ID: 1511103

Case Narrative

Sample Receiving Nonconformance:

For sample "DW-1", one of the two vials was received broken. We proceeded with analysis using the remaining vial.

Sample ID "MW-42" is listed on the Chain of Custody, however sample ID "MW-40" was labeled on the vials. Sample collection date/time provided on the sample labels corresponded with the COC. Sample was identified according to the COC.

Volatile Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1511103-003, -004, -005, -006, -013, -014, -019, -022, -023, -039, -041 and -057 required dilution during preparation and/or analysis, resulting in elevated reporting limits.

Touene value for the QC samples 1511103-006AMS/MSD is "E" qualified indicating estimated value over linear calibration range due to the level of target analyte present in the unspiked sample.

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-25
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 8:00:00 AM
Lab ID:	1511103-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	14		0.30	1.0	ug/L	215758	1	11/12/2015 13:56	NP
Ethylbenzene	200		0.29	1.0	ug/L	215758	1	11/12/2015 13:56	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 13:56	NP
Naphthalene	340		22	250	ug/L	215758	50	11/11/2015 16:50	NP
Toluene	150		0.24	1.0	ug/L	215758	1	11/12/2015 13:56	NP
Xylenes, Total	2600		47	50	ug/L	215758	50	11/11/2015 16:50	NP
Surr: 4-Bromofluorobenzene	99.6		0	70-130	%REC	215758	50	11/11/2015 16:50	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	215758	1	11/12/2015 13:56	NP
Surr: Dibromofluoromethane	98.5		0	70-130	%REC	215758	50	11/11/2015 16:50	NP
Surr: Dibromofluoromethane	94		0	70-130	%REC	215758	1	11/12/2015 13:56	NP
Surr: Toluene-d8	97.4		0	70-130	%REC	215758	50	11/11/2015 16:50	NP
Surr: Toluene-d8	99.8		0	70-130	%REC	215758	1	11/12/2015 13:56	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 13:56	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 13:56	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 13:56	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 13:56	NP
tert-Amyl alcohol	390		29	100	ug/L	215758	1	11/12/2015 13:56	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 13:56	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 13:56	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 13:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-23
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 8:15:00 AM
Lab ID:	1511103-002	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	2.9		0.30	1.0	ug/L	215758	1	11/12/2015 00:21	NP
Ethylbenzene	1.5		0.29	1.0	ug/L	215758	1	11/12/2015 00:21	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 00:21	NP
Naphthalene	52		0.44	5.0	ug/L	215758	1	11/12/2015 00:21	NP
Toluene	8.5		0.24	1.0	ug/L	215758	1	11/12/2015 00:21	NP
Xylenes, Total	190		0.93	1.0	ug/L	215758	1	11/12/2015 00:21	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	215758	1	11/12/2015 00:21	NP
Surr: Dibromofluoromethane	99.4		0	70-130	%REC	215758	1	11/12/2015 00:21	NP
Surr: Toluene-d8	99.9		0	70-130	%REC	215758	1	11/12/2015 00:21	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 00:21	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 00:21	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 00:21	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 00:21	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215758	1	11/12/2015 00:21	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 00:21	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 00:21	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 00:21	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-19
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 8:25:00 AM
Lab ID:	1511103-003	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	2900		30	100	ug/L	215758	100	11/11/2015 03:06	NP
Ethylbenzene	720		29	100	ug/L	215758	100	11/11/2015 03:06	NP
Methyl tert-butyl ether	BRL		39	100	ug/L	215758	100	11/11/2015 03:06	NP
Naphthalene	1100		44	500	ug/L	215758	100	11/11/2015 03:06	NP
Toluene	19000		24	100	ug/L	215758	100	11/11/2015 03:06	NP
Xylenes, Total	17000		93	100	ug/L	215758	100	11/11/2015 03:06	NP
Surr: 4-Bromofluorobenzene	98.4		0	70-130	%REC	215758	100	11/11/2015 03:06	NP
Surr: Dibromofluoromethane	96.4		0	70-130	%REC	215758	100	11/11/2015 03:06	NP
Surr: Toluene-d8	95.8		0	70-130	%REC	215758	100	11/11/2015 03:06	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		3600	10000	ug/L	215758	100	11/11/2015 03:06	NP
Ethanol	BRL		4000	10000	ug/L	215758	100	11/11/2015 03:06	NP
Ethyl tert-butyl ether	BRL		290	10000	ug/L	215758	100	11/11/2015 03:06	NP
Isopropyl ether	BRL		300	1000	ug/L	215758	100	11/11/2015 03:06	NP
tert-Amyl alcohol	5400	J	2900	10000	ug/L	215758	100	11/11/2015 03:06	NP
tert-Amyl methyl ether	BRL		250	1000	ug/L	215758	100	11/11/2015 03:06	NP
tert-Butyl Alcohol	BRL		2800	10000	ug/L	215758	100	11/11/2015 03:06	NP
tert-Butyl formate	BRL		3900	10000	ug/L	215758	100	11/11/2015 03:06	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-5AR
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 8:55:00 AM
Lab ID:	1511103-004	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	5200		30	100	ug/L	215758	100	11/11/2015 03:29	NP
Ethylbenzene	810		29	100	ug/L	215758	100	11/11/2015 03:29	NP
Methyl tert-butyl ether	BRL		39	100	ug/L	215758	100	11/11/2015 03:29	NP
Naphthalene	580		44	500	ug/L	215758	100	11/11/2015 03:29	NP
Toluene	10000		24	100	ug/L	215758	100	11/11/2015 03:29	NP
Xylenes, Total	5300		93	100	ug/L	215758	100	11/11/2015 03:29	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	215758	100	11/11/2015 03:29	NP
Surr: Dibromofluoromethane	98.5		0	70-130	%REC	215758	100	11/11/2015 03:29	NP
Surr: Toluene-d8	97.7		0	70-130	%REC	215758	100	11/11/2015 03:29	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		3600	10000	ug/L	215758	100	11/11/2015 03:29	NP
Ethanol	BRL		4000	10000	ug/L	215758	100	11/11/2015 03:29	NP
Ethyl tert-butyl ether	BRL		290	10000	ug/L	215758	100	11/11/2015 03:29	NP
Isopropyl ether	BRL		300	1000	ug/L	215758	100	11/11/2015 03:29	NP
tert-Amyl alcohol	BRL		2900	10000	ug/L	215758	100	11/11/2015 03:29	NP
tert-Amyl methyl ether	BRL		250	1000	ug/L	215758	100	11/11/2015 03:29	NP
tert-Butyl Alcohol	BRL		2800	10000	ug/L	215758	100	11/11/2015 03:29	NP
tert-Butyl formate	BRL		3900	10000	ug/L	215758	100	11/11/2015 03:29	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-20
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 9:05:00 AM
Lab ID:	1511103-005	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	930		15	50	ug/L	215758	50	11/11/2015 17:14	NP
Ethylbenzene	1000		14	50	ug/L	215758	50	11/11/2015 17:14	NP
Methyl tert-butyl ether	BRL		20	50	ug/L	215758	50	11/11/2015 17:14	NP
Naphthalene	1400		22	250	ug/L	215758	50	11/11/2015 17:14	NP
Toluene	11000		24	100	ug/L	215758	100	11/12/2015 16:37	NP
Xylenes, Total	17000		47	50	ug/L	215758	50	11/11/2015 17:14	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	215758	50	11/11/2015 17:14	NP
Surr: 4-Bromofluorobenzene	97.2		0	70-130	%REC	215758	100	11/12/2015 16:37	NP
Surr: Dibromofluoromethane	97.8		0	70-130	%REC	215758	50	11/11/2015 17:14	NP
Surr: Dibromofluoromethane	96.9		0	70-130	%REC	215758	100	11/12/2015 16:37	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	215758	50	11/11/2015 17:14	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	215758	100	11/12/2015 16:37	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		1800	5000	ug/L	215758	50	11/11/2015 17:14	NP
Ethanol	BRL		2000	5000	ug/L	215758	50	11/11/2015 17:14	NP
Ethyl tert-butyl ether	BRL		140	5000	ug/L	215758	50	11/11/2015 17:14	NP
Isopropyl ether	BRL		150	500	ug/L	215758	50	11/11/2015 17:14	NP
tert-Amyl alcohol	BRL		1400	5000	ug/L	215758	50	11/11/2015 17:14	NP
tert-Amyl methyl ether	BRL		130	500	ug/L	215758	50	11/11/2015 17:14	NP
tert-Butyl Alcohol	BRL		1400	5000	ug/L	215758	50	11/11/2015 17:14	NP
tert-Butyl formate	BRL		1900	5000	ug/L	215758	50	11/11/2015 17:14	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-22
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 9:20:00 AM
Lab ID:	1511103-006	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	6400		30	100	ug/L	215758	100	11/11/2015 03:52	NP
Ethylbenzene	740		29	100	ug/L	215758	100	11/11/2015 03:52	NP
Methyl tert-butyl ether	BRL		39	100	ug/L	215758	100	11/11/2015 03:52	NP
Naphthalene	1000		44	500	ug/L	215758	100	11/11/2015 03:52	NP
Toluene	20000		120	500	ug/L	215758	500	11/11/2015 12:53	NP
Xylenes, Total	24000		93	100	ug/L	215758	100	11/11/2015 03:52	NP
Surr: 4-Bromofluorobenzene	98.2		0	70-130	%REC	215758	500	11/11/2015 12:53	NP
Surr: 4-Bromofluorobenzene	98.6		0	70-130	%REC	215758	100	11/11/2015 03:52	NP
Surr: Dibromofluoromethane	97.2		0	70-130	%REC	215758	500	11/11/2015 12:53	NP
Surr: Dibromofluoromethane	95.7		0	70-130	%REC	215758	100	11/11/2015 03:52	NP
Surr: Toluene-d8	97.4		0	70-130	%REC	215758	500	11/11/2015 12:53	NP
Surr: Toluene-d8	95.4		0	70-130	%REC	215758	100	11/11/2015 03:52	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		3600	10000	ug/L	215758	100	11/11/2015 03:52	NP
Ethanol	BRL		4000	10000	ug/L	215758	100	11/11/2015 03:52	NP
Ethyl tert-butyl ether	BRL		290	10000	ug/L	215758	100	11/11/2015 03:52	NP
Isopropyl ether	BRL		300	1000	ug/L	215758	100	11/11/2015 03:52	NP
tert-Amyl alcohol	3900	J	2900	10000	ug/L	215758	100	11/11/2015 03:52	NP
tert-Amyl methyl ether	BRL		250	1000	ug/L	215758	100	11/11/2015 03:52	NP
tert-Butyl Alcohol	BRL		2800	10000	ug/L	215758	100	11/11/2015 03:52	NP
tert-Butyl formate	BRL		3900	10000	ug/L	215758	100	11/11/2015 03:52	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-29
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 9:40:00 AM
Lab ID:	1511103-007	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215758	1	11/12/2015 00:45	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215758	1	11/12/2015 00:45	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 00:45	NP
Naphthalene	BRL		0.44	5.0	ug/L	215758	1	11/12/2015 00:45	NP
Toluene	BRL		0.24	1.0	ug/L	215758	1	11/12/2015 00:45	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215758	1	11/12/2015 00:45	NP
Surr: 4-Bromofluorobenzene	93.8		0	70-130	%REC	215758	1	11/12/2015 00:45	NP
Surr: Dibromofluoromethane	99.6		0	70-130	%REC	215758	1	11/12/2015 00:45	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	215758	1	11/12/2015 00:45	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 00:45	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 00:45	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 00:45	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 00:45	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215758	1	11/12/2015 00:45	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 00:45	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 00:45	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 00:45	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-28
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 9:55:00 AM
Lab ID:	1511103-008	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215758	1	11/12/2015 01:08	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215758	1	11/12/2015 01:08	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 01:08	NP
Naphthalene	BRL		0.44	5.0	ug/L	215758	1	11/12/2015 01:08	NP
Toluene	BRL		0.24	1.0	ug/L	215758	1	11/12/2015 01:08	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215758	1	11/12/2015 01:08	NP
Surr: 4-Bromofluorobenzene	97.6		0	70-130	%REC	215758	1	11/12/2015 01:08	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	215758	1	11/12/2015 01:08	NP
Surr: Toluene-d8	97.9		0	70-130	%REC	215758	1	11/12/2015 01:08	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 01:08	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 01:08	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 01:08	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 01:08	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215758	1	11/12/2015 01:08	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 01:08	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 01:08	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 01:08	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-27
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 10:15:00 AM
Lab ID:	1511103-009	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215758	1	11/12/2015 01:32	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215758	1	11/12/2015 01:32	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 01:32	NP
Naphthalene	BRL		0.44	5.0	ug/L	215758	1	11/12/2015 01:32	NP
Toluene	BRL		0.24	1.0	ug/L	215758	1	11/12/2015 01:32	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215758	1	11/12/2015 01:32	NP
Surr: 4-Bromofluorobenzene	98.2		0	70-130	%REC	215758	1	11/12/2015 01:32	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	215758	1	11/12/2015 01:32	NP
Surr: Toluene-d8	95.9		0	70-130	%REC	215758	1	11/12/2015 01:32	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 01:32	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 01:32	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 01:32	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 01:32	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215758	1	11/12/2015 01:32	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 01:32	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 01:32	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 01:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-30
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 10:20:00 AM
Lab ID:	1511103-010	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215758	1	11/12/2015 01:56	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215758	1	11/12/2015 01:56	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 01:56	NP
Naphthalene	BRL		0.44	5.0	ug/L	215758	1	11/12/2015 01:56	NP
Toluene	BRL		0.24	1.0	ug/L	215758	1	11/12/2015 01:56	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215758	1	11/12/2015 01:56	NP
Surr: 4-Bromofluorobenzene	98.7		0	70-130	%REC	215758	1	11/12/2015 01:56	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215758	1	11/12/2015 01:56	NP
Surr: Toluene-d8	98.4		0	70-130	%REC	215758	1	11/12/2015 01:56	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 01:56	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 01:56	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 01:56	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 01:56	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215758	1	11/12/2015 01:56	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 01:56	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 01:56	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 01:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-32
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 10:30:00 AM
Lab ID:	1511103-011	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215758	1	11/12/2015 02:20	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215758	1	11/12/2015 02:20	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 02:20	NP
Naphthalene	BRL		0.44	5.0	ug/L	215758	1	11/12/2015 02:20	NP
Toluene	BRL		0.24	1.0	ug/L	215758	1	11/12/2015 02:20	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215758	1	11/12/2015 02:20	NP
Surr: 4-Bromofluorobenzene	97.6		0	70-130	%REC	215758	1	11/12/2015 02:20	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	215758	1	11/12/2015 02:20	NP
Surr: Toluene-d8	98.4		0	70-130	%REC	215758	1	11/12/2015 02:20	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 02:20	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 02:20	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 02:20	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 02:20	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215758	1	11/12/2015 02:20	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 02:20	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 02:20	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 02:20	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-36
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 10:35:00 AM
Lab ID:	1511103-012	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	0.74	J	0.30	1.0	ug/L	215758	1	11/12/2015 13:08	NP
Ethylbenzene	1.6		0.29	1.0	ug/L	215758	1	11/12/2015 13:08	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 13:08	NP
Naphthalene	16		0.44	5.0	ug/L	215758	1	11/12/2015 13:08	NP
Toluene	BRL		0.24	1.0	ug/L	215758	1	11/12/2015 13:08	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215758	1	11/12/2015 13:08	NP
Surr: 4-Bromofluorobenzene	99.1		0	70-130	%REC	215758	1	11/12/2015 13:08	NP
Surr: Dibromofluoromethane	99.3		0	70-130	%REC	215758	1	11/12/2015 13:08	NP
Surr: Toluene-d8	99.3		0	70-130	%REC	215758	1	11/12/2015 13:08	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 13:08	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 13:08	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 13:08	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 13:08	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215758	1	11/12/2015 13:08	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 13:08	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 13:08	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 13:08	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-33
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 10:40:00 AM
Lab ID:	1511103-013	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	240		15	50	ug/L	215758	50	11/11/2015 17:38	NP
Ethylbenzene	1600		14	50	ug/L	215758	50	11/11/2015 17:38	NP
Methyl tert-butyl ether	BRL		20	50	ug/L	215758	50	11/11/2015 17:38	NP
Naphthalene	430		22	250	ug/L	215758	50	11/11/2015 17:38	NP
Toluene	7500		12	50	ug/L	215758	50	11/11/2015 17:38	NP
Xylenes, Total	11000		47	50	ug/L	215758	50	11/11/2015 17:38	NP
Surr: 4-Bromofluorobenzene	95		0	70-130	%REC	215758	50	11/11/2015 17:38	NP
Surr: Dibromofluoromethane	98.2		0	70-130	%REC	215758	50	11/11/2015 17:38	NP
Surr: Toluene-d8	97.6		0	70-130	%REC	215758	50	11/11/2015 17:38	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		1800	5000	ug/L	215758	50	11/11/2015 17:38	NP
Ethanol	BRL		2000	5000	ug/L	215758	50	11/11/2015 17:38	NP
Ethyl tert-butyl ether	BRL		140	5000	ug/L	215758	50	11/11/2015 17:38	NP
Isopropyl ether	BRL		150	500	ug/L	215758	50	11/11/2015 17:38	NP
tert-Amyl alcohol	BRL		1400	5000	ug/L	215758	50	11/11/2015 17:38	NP
tert-Amyl methyl ether	BRL		130	500	ug/L	215758	50	11/11/2015 17:38	NP
tert-Butyl Alcohol	BRL		1400	5000	ug/L	215758	50	11/11/2015 17:38	NP
tert-Butyl formate	BRL		1900	5000	ug/L	215758	50	11/11/2015 17:38	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-18
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 10:50:00 AM
Lab ID:	1511103-014	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	990		30	100	ug/L	215758	100	11/11/2015 16:02	NP
Ethylbenzene	600		29	100	ug/L	215758	100	11/11/2015 16:02	NP
Methyl tert-butyl ether	93	J	39	100	ug/L	215758	100	11/11/2015 16:02	NP
Naphthalene	260	J	44	500	ug/L	215758	100	11/11/2015 16:02	NP
Toluene	5800		24	100	ug/L	215758	100	11/11/2015 16:02	NP
Xylenes, Total	8900		93	100	ug/L	215758	100	11/11/2015 16:02	NP
Surr: 4-Bromofluorobenzene	98.7		0	70-130	%REC	215758	100	11/11/2015 16:02	NP
Surr: Dibromofluoromethane	95.4		0	70-130	%REC	215758	100	11/11/2015 16:02	NP
Surr: Toluene-d8	96.7		0	70-130	%REC	215758	100	11/11/2015 16:02	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		3600	10000	ug/L	215758	100	11/11/2015 16:02	NP
Ethanol	BRL		4000	10000	ug/L	215758	100	11/11/2015 16:02	NP
Ethyl tert-butyl ether	BRL		290	10000	ug/L	215758	100	11/11/2015 16:02	NP
Isopropyl ether	BRL		300	1000	ug/L	215758	100	11/11/2015 16:02	NP
tert-Amyl alcohol	BRL		2900	10000	ug/L	215758	100	11/11/2015 16:02	NP
tert-Amyl methyl ether	BRL		250	1000	ug/L	215758	100	11/11/2015 16:02	NP
tert-Butyl Alcohol	BRL		2800	10000	ug/L	215758	100	11/11/2015 16:02	NP
tert-Butyl formate	BRL		3900	10000	ug/L	215758	100	11/11/2015 16:02	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-34
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 11:10:00 AM
Lab ID:	1511103-015	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215758	1	11/12/2015 02:44	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215758	1	11/12/2015 02:44	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 02:44	NP
Naphthalene	BRL		0.44	5.0	ug/L	215758	1	11/12/2015 02:44	NP
Toluene	BRL		0.24	1.0	ug/L	215758	1	11/12/2015 02:44	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215758	1	11/12/2015 02:44	NP
Surr: 4-Bromofluorobenzene	96.5		0	70-130	%REC	215758	1	11/12/2015 02:44	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	215758	1	11/12/2015 02:44	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	215758	1	11/12/2015 02:44	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 02:44	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 02:44	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 02:44	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 02:44	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215758	1	11/12/2015 02:44	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 02:44	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 02:44	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 02:44	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-35
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 11:15:00 AM
Lab ID:	1511103-016	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	1900		6.0	20	ug/L	215758	20	11/11/2015 18:25	NP
Ethylbenzene	1100		5.8	20	ug/L	215758	20	11/11/2015 18:25	NP
Methyl tert-butyl ether	84		0.39	1.0	ug/L	215758	1	11/12/2015 15:06	NP
Naphthalene	530		8.8	100	ug/L	215758	20	11/11/2015 18:25	NP
Toluene	2200		4.8	20	ug/L	215758	20	11/11/2015 18:25	NP
Xylenes, Total	3300		19	20	ug/L	215758	20	11/11/2015 18:25	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	215758	20	11/11/2015 18:25	NP
Surr: 4-Bromofluorobenzene	95.5		0	70-130	%REC	215758	1	11/12/2015 15:06	NP
Surr: Dibromofluoromethane	92.2		0	70-130	%REC	215758	1	11/12/2015 15:06	NP
Surr: Dibromofluoromethane	99		0	70-130	%REC	215758	20	11/11/2015 18:25	NP
Surr: Toluene-d8	99.7		0	70-130	%REC	215758	1	11/12/2015 15:06	NP
Surr: Toluene-d8	98.6		0	70-130	%REC	215758	20	11/11/2015 18:25	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 15:06	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 15:06	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 15:06	NP
Isopropyl ether	140		3.0	10	ug/L	215758	1	11/12/2015 15:06	NP
tert-Amyl alcohol	2300		29	100	ug/L	215758	1	11/12/2015 15:06	NP
tert-Amyl methyl ether	28		2.5	10	ug/L	215758	1	11/12/2015 15:06	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 15:06	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 15:06	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-37
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 11:30:00 AM
Lab ID:	1511103-017	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	3.5		0.30	1.0	ug/L	215758	1	11/12/2015 03:07	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215758	1	11/12/2015 03:07	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 03:07	NP
Naphthalene	5.5		0.44	5.0	ug/L	215758	1	11/12/2015 03:07	NP
Toluene	BRL		0.24	1.0	ug/L	215758	1	11/12/2015 03:07	NP
Xylenes, Total	5.4		0.93	1.0	ug/L	215758	1	11/12/2015 03:07	NP
Surr: 4-Bromofluorobenzene	96.2		0	70-130	%REC	215758	1	11/12/2015 03:07	NP
Surr: Dibromofluoromethane	99.5		0	70-130	%REC	215758	1	11/12/2015 03:07	NP
Surr: Toluene-d8	100		0	70-130	%REC	215758	1	11/12/2015 03:07	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 03:07	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 03:07	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 03:07	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 03:07	NP
tert-Amyl alcohol	77	J	29	100	ug/L	215758	1	11/12/2015 03:07	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 03:07	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 03:07	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 03:07	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-31
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 11:40:00 AM
Lab ID:	1511103-018	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215758	1	11/12/2015 03:31	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215758	1	11/12/2015 03:31	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 03:31	NP
Naphthalene	BRL		0.44	5.0	ug/L	215758	1	11/12/2015 03:31	NP
Toluene	BRL		0.24	1.0	ug/L	215758	1	11/12/2015 03:31	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215758	1	11/12/2015 03:31	NP
Surr: 4-Bromofluorobenzene	97.5		0	70-130	%REC	215758	1	11/12/2015 03:31	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	215758	1	11/12/2015 03:31	NP
Surr: Toluene-d8	97.3		0	70-130	%REC	215758	1	11/12/2015 03:31	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 03:31	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 03:31	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 03:31	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 03:31	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215758	1	11/12/2015 03:31	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 03:31	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 03:31	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 03:31	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-3
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 3:00:00 PM
Lab ID:	1511103-019	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	4300		30	100	ug/L	215758	100	11/12/2015 17:01	NP
Ethylbenzene	2300		5.8	20	ug/L	215758	20	11/11/2015 18:49	NP
Methyl tert-butyl ether	230		7.9	20	ug/L	215758	20	11/11/2015 18:49	NP
Naphthalene	800		8.8	100	ug/L	215758	20	11/11/2015 18:49	NP
Toluene	16000		24	100	ug/L	215758	100	11/12/2015 17:01	NP
Xylenes, Total	11000		93	100	ug/L	215758	100	11/12/2015 17:01	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	215758	20	11/11/2015 18:49	NP
Surr: 4-Bromofluorobenzene	96.5		0	70-130	%REC	215758	100	11/12/2015 17:01	NP
Surr: Dibromofluoromethane	96.3		0	70-130	%REC	215758	100	11/12/2015 17:01	NP
Surr: Dibromofluoromethane	96.2		0	70-130	%REC	215758	20	11/11/2015 18:49	NP
Surr: Toluene-d8	97.5		0	70-130	%REC	215758	100	11/12/2015 17:01	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	215758	20	11/11/2015 18:49	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		720	2000	ug/L	215758	20	11/11/2015 18:49	NP
Ethanol	BRL		790	2000	ug/L	215758	20	11/11/2015 18:49	NP
Ethyl tert-butyl ether	BRL		57	2000	ug/L	215758	20	11/11/2015 18:49	NP
Isopropyl ether	240		60	200	ug/L	215758	20	11/11/2015 18:49	NP
tert-Amyl alcohol	2600		580	2000	ug/L	215758	20	11/11/2015 18:49	NP
tert-Amyl methyl ether	50	J	50	200	ug/L	215758	20	11/11/2015 18:49	NP
tert-Butyl Alcohol	BRL		560	2000	ug/L	215758	20	11/11/2015 18:49	NP
tert-Butyl formate	BRL		770	2000	ug/L	215758	20	11/11/2015 18:49	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-4
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 3:40:00 PM
Lab ID:	1511103-020	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215758	1	11/12/2015 03:54	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215758	1	11/12/2015 03:54	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215758	1	11/12/2015 03:54	NP
Naphthalene	BRL		0.44	5.0	ug/L	215758	1	11/12/2015 03:54	NP
Toluene	BRL		0.24	1.0	ug/L	215758	1	11/12/2015 03:54	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215758	1	11/12/2015 03:54	NP
Surr: 4-Bromofluorobenzene	97.1		0	70-130	%REC	215758	1	11/12/2015 03:54	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	215758	1	11/12/2015 03:54	NP
Surr: Toluene-d8	96.8		0	70-130	%REC	215758	1	11/12/2015 03:54	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215758	1	11/12/2015 03:54	NP
Ethanol	BRL		40	100	ug/L	215758	1	11/12/2015 03:54	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215758	1	11/12/2015 03:54	NP
Isopropyl ether	BRL		3.0	10	ug/L	215758	1	11/12/2015 03:54	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215758	1	11/12/2015 03:54	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215758	1	11/12/2015 03:54	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215758	1	11/12/2015 03:54	NP
tert-Butyl formate	BRL		39	100	ug/L	215758	1	11/12/2015 03:54	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-38
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 3:45:00 PM
Lab ID:	1511103-021	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 04:18	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 04:18	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 04:18	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 04:18	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 04:18	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 04:18	NP
Surr: 4-Bromofluorobenzene	99.5		0	70-130	%REC	215769	1	11/12/2015 04:18	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	215769	1	11/12/2015 04:18	NP
Surr: Toluene-d8	99.9		0	70-130	%REC	215769	1	11/12/2015 04:18	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 04:18	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 04:18	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 04:18	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 04:18	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 04:18	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 04:18	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 04:18	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 04:18	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	PW-1R
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 4:00:00 PM
Lab ID:	1511103-022	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	830		150	500	ug/L	215769	500	11/11/2015 13:17	NP
Ethylbenzene	1200		140	500	ug/L	215769	500	11/11/2015 13:17	NP
Methyl tert-butyl ether	BRL		200	500	ug/L	215769	500	11/11/2015 13:17	NP
Naphthalene	600	J	220	2500	ug/L	215769	500	11/11/2015 13:17	NP
Toluene	20000		120	500	ug/L	215769	500	11/11/2015 13:17	NP
Xylenes, Total	14000		470	500	ug/L	215769	500	11/11/2015 13:17	NP
Surr: 4-Bromofluorobenzene	95.1		0	70-130	%REC	215769	500	11/11/2015 13:17	NP
Surr: Dibromofluoromethane	98.2		0	70-130	%REC	215769	500	11/11/2015 13:17	NP
Surr: Toluene-d8	94.6		0	70-130	%REC	215769	500	11/11/2015 13:17	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		18000	50000	ug/L	215769	500	11/11/2015 13:17	NP
Ethanol	BRL		20000	50000	ug/L	215769	500	11/11/2015 13:17	NP
Ethyl tert-butyl ether	BRL		1400	50000	ug/L	215769	500	11/11/2015 13:17	NP
Isopropyl ether	BRL		1500	5000	ug/L	215769	500	11/11/2015 13:17	NP
tert-Amyl alcohol	BRL		14000	50000	ug/L	215769	500	11/11/2015 13:17	NP
tert-Amyl methyl ether	BRL		1300	5000	ug/L	215769	500	11/11/2015 13:17	NP
tert-Butyl Alcohol	BRL		14000	50000	ug/L	215769	500	11/11/2015 13:17	NP
tert-Butyl formate	BRL		19000	50000	ug/L	215769	500	11/11/2015 13:17	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 1
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 4:00:00 PM
Lab ID:	1511103-023	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	930		150	500	ug/L	215769	500	11/11/2015 15:39	NP
Ethylbenzene	1400		140	500	ug/L	215769	500	11/11/2015 15:39	NP
Methyl tert-butyl ether	BRL		200	500	ug/L	215769	500	11/11/2015 15:39	NP
Naphthalene	910	J	220	2500	ug/L	215769	500	11/11/2015 15:39	NP
Toluene	24000		120	500	ug/L	215769	500	11/11/2015 15:39	NP
Xylenes, Total	14000		470	500	ug/L	215769	500	11/11/2015 15:39	NP
Surr: 4-Bromofluorobenzene	96		0	70-130	%REC	215769	500	11/11/2015 15:39	NP
Surr: Dibromofluoromethane	97.8		0	70-130	%REC	215769	500	11/11/2015 15:39	NP
Surr: Toluene-d8	97.5		0	70-130	%REC	215769	500	11/11/2015 15:39	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		18000	50000	ug/L	215769	500	11/11/2015 15:39	NP
Ethanol	BRL		20000	50000	ug/L	215769	500	11/11/2015 15:39	NP
Ethyl tert-butyl ether	BRL		1400	50000	ug/L	215769	500	11/11/2015 15:39	NP
Isopropyl ether	BRL		1500	5000	ug/L	215769	500	11/11/2015 15:39	NP
tert-Amyl alcohol	22000	J	14000	50000	ug/L	215769	500	11/11/2015 15:39	NP
tert-Amyl methyl ether	BRL		1300	5000	ug/L	215769	500	11/11/2015 15:39	NP
tert-Butyl Alcohol	35000	J	14000	50000	ug/L	215769	500	11/11/2015 15:39	NP
tert-Butyl formate	BRL		19000	50000	ug/L	215769	500	11/11/2015 15:39	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	Field Blank
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015 4:15:00 PM
Lab ID:	1511103-024	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/11/2015 23:33	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/11/2015 23:33	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/11/2015 23:33	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/11/2015 23:33	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/11/2015 23:33	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/11/2015 23:33	NP
Surr: 4-Bromofluorobenzene	95.9		0	70-130	%REC	215769	1	11/11/2015 23:33	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	215769	1	11/11/2015 23:33	NP
Surr: Toluene-d8	95.8		0	70-130	%REC	215769	1	11/11/2015 23:33	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/11/2015 23:33	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/11/2015 23:33	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/11/2015 23:33	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/11/2015 23:33	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/11/2015 23:33	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/11/2015 23:33	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/11/2015 23:33	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/11/2015 23:33	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	Trip Blank
Project Name:	Cloud's Chevron	**Collection Date:**	11/3/2015
Lab ID:	1511103-025	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/11/2015 23:57	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/11/2015 23:57	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/11/2015 23:57	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/11/2015 23:57	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/11/2015 23:57	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/11/2015 23:57	NP
Surr: 4-Bromofluorobenzene	98.1		0	70-130	%REC	215769	1	11/11/2015 23:57	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215769	1	11/11/2015 23:57	NP
Surr: Toluene-d8	97.7		0	70-130	%REC	215769	1	11/11/2015 23:57	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/11/2015 23:57	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/11/2015 23:57	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/11/2015 23:57	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/11/2015 23:57	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/11/2015 23:57	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/11/2015 23:57	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/11/2015 23:57	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/11/2015 23:57	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-5
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 8:30:00 AM
Lab ID:	1511103-026	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	5900		15	50	ug/L	215769	50	11/12/2015 17:25	NP
Ethylbenzene	200		0.29	1.0	ug/L	215769	1	11/12/2015 04:41	NP
Methyl tert-butyl ether	1100		20	50	ug/L	215769	50	11/12/2015 17:25	NP
Naphthalene	170		4.4	50	ug/L	215769	10	11/13/2015 12:06	NP
Toluene	490		12	50	ug/L	215769	50	11/12/2015 17:25	NP
Xylenes, Total	1800		47	50	ug/L	215769	50	11/12/2015 17:25	NP
Surr: 4-Bromofluorobenzene	97.1		0	70-130	%REC	215769	50	11/12/2015 17:25	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	215769	1	11/12/2015 04:41	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	215769	10	11/13/2015 12:06	NP
Surr: Dibromofluoromethane	98.6		0	70-130	%REC	215769	50	11/12/2015 17:25	NP
Surr: Dibromofluoromethane	94.8		0	70-130	%REC	215769	1	11/12/2015 04:41	NP
Surr: Dibromofluoromethane	97.2		0	70-130	%REC	215769	10	11/13/2015 12:06	NP
Surr: Toluene-d8	99.8		0	70-130	%REC	215769	50	11/12/2015 17:25	NP
Surr: Toluene-d8	98.2		0	70-130	%REC	215769	10	11/13/2015 12:06	NP
Surr: Toluene-d8	101		0	70-130	%REC	215769	1	11/12/2015 04:41	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 04:41	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 04:41	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 04:41	NP
Isopropyl ether	650		3.0	10	ug/L	215769	1	11/12/2015 04:41	NP
tert-Amyl alcohol	4800		29	100	ug/L	215769	1	11/12/2015 04:41	NP
tert-Amyl methyl ether	89		2.5	10	ug/L	215769	1	11/12/2015 04:41	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 04:41	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 04:41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-39
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 8:30:00 AM
Lab ID:	1511103-027	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 12:22	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 12:22	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 12:22	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 12:22	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 12:22	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 12:22	NP
Surr: 4-Bromofluorobenzene	98.3		0	70-130	%REC	215769	1	11/12/2015 12:22	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	215769	1	11/12/2015 12:22	NP
Surr: Toluene-d8	97.5		0	70-130	%REC	215769	1	11/12/2015 12:22	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 12:22	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 12:22	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 12:22	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 12:22	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 12:22	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 12:22	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 12:22	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 12:22	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-40
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 8:40:00 AM
Lab ID:	1511103-028	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	0.51	J	0.30	1.0	ug/L	215769	1	11/12/2015 05:29	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 05:29	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 05:29	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 05:29	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 05:29	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 05:29	NP
Surr: 4-Bromofluorobenzene	97.4		0	70-130	%REC	215769	1	11/12/2015 05:29	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	215769	1	11/12/2015 05:29	NP
Surr: Toluene-d8	97		0	70-130	%REC	215769	1	11/12/2015 05:29	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 05:29	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 05:29	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 05:29	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 05:29	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 05:29	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 05:29	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 05:29	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 05:29	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-42
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 8:45:00 AM
Lab ID:	1511103-029	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 05:53	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 05:53	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 05:53	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 05:53	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 05:53	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 05:53	NP
Surr: 4-Bromofluorobenzene	96.1		0	70-130	%REC	215769	1	11/12/2015 05:53	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	215769	1	11/12/2015 05:53	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	215769	1	11/12/2015 05:53	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 05:53	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 05:53	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 05:53	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 05:53	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 05:53	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 05:53	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 05:53	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 05:53	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-41
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 8:50:00 AM
Lab ID:	1511103-030	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 06:17	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 06:17	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 06:17	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 06:17	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 06:17	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 06:17	NP
Surr: 4-Bromofluorobenzene	92.8		0	70-130	%REC	215769	1	11/12/2015 06:17	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215769	1	11/12/2015 06:17	NP
Surr: Toluene-d8	95.4		0	70-130	%REC	215769	1	11/12/2015 06:17	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 06:17	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 06:17	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 06:17	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 06:17	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 06:17	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 06:17	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 06:17	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 06:17	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-67
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 8:55:00 AM
Lab ID:	1511103-031	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 06:40	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 06:40	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 06:40	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 06:40	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 06:40	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 06:40	NP
Surr: 4-Bromofluorobenzene	96.2		0	70-130	%REC	215769	1	11/12/2015 06:40	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215769	1	11/12/2015 06:40	NP
Surr: Toluene-d8	98.2		0	70-130	%REC	215769	1	11/12/2015 06:40	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 06:40	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 06:40	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 06:40	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 06:40	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 06:40	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 06:40	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 06:40	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 06:40	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-70
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 9:00:00 AM
Lab ID:	1511103-032	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 09:27	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 09:27	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 09:27	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 09:27	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 09:27	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 09:27	NP
Surr: 4-Bromofluorobenzene	96		0	70-130	%REC	215769	1	11/12/2015 09:27	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215769	1	11/12/2015 09:27	NP
Surr: Toluene-d8	98.1		0	70-130	%REC	215769	1	11/12/2015 09:27	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 09:27	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 09:27	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 09:27	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 09:27	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 09:27	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 09:27	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 09:27	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 09:27	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-6
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 9:05:00 AM
Lab ID:	1511103-033	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 07:04	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 07:04	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 07:04	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 07:04	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 07:04	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 07:04	NP
Surr: 4-Bromofluorobenzene	98.1		0	70-130	%REC	215769	1	11/12/2015 07:04	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	215769	1	11/12/2015 07:04	NP
Surr: Toluene-d8	97.2		0	70-130	%REC	215769	1	11/12/2015 07:04	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 07:04	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 07:04	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 07:04	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 07:04	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 07:04	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 07:04	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 07:04	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 07:04	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-43
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 9:15:00 AM
Lab ID:	1511103-034	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 07:28	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 07:28	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 07:28	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 07:28	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 07:28	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 07:28	NP
Surr: 4-Bromofluorobenzene	95.7		0	70-130	%REC	215769	1	11/12/2015 07:28	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	215769	1	11/12/2015 07:28	NP
Surr: Toluene-d8	98.8		0	70-130	%REC	215769	1	11/12/2015 07:28	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 07:28	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 07:28	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 07:28	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 07:28	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 07:28	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 07:28	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 07:28	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 07:28	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-63
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 9:15:00 AM
Lab ID:	1511103-035	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 07:52	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 07:52	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 07:52	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 07:52	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 07:52	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 07:52	NP
Surr: 4-Bromofluorobenzene	92.9		0	70-130	%REC	215769	1	11/12/2015 07:52	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215769	1	11/12/2015 07:52	NP
Surr: Toluene-d8	98.1		0	70-130	%REC	215769	1	11/12/2015 07:52	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 07:52	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 07:52	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 07:52	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 07:52	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 07:52	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 07:52	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 07:52	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 07:52	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-44
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 9:20:00 AM
Lab ID:	1511103-036	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 08:15	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 08:15	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 08:15	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 08:15	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 08:15	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 08:15	NP
Surr: 4-Bromofluorobenzene	98.3		0	70-130	%REC	215769	1	11/12/2015 08:15	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215769	1	11/12/2015 08:15	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	215769	1	11/12/2015 08:15	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 08:15	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 08:15	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 08:15	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 08:15	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 08:15	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 08:15	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 08:15	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 08:15	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-45
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 9:25:00 AM
Lab ID:	1511103-037	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 08:39	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 08:39	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 08:39	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 08:39	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 08:39	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 08:39	NP
Surr: 4-Bromofluorobenzene	97.8		0	70-130	%REC	215769	1	11/12/2015 08:39	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	215769	1	11/12/2015 08:39	NP
Surr: Toluene-d8	97.8		0	70-130	%REC	215769	1	11/12/2015 08:39	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 08:39	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 08:39	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 08:39	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 08:39	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 08:39	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 08:39	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 08:39	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 08:39	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-46
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 9:30:00 AM
Lab ID:	1511103-038	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 09:03	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 09:03	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 09:03	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 09:03	NP
Toluene	BRL		0.24	1.0	ug/L	215769	1	11/12/2015 09:03	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 09:03	NP
Surr: 4-Bromofluorobenzene	97.4		0	70-130	%REC	215769	1	11/12/2015 09:03	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	215769	1	11/12/2015 09:03	NP
Surr: Toluene-d8	97.9		0	70-130	%REC	215769	1	11/12/2015 09:03	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 09:03	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 09:03	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 09:03	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 09:03	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 09:03	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 09:03	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 09:03	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 09:03	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-17
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 9:35:00 AM
Lab ID:	1511103-039	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	280		30	100	ug/L	215769	100	11/11/2015 16:27	NP
Ethylbenzene	660		29	100	ug/L	215769	100	11/11/2015 16:27	NP
Methyl tert-butyl ether	BRL		39	100	ug/L	215769	100	11/11/2015 16:27	NP
Naphthalene	720		44	500	ug/L	215769	100	11/11/2015 16:27	NP
Toluene	10000		24	100	ug/L	215769	100	11/11/2015 16:27	NP
Xylenes, Total	13000		93	100	ug/L	215769	100	11/11/2015 16:27	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	215769	100	11/11/2015 16:27	NP
Surr: Dibromofluoromethane	96.6		0	70-130	%REC	215769	100	11/11/2015 16:27	NP
Surr: Toluene-d8	97		0	70-130	%REC	215769	100	11/11/2015 16:27	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		3600	10000	ug/L	215769	100	11/11/2015 16:27	NP
Ethanol	BRL		4000	10000	ug/L	215769	100	11/11/2015 16:27	NP
Ethyl tert-butyl ether	BRL		290	10000	ug/L	215769	100	11/11/2015 16:27	NP
Isopropyl ether	BRL		300	1000	ug/L	215769	100	11/11/2015 16:27	NP
tert-Amyl alcohol	BRL		2900	10000	ug/L	215769	100	11/11/2015 16:27	NP
tert-Amyl methyl ether	BRL		250	1000	ug/L	215769	100	11/11/2015 16:27	NP
tert-Butyl Alcohol	BRL		2800	10000	ug/L	215769	100	11/11/2015 16:27	NP
tert-Butyl formate	BRL		3900	10000	ug/L	215769	100	11/11/2015 16:27	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-16
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 9:40:00 AM
Lab ID:	1511103-040	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215769	1	11/12/2015 16:20	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215769	1	11/12/2015 16:20	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215769	1	11/12/2015 16:20	NP
Naphthalene	BRL		0.44	5.0	ug/L	215769	1	11/12/2015 16:20	NP
Toluene	0.25	J	0.24	1.0	ug/L	215769	1	11/12/2015 16:20	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215769	1	11/12/2015 16:20	NP
Surr: 4-Bromofluorobenzene	94.8		0	70-130	%REC	215769	1	11/12/2015 16:20	NP
Surr: Dibromofluoromethane	93.7		0	70-130	%REC	215769	1	11/12/2015 16:20	NP
Surr: Toluene-d8	98.4		0	70-130	%REC	215769	1	11/12/2015 16:20	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215769	1	11/12/2015 16:20	NP
Ethanol	BRL		40	100	ug/L	215769	1	11/12/2015 16:20	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215769	1	11/12/2015 16:20	NP
Isopropyl ether	BRL		3.0	10	ug/L	215769	1	11/12/2015 16:20	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215769	1	11/12/2015 16:20	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215769	1	11/12/2015 16:20	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215769	1	11/12/2015 16:20	NP
tert-Butyl formate	BRL		39	100	ug/L	215769	1	11/12/2015 16:20	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-9
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 10:10:00 AM
Lab ID:	1511103-041	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	520		15	50	ug/L	215770	50	11/11/2015 14:28	NP
Ethylbenzene	1100		14	50	ug/L	215770	50	11/11/2015 14:28	NP
Methyl tert-butyl ether	BRL		20	50	ug/L	215770	50	11/11/2015 14:28	NP
Naphthalene	470		22	250	ug/L	215770	50	11/11/2015 14:28	NP
Toluene	6200		12	50	ug/L	215770	50	11/11/2015 14:28	NP
Xylenes, Total	8600		47	50	ug/L	215770	50	11/11/2015 14:28	NP
Surr: 4-Bromofluorobenzene	98.4		0	70-130	%REC	215770	50	11/11/2015 14:28	NP
Surr: Dibromofluoromethane	97.9		0	70-130	%REC	215770	50	11/11/2015 14:28	NP
Surr: Toluene-d8	98		0	70-130	%REC	215770	50	11/11/2015 14:28	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		1800	5000	ug/L	215770	50	11/11/2015 14:28	NP
Ethanol	BRL		2000	5000	ug/L	215770	50	11/11/2015 14:28	NP
Ethyl tert-butyl ether	BRL		140	5000	ug/L	215770	50	11/11/2015 14:28	NP
Isopropyl ether	BRL		150	500	ug/L	215770	50	11/11/2015 14:28	NP
tert-Amyl alcohol	3000	J	1400	5000	ug/L	215770	50	11/11/2015 14:28	NP
tert-Amyl methyl ether	BRL		130	500	ug/L	215770	50	11/11/2015 14:28	NP
tert-Butyl Alcohol	BRL		1400	5000	ug/L	215770	50	11/11/2015 14:28	NP
tert-Butyl formate	BRL		1900	5000	ug/L	215770	50	11/11/2015 14:28	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-10
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 10:15:00 AM
Lab ID:	1511103-042	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	10		0.30	1.0	ug/L	215770	1	11/12/2015 13:32	NP
Ethylbenzene	4.5		0.29	1.0	ug/L	215770	1	11/12/2015 13:32	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 13:32	NP
Naphthalene	46		0.44	5.0	ug/L	215770	1	11/12/2015 13:32	NP
Toluene	18		0.24	1.0	ug/L	215770	1	11/12/2015 13:32	NP
Xylenes, Total	120		0.93	1.0	ug/L	215770	1	11/12/2015 13:32	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	215770	1	11/12/2015 13:32	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	215770	1	11/12/2015 13:32	NP
Surr: Toluene-d8	100		0	70-130	%REC	215770	1	11/12/2015 13:32	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 13:32	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 13:32	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 13:32	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 13:32	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 13:32	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 13:32	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 13:32	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 13:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-13
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 10:30:00 AM
Lab ID:	1511103-043	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 16:44	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 16:44	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 16:44	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 16:44	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 16:44	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 16:44	NP
Surr: 4-Bromofluorobenzene	96.4		0	70-130	%REC	215770	1	11/12/2015 16:44	NP
Surr: Dibromofluoromethane	98.4		0	70-130	%REC	215770	1	11/12/2015 16:44	NP
Surr: Toluene-d8	98.2		0	70-130	%REC	215770	1	11/12/2015 16:44	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 16:44	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 16:44	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 16:44	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 16:44	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 16:44	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 16:44	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 16:44	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 16:44	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-55
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 10:35:00 AM
Lab ID:	1511103-044	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	640		6.0	20	ug/L	215770	20	11/11/2015 19:13	NP
Ethylbenzene	200		5.8	20	ug/L	215770	20	11/11/2015 19:13	NP
Methyl tert-butyl ether	160		0.39	1.0	ug/L	215770	1	11/12/2015 14:19	NP
Naphthalene	120		0.44	5.0	ug/L	215770	1	11/12/2015 14:19	NP
Toluene	64		0.24	1.0	ug/L	215770	1	11/12/2015 14:19	NP
Xylenes, Total	230		0.93	1.0	ug/L	215770	1	11/12/2015 14:19	NP
Surr: 4-Bromofluorobenzene	96.7		0	70-130	%REC	215770	1	11/12/2015 14:19	NP
Surr: 4-Bromofluorobenzene	99.8		0	70-130	%REC	215770	20	11/11/2015 19:13	NP
Surr: Dibromofluoromethane	94.1		0	70-130	%REC	215770	1	11/12/2015 14:19	NP
Surr: Dibromofluoromethane	96.1		0	70-130	%REC	215770	20	11/11/2015 19:13	NP
Surr: Toluene-d8	101		0	70-130	%REC	215770	1	11/12/2015 14:19	NP
Surr: Toluene-d8	96		0	70-130	%REC	215770	20	11/11/2015 19:13	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 14:19	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 14:19	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 14:19	NP
Isopropyl ether	52		3.0	10	ug/L	215770	1	11/12/2015 14:19	NP
tert-Amyl alcohol	1200		29	100	ug/L	215770	1	11/12/2015 14:19	NP
tert-Amyl methyl ether	11		2.5	10	ug/L	215770	1	11/12/2015 14:19	NP
tert-Butyl Alcohol	56	J	28	100	ug/L	215770	1	11/12/2015 14:19	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 14:19	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-54
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 10:40:00 AM
Lab ID:	1511103-045	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 17:08	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 17:08	NP
Methyl tert-butyl ether	1.5		0.39	1.0	ug/L	215770	1	11/12/2015 17:08	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 17:08	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 17:08	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 17:08	NP
Surr: 4-Bromofluorobenzene	97.5		0	70-130	%REC	215770	1	11/12/2015 17:08	NP
Surr: Dibromofluoromethane	97.6		0	70-130	%REC	215770	1	11/12/2015 17:08	NP
Surr: Toluene-d8	96.4		0	70-130	%REC	215770	1	11/12/2015 17:08	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 17:08	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 17:08	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 17:08	NP
Isopropyl ether	3.2	J	3.0	10	ug/L	215770	1	11/12/2015 17:08	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 17:08	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 17:08	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 17:08	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 17:08	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-56
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 10:45:00 AM
Lab ID:	1511103-046	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 17:32	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 17:32	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 17:32	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 17:32	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 17:32	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 17:32	NP
Surr: 4-Bromofluorobenzene	96.2		0	70-130	%REC	215770	1	11/12/2015 17:32	NP
Surr: Dibromofluoromethane	99.3		0	70-130	%REC	215770	1	11/12/2015 17:32	NP
Surr: Toluene-d8	97.3		0	70-130	%REC	215770	1	11/12/2015 17:32	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 17:32	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 17:32	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 17:32	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 17:32	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 17:32	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 17:32	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 17:32	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 17:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-51
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 10:50:00 AM
Lab ID:	1511103-047	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 17:55	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 17:55	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 17:55	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 17:55	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 17:55	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 17:55	NP
Surr: 4-Bromofluorobenzene	93.9		0	70-130	%REC	215770	1	11/12/2015 17:55	NP
Surr: Dibromofluoromethane	98.8		0	70-130	%REC	215770	1	11/12/2015 17:55	NP
Surr: Toluene-d8	95.8		0	70-130	%REC	215770	1	11/12/2015 17:55	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 17:55	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 17:55	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 17:55	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 17:55	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 17:55	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 17:55	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 17:55	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 17:55	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-11
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 11:00:00 AM
Lab ID:	1511103-048	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 18:19	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 18:19	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 18:19	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 18:19	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 18:19	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 18:19	NP
Surr: 4-Bromofluorobenzene	96.9		0	70-130	%REC	215770	1	11/12/2015 18:19	NP
Surr: Dibromofluoromethane	99.5		0	70-130	%REC	215770	1	11/12/2015 18:19	NP
Surr: Toluene-d8	96		0	70-130	%REC	215770	1	11/12/2015 18:19	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 18:19	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 18:19	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 18:19	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 18:19	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 18:19	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 18:19	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 18:19	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 18:19	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-53
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 11:05:00 AM
Lab ID:	1511103-049	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 18:43	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 18:43	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 18:43	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 18:43	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 18:43	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 18:43	NP
Surr: 4-Bromofluorobenzene	94.7		0	70-130	%REC	215770	1	11/12/2015 18:43	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	215770	1	11/12/2015 18:43	NP
Surr: Toluene-d8	98.3		0	70-130	%REC	215770	1	11/12/2015 18:43	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 18:43	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 18:43	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 18:43	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 18:43	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 18:43	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 18:43	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 18:43	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 18:43	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-59
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 11:10:00 AM
Lab ID:	1511103-050	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	1300		15	50	ug/L	215770	50	11/11/2015 18:01	NP
Ethylbenzene	440		14	50	ug/L	215770	50	11/11/2015 18:01	NP
Methyl tert-butyl ether	58		0.39	1.0	ug/L	215770	1	11/12/2015 14:42	NP
Naphthalene	250		22	200	ug/L	215770	50	11/11/2015 18:01	NP
Toluene	48		0.24	1.0	ug/L	215770	1	11/12/2015 14:42	NP
Xylenes, Total	850		47	50	ug/L	215770	50	11/11/2015 18:01	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	215770	50	11/11/2015 18:01	NP
Surr: 4-Bromofluorobenzene	98.3		0	70-130	%REC	215770	1	11/12/2015 14:42	NP
Surr: Dibromofluoromethane	97.5		0	70-130	%REC	215770	50	11/11/2015 18:01	NP
Surr: Dibromofluoromethane	93.2		0	70-130	%REC	215770	1	11/12/2015 14:42	NP
Surr: Toluene-d8	96.6		0	70-130	%REC	215770	50	11/11/2015 18:01	NP
Surr: Toluene-d8	101		0	70-130	%REC	215770	1	11/12/2015 14:42	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 14:42	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 14:42	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 14:42	NP
Isopropyl ether	150		3.0	10	ug/L	215770	1	11/12/2015 14:42	NP
tert-Amyl alcohol	2800		29	100	ug/L	215770	1	11/12/2015 14:42	NP
tert-Amyl methyl ether	19		2.5	10	ug/L	215770	1	11/12/2015 14:42	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 14:42	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 14:42	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-7
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 11:10:00 AM
Lab ID:	1511103-051	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 19:07	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 19:07	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 19:07	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 19:07	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 19:07	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 19:07	NP
Surr: 4-Bromofluorobenzene	96		0	70-130	%REC	215770	1	11/12/2015 19:07	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215770	1	11/12/2015 19:07	NP
Surr: Toluene-d8	98.3		0	70-130	%REC	215770	1	11/12/2015 19:07	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 19:07	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 19:07	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 19:07	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 19:07	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 19:07	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 19:07	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 19:07	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 19:07	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-12
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 11:15:00 AM
Lab ID:	1511103-052	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	110		0.30	1.0	ug/L	215770	1	11/12/2015 19:31	NP
Ethylbenzene	53		0.29	1.0	ug/L	215770	1	11/12/2015 19:31	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 19:31	NP
Naphthalene	10		0.44	5.0	ug/L	215770	1	11/12/2015 19:31	NP
Toluene	2.0		0.24	1.0	ug/L	215770	1	11/12/2015 19:31	NP
Xylenes, Total	25		0.93	1.0	ug/L	215770	1	11/12/2015 19:31	NP
Surr: 4-Bromofluorobenzene	99		0	70-130	%REC	215770	1	11/12/2015 19:31	NP
Surr: Dibromofluoromethane	98.4		0	70-130	%REC	215770	1	11/12/2015 19:31	NP
Surr: Toluene-d8	100		0	70-130	%REC	215770	1	11/12/2015 19:31	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 19:31	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 19:31	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 19:31	NP
Isopropyl ether	67		3.0	10	ug/L	215770	1	11/12/2015 19:31	NP
tert-Amyl alcohol	1800		29	100	ug/L	215770	1	11/12/2015 19:31	NP
tert-Amyl methyl ether	8.2	J	2.5	10	ug/L	215770	1	11/12/2015 19:31	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 19:31	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 19:31	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-8
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 11:45:00 AM
Lab ID:	1511103-053	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 12:45	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 12:45	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 12:45	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 12:45	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 12:45	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 12:45	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	215770	1	11/12/2015 12:45	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215770	1	11/12/2015 12:45	NP
Surr: Toluene-d8	99.3		0	70-130	%REC	215770	1	11/12/2015 12:45	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 12:45	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 12:45	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 12:45	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 12:45	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 12:45	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 12:45	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 12:45	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 12:45	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-9
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 11:50:00 AM
Lab ID:	1511103-054	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 19:54	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 19:54	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 19:54	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 19:54	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 19:54	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 19:54	NP
Surr: 4-Bromofluorobenzene	98		0	70-130	%REC	215770	1	11/12/2015 19:54	NP
Surr: Dibromofluoromethane	99.8		0	70-130	%REC	215770	1	11/12/2015 19:54	NP
Surr: Toluene-d8	97.7		0	70-130	%REC	215770	1	11/12/2015 19:54	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/13/2015 11:43	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/13/2015 11:43	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/13/2015 11:43	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/13/2015 11:43	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/13/2015 11:43	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/13/2015 11:43	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/13/2015 11:43	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/13/2015 11:43	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-58
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 11:55:00 AM
Lab ID:	1511103-055	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 20:18	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 20:18	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 20:18	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 20:18	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 20:18	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 20:18	NP
Surr: 4-Bromofluorobenzene	91.1		0	70-130	%REC	215770	1	11/12/2015 20:18	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	215770	1	11/12/2015 20:18	NP
Surr: Toluene-d8	96.9		0	70-130	%REC	215770	1	11/12/2015 20:18	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 20:18	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 20:18	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 20:18	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 20:18	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 20:18	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 20:18	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 20:18	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 20:18	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	SW-1
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 12:05:00 PM
Lab ID:	1511103-056	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/13/2015 11:20	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/13/2015 11:20	NP
Methyl tert-butyl ether	0.76	J	0.39	1.0	ug/L	215770	1	11/13/2015 11:20	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/13/2015 11:20	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/13/2015 11:20	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/13/2015 11:20	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	215770	1	11/13/2015 11:20	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	215770	1	11/13/2015 11:20	NP
Surr: Toluene-d8	98.4		0	70-130	%REC	215770	1	11/13/2015 11:20	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/13/2015 11:20	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/13/2015 11:20	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/13/2015 11:20	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/13/2015 11:20	NP
tert-Amyl alcohol	44	J	29	100	ug/L	215770	1	11/13/2015 11:20	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/13/2015 11:20	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/13/2015 11:20	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/13/2015 11:20	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-3
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 1:50:00 PM
Lab ID:	1511103-057	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	3000		6.0	20	ug/L	215770	20	11/11/2015 19:37	NP
Ethylbenzene	600		5.8	20	ug/L	215770	20	11/11/2015 19:37	NP
Methyl tert-butyl ether	720		7.9	20	ug/L	215770	20	11/11/2015 19:37	NP
Naphthalene	360		8.8	100	ug/L	215770	20	11/11/2015 19:37	NP
Toluene	8700		12	50	ug/L	215770	50	11/12/2015 17:49	NP
Xylenes, Total	7200		19	20	ug/L	215770	20	11/11/2015 19:37	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	215770	20	11/11/2015 19:37	NP
Surr: 4-Bromofluorobenzene	98		0	70-130	%REC	215770	50	11/12/2015 17:49	NP
Surr: Dibromofluoromethane	98.1		0	70-130	%REC	215770	50	11/12/2015 17:49	NP
Surr: Dibromofluoromethane	97.9		0	70-130	%REC	215770	20	11/11/2015 19:37	NP
Surr: Toluene-d8	97.7		0	70-130	%REC	215770	50	11/12/2015 17:49	NP
Surr: Toluene-d8	97.4		0	70-130	%REC	215770	20	11/11/2015 19:37	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		720	2000	ug/L	215770	20	11/11/2015 19:37	NP
Ethanol	BRL		790	2000	ug/L	215770	20	11/11/2015 19:37	NP
Ethyl tert-butyl ether	BRL		57	2000	ug/L	215770	20	11/11/2015 19:37	NP
Isopropyl ether	66	J	60	200	ug/L	215770	20	11/11/2015 19:37	NP
tert-Amyl alcohol	BRL		580	2000	ug/L	215770	20	11/11/2015 19:37	NP
tert-Amyl methyl ether	140	J	50	200	ug/L	215770	20	11/11/2015 19:37	NP
tert-Butyl Alcohol	BRL		560	2000	ug/L	215770	20	11/11/2015 19:37	NP
tert-Butyl formate	BRL		770	2000	ug/L	215770	20	11/11/2015 19:37	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-26
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 1:45:00 PM
Lab ID:	1511103-058	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 21:04	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 21:04	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 21:04	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 21:04	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 21:04	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 21:04	NP
Surr: 4-Bromofluorobenzene	98.5		0	70-130	%REC	215770	1	11/12/2015 21:04	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	215770	1	11/12/2015 21:04	NP
Surr: Toluene-d8	97.6		0	70-130	%REC	215770	1	11/12/2015 21:04	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 21:04	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 21:04	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 21:04	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 21:04	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 21:04	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 21:04	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 21:04	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 21:04	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-2
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 1:45:00 PM
Lab ID:	1511103-059	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	0.61	J	0.30	1.0	ug/L	215770	1	11/12/2015 21:28	NP
Ethylbenzene	1.4		0.29	1.0	ug/L	215770	1	11/12/2015 21:28	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215770	1	11/12/2015 21:28	NP
Naphthalene	2.6	J	0.44	5.0	ug/L	215770	1	11/12/2015 21:28	NP
Toluene	0.48	J	0.24	1.0	ug/L	215770	1	11/12/2015 21:28	NP
Xylenes, Total	5.5		0.93	1.0	ug/L	215770	1	11/12/2015 21:28	NP
Surr: 4-Bromofluorobenzene	93.1		0	70-130	%REC	215770	1	11/12/2015 21:28	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215770	1	11/12/2015 21:28	NP
Surr: Toluene-d8	99.3		0	70-130	%REC	215770	1	11/12/2015 21:28	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 21:28	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 21:28	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 21:28	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 21:28	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 21:28	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 21:28	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 21:28	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 21:28	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-4
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 1:40:00 PM
Lab ID:	1511103-060	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215770	1	11/12/2015 21:51	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215770	1	11/12/2015 21:51	NP
Methyl tert-butyl ether	1.9		0.39	1.0	ug/L	215770	1	11/12/2015 21:51	NP
Naphthalene	BRL		0.44	5.0	ug/L	215770	1	11/12/2015 21:51	NP
Toluene	BRL		0.24	1.0	ug/L	215770	1	11/12/2015 21:51	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215770	1	11/12/2015 21:51	NP
Surr: 4-Bromofluorobenzene	97.9		0	70-130	%REC	215770	1	11/12/2015 21:51	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	215770	1	11/12/2015 21:51	NP
Surr: Toluene-d8	97.6		0	70-130	%REC	215770	1	11/12/2015 21:51	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215770	1	11/12/2015 21:51	NP
Ethanol	BRL		40	100	ug/L	215770	1	11/12/2015 21:51	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215770	1	11/12/2015 21:51	NP
Isopropyl ether	BRL		3.0	10	ug/L	215770	1	11/12/2015 21:51	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215770	1	11/12/2015 21:51	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215770	1	11/12/2015 21:51	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215770	1	11/12/2015 21:51	NP
tert-Butyl formate	BRL		39	100	ug/L	215770	1	11/12/2015 21:51	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-8
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 1:20:00 PM
Lab ID:	1511103-061	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215701	1	11/10/2015 01:51	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215701	1	11/10/2015 01:51	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215701	1	11/10/2015 01:51	NP
Naphthalene	BRL		0.44	5.0	ug/L	215701	1	11/10/2015 01:51	NP
Toluene	BRL		0.24	1.0	ug/L	215701	1	11/10/2015 01:51	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215701	1	11/10/2015 01:51	NP
Surr: 4-Bromofluorobenzene	96.1		0	70-130	%REC	215701	1	11/10/2015 01:51	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215701	1	11/10/2015 01:51	NP
Surr: Toluene-d8	98.3		0	70-130	%REC	215701	1	11/10/2015 01:51	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215701	1	11/10/2015 01:51	NP
Ethanol	BRL		40	100	ug/L	215701	1	11/10/2015 01:51	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215701	1	11/10/2015 01:51	NP
Isopropyl ether	BRL		3.0	10	ug/L	215701	1	11/10/2015 01:51	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215701	1	11/10/2015 01:51	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215701	1	11/10/2015 01:51	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215701	1	11/10/2015 01:51	NP
tert-Butyl formate	BRL		39	100	ug/L	215701	1	11/10/2015 01:51	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-7
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 1:25:00 PM
Lab ID:	1511103-062	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215701	1	11/10/2015 02:15	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215701	1	11/10/2015 02:15	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215701	1	11/10/2015 02:15	NP
Naphthalene	BRL		0.44	5.0	ug/L	215701	1	11/10/2015 02:15	NP
Toluene	BRL		0.24	1.0	ug/L	215701	1	11/10/2015 02:15	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215701	1	11/10/2015 02:15	NP
Surr: 4-Bromofluorobenzene	97.5		0	70-130	%REC	215701	1	11/10/2015 02:15	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	215701	1	11/10/2015 02:15	NP
Surr: Toluene-d8	98.1		0	70-130	%REC	215701	1	11/10/2015 02:15	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215701	1	11/10/2015 02:15	NP
Ethanol	BRL		40	100	ug/L	215701	1	11/10/2015 02:15	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215701	1	11/10/2015 02:15	NP
Isopropyl ether	BRL		3.0	10	ug/L	215701	1	11/10/2015 02:15	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215701	1	11/10/2015 02:15	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215701	1	11/10/2015 02:15	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215701	1	11/10/2015 02:15	NP
tert-Butyl formate	BRL		39	100	ug/L	215701	1	11/10/2015 02:15	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-1
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 1:30:00 PM
Lab ID:	1511103-063	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	BRL		0.30	1.0	ug/L	215701	1	11/10/2015 03:26	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215701	1	11/10/2015 03:26	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215701	1	11/10/2015 03:26	NP
Naphthalene	BRL		0.44	5.0	ug/L	215701	1	11/10/2015 03:26	NP
Toluene	BRL		0.24	1.0	ug/L	215701	1	11/10/2015 03:26	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215701	1	11/10/2015 03:26	NP
Surr: 4-Bromofluorobenzene	97.8		0	70-130	%REC	215701	1	11/10/2015 03:26	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	215701	1	11/10/2015 03:26	NP
Surr: Toluene-d8	99.7		0	70-130	%REC	215701	1	11/10/2015 03:26	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215701	1	11/10/2015 03:26	NP
Ethanol	BRL		40	100	ug/L	215701	1	11/10/2015 03:26	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215701	1	11/10/2015 03:26	NP
Isopropyl ether	BRL		3.0	10	ug/L	215701	1	11/10/2015 03:26	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215701	1	11/10/2015 03:26	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215701	1	11/10/2015 03:26	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215701	1	11/10/2015 03:26	NP
tert-Butyl formate	BRL		39	100	ug/L	215701	1	11/10/2015 03:26	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-6
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 1:30:00 PM
Lab ID:	1511103-064	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215701	1	11/10/2015 02:39	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215701	1	11/10/2015 02:39	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215701	1	11/10/2015 02:39	NP
Naphthalene	BRL		0.44	5.0	ug/L	215701	1	11/10/2015 02:39	NP
Toluene	BRL		0.24	1.0	ug/L	215701	1	11/10/2015 02:39	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215701	1	11/10/2015 02:39	NP
Surr: 4-Bromofluorobenzene	99.5		0	70-130	%REC	215701	1	11/10/2015 02:39	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	215701	1	11/10/2015 02:39	NP
Surr: Toluene-d8	99.9		0	70-130	%REC	215701	1	11/10/2015 02:39	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215701	1	11/10/2015 02:39	NP
Ethanol	BRL		40	100	ug/L	215701	1	11/10/2015 02:39	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215701	1	11/10/2015 02:39	NP
Isopropyl ether	BRL		3.0	10	ug/L	215701	1	11/10/2015 02:39	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215701	1	11/10/2015 02:39	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215701	1	11/10/2015 02:39	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215701	1	11/10/2015 02:39	NP
tert-Butyl formate	BRL		39	100	ug/L	215701	1	11/10/2015 02:39	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	Duplicate 2
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 10:35:00 AM
Lab ID:	1511103-065	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	880		3.0	10	ug/L	215701	10	11/11/2015 11:18	NP
Ethylbenzene	290		2.9	10	ug/L	215701	10	11/11/2015 11:18	NP
Methyl tert-butyl ether	180		0.39	1.0	ug/L	215701	1	11/11/2015 10:52	NP
Naphthalene	160		0.44	5.0	ug/L	215701	1	11/11/2015 10:52	NP
Toluene	89		0.24	1.0	ug/L	215701	1	11/11/2015 10:52	NP
Xylenes, Total	320		0.93	1.0	ug/L	215701	1	11/11/2015 10:52	NP
Surr: 4-Bromofluorobenzene	97.4		0	70-130	%REC	215701	1	11/11/2015 10:52	NP
Surr: 4-Bromofluorobenzene	99.5		0	70-130	%REC	215701	10	11/11/2015 11:18	NP
Surr: Dibromofluoromethane	96.5		0	70-130	%REC	215701	1	11/11/2015 10:52	NP
Surr: Dibromofluoromethane	97.6		0	70-130	%REC	215701	10	11/11/2015 11:18	NP
Surr: Toluene-d8	97.6		0	70-130	%REC	215701	10	11/11/2015 11:18	NP
Surr: Toluene-d8	101		0	70-130	%REC	215701	1	11/11/2015 10:52	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215701	1	11/11/2015 10:52	NP
Ethanol	BRL		40	100	ug/L	215701	1	11/11/2015 10:52	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215701	1	11/11/2015 10:52	NP
Isopropyl ether	63		3.0	10	ug/L	215701	1	11/11/2015 10:52	NP
tert-Amyl alcohol	1800		29	100	ug/L	215701	1	11/11/2015 10:52	NP
tert-Amyl methyl ether	12		2.5	10	ug/L	215701	1	11/11/2015 10:52	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215701	1	11/11/2015 10:52	NP
tert-Butyl formate	BRL		39	100	ug/L	215701	1	11/11/2015 10:52	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	Field Blank 2
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 2:30:00 PM
Lab ID:	1511103-066	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215701	1	11/09/2015 19:32	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215701	1	11/09/2015 19:32	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215701	1	11/09/2015 19:32	NP
Naphthalene	BRL		0.44	5.0	ug/L	215701	1	11/09/2015 19:32	NP
Toluene	BRL		0.24	1.0	ug/L	215701	1	11/09/2015 19:32	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215701	1	11/09/2015 19:32	NP
Surr: 4-Bromofluorobenzene	98.4		0	70-130	%REC	215701	1	11/09/2015 19:32	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	215701	1	11/09/2015 19:32	NP
Surr: Toluene-d8	93.6		0	70-130	%REC	215701	1	11/09/2015 19:32	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215701	1	11/09/2015 19:32	NP
Ethanol	BRL		40	100	ug/L	215701	1	11/09/2015 19:32	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215701	1	11/09/2015 19:32	NP
Isopropyl ether	BRL		3.0	10	ug/L	215701	1	11/09/2015 19:32	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215701	1	11/09/2015 19:32	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215701	1	11/09/2015 19:32	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215701	1	11/09/2015 19:32	NP
tert-Butyl formate	BRL		39	100	ug/L	215701	1	11/09/2015 19:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	Trip Blank 2
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015
Lab ID:	1511103-067	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215701	1	11/09/2015 19:56	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215701	1	11/09/2015 19:56	NP
Methyl tert-butyl ether	BRL		0.39	1.0	ug/L	215701	1	11/09/2015 19:56	NP
Naphthalene	BRL		0.44	5.0	ug/L	215701	1	11/09/2015 19:56	NP
Toluene	BRL		0.24	1.0	ug/L	215701	1	11/09/2015 19:56	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215701	1	11/09/2015 19:56	NP
Surr: 4-Bromofluorobenzene	99		0	70-130	%REC	215701	1	11/09/2015 19:56	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	215701	1	11/09/2015 19:56	NP
Surr: Toluene-d8	96.1		0	70-130	%REC	215701	1	11/09/2015 19:56	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215701	1	11/09/2015 19:56	NP
Ethanol	BRL		40	100	ug/L	215701	1	11/09/2015 19:56	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215701	1	11/09/2015 19:56	NP
Isopropyl ether	BRL		3.0	10	ug/L	215701	1	11/09/2015 19:56	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215701	1	11/09/2015 19:56	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215701	1	11/09/2015 19:56	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215701	1	11/09/2015 19:56	NP
tert-Butyl formate	BRL		39	100	ug/L	215701	1	11/09/2015 19:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 16-Nov-15

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-2
Project Name:	Cloud's Chevron	**Collection Date:**	11/4/2015 2:15:00 PM
Lab ID:	1511103-068	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.30	1.0	ug/L	215701	1	11/10/2015 03:02	NP
Ethylbenzene	BRL		0.29	1.0	ug/L	215701	1	11/10/2015 03:02	NP
Methyl tert-butyl ether	8.7		0.39	1.0	ug/L	215701	1	11/10/2015 03:02	NP
Naphthalene	BRL		0.44	5.0	ug/L	215701	1	11/10/2015 03:02	NP
Toluene	BRL		0.24	1.0	ug/L	215701	1	11/10/2015 03:02	NP
Xylenes, Total	BRL		0.93	1.0	ug/L	215701	1	11/10/2015 03:02	NP
Surr: 4-Bromofluorobenzene	97.4		0	70-130	%REC	215701	1	11/10/2015 03:02	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	215701	1	11/10/2015 03:02	NP
Surr: Toluene-d8	97.4		0	70-130	%REC	215701	1	11/10/2015 03:02	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		36	100	ug/L	215701	1	11/10/2015 03:02	NP
Ethanol	BRL		40	100	ug/L	215701	1	11/10/2015 03:02	NP
Ethyl tert-butyl ether	BRL		2.9	100	ug/L	215701	1	11/10/2015 03:02	NP
Isopropyl ether	BRL		3.0	10	ug/L	215701	1	11/10/2015 03:02	NP
tert-Amyl alcohol	BRL		29	100	ug/L	215701	1	11/10/2015 03:02	NP
tert-Amyl methyl ether	BRL		2.5	10	ug/L	215701	1	11/10/2015 03:02	NP
tert-Butyl Alcohol	BRL		28	100	ug/L	215701	1	11/10/2015 03:02	NP
tert-Butyl formate	BRL		39	100	ug/L	215701	1	11/10/2015 03:02	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Accu-Crawford Work Order Number 1571103

Checklist completed by [signature] 11/5/2015
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.6°C Cooler #2 3.5°C Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes __ No ✓

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes __ No ✓

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Sample Condition: Good ✓ per 11/6/15 Adjusted? _____ Checked by _____
Other(Explain) Received broken vial

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215701

Sample ID: **MB-215701**	Client ID:			Units: **ug/L**	Prep Date: **11/09/2015**	Run No: **303946**
SampleType: **MBLK**	TestCode: **Oxygenates** **SW8260B**			BatchID: **215701**	Analysis Date: **11/09/2015**	Seq No: **6506546**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **MB-215701**	Client ID:			Units: **ug/L**	Prep Date: **11/09/2015**	Run No: **303946**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**			BatchID: **215701**	Analysis Date: **11/09/2015**	Seq No: **6506650**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	49.56	0	50.00		99.1	70	130				
Surr: Dibromofluoromethane	53.52	0	50.00		107	70	130				
Surr: Toluene-d8	47.60	0	50.00		95.2	70	130				

Sample ID: **LCS-215701**	Client ID:			Units: **ug/L**	Prep Date: **11/09/2015**	Run No: **304056**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**			BatchID: **215701**	Analysis Date: **11/10/2015**	Seq No: **6508939**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	52.94	1.0	50.00		106	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215701

Sample ID: **LCS-215701** Client ID: Units: **ug/L** Prep Date: **11/09/2015** Run No: **304056**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215701** Analysis Date: **11/10/2015** Seq No: **6508939**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	54.48	1.0	50.00		109	70	130				
Naphthalene	62.33	5.0	50.00		125	70	130				
Toluene	52.79	1.0	50.00		106	70	130				
Xylenes, Total	163.7	1.0	150.0		109	70	130				
Surr: 4-Bromofluorobenzene	50.75	0	50.00		102	70	130				
Surr: Dibromofluoromethane	48.60	0	50.00		97.2	70	130				
Surr: Toluene-d8	49.49	0	50.00		99.0	70	130				

Sample ID: **LCS-215701** Client ID: Units: **ug/L** Prep Date: **11/09/2015** Run No: **304056**
SampleType: **LCS** TestCode: **Oxygenates SW8260B** BatchID: **215701** Analysis Date: **11/10/2015** Seq No: **6508944**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	902.9	100	1000		90.3	70	130				
Ethanol	1041	100	1000		104	70	130				
Ethyl tert-butyl ether	215.1	100	200.0		108	70	130				
Isopropyl ether	220.8	10	200.0		110	70	130				
tert-Amyl alcohol	998.4	100	1000		99.8	70	130				
tert-Amyl methyl ether	204.3	10	200.0		102	70	130				
tert-Butyl Alcohol	1000	100	1000		100	70	130				
tert-Butyl formate	1012	100	1000		101	70	130				

Sample ID: **1511103-065AMS** Client ID: **Duplicate 2** Units: **ug/L** Prep Date: **11/09/2015** Run No: **304058**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215701** Analysis Date: **11/10/2015** Seq No: **6509054**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	6263	100	5000	766.0	110	70	135				
Ethylbenzene	5819	100	5000	259.0	111	73.7	135				
Naphthalene	6737	500	5000	76.00	133	53.1	128				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215701

Sample ID: **1511103-065AMS** Client ID: **Duplicate 2** Units: **ug/L** Prep Date: **11/09/2015** Run No: **304058**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215701** Analysis Date: **11/10/2015** Seq No: **6509054**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	5606	100	5000	78.00	111	70.5	137				
Xylenes, Total	17050	100	15000	250.0	112	71.2	135				
Surr: 4-Bromofluorobenzene	4987	0	5000		99.7	70	130				
Surr: Dibromofluoromethane	4787	0	5000		95.7	70	130				
Surr: Toluene-d8	4848	0	5000		97.0	70	130				

Sample ID: **1511103-065AMS** Client ID: **Duplicate 2** Units: **ug/L** Prep Date: **11/09/2015** Run No: **304058**
SampleType: **MS** TestCode: **Oxygenates SW8260B** BatchID: **215701** Analysis Date: **11/10/2015** Seq No: **6509491**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	99140	10000	100000		99.1	61.1	139				
Ethanol	139200	10000	100000		139	61.7	144				
Ethyl tert-butyl ether	19350	10000	20000		96.7	69.6	130				
Isopropyl ether	20230	1000	20000		101	70.1	134				
tert-Amyl alcohol	110800	10000	100000		111	66.5	145				
tert-Amyl methyl ether	19040	1000	20000		95.2	70.1	127				
tert-Butyl Alcohol	114300	10000	100000		114	70	149				
tert-Butyl formate	91720	10000	100000		91.7	41.5	139				

Sample ID: **1511103-065AMSD** Client ID: **Duplicate 2** Units: **ug/L** Prep Date: **11/09/2015** Run No: **304058**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215701** Analysis Date: **11/10/2015** Seq No: **6509055**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	6427	100	5000	766.0	113	70	135	6263	2.58	20	
Ethylbenzene	5945	100	5000	259.0	114	73.7	135	5819	2.14	20	
Naphthalene	6983	500	5000	76.00	138	53.1	128	6737	3.59	36.7	S
Toluene	5743	100	5000	78.00	113	70.5	137	5606	2.41	20	
Xylenes, Total	17240	100	15000	250.0	113	71.2	135	17050	1.11	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215701

Sample ID: **1511103-065AMSD** Client ID: **Duplicate 2** Units: **ug/L** Prep Date: **11/09/2015** Run No: **304058**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215701** Analysis Date: **11/10/2015** Seq No: **6509055**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	5039	0	5000		101	70	130	4987	0	0	
Surr: Dibromofluoromethane	4788	0	5000		95.8	70	130	4787	0	0	
Surr: Toluene-d8	4971	0	5000		99.4	70	130	4848	0	0	

Sample ID: **1511103-065AMSD** Client ID: **Duplicate 2** Units: **ug/L** Prep Date: **11/09/2015** Run No: **304058**
SampleType: **MSD** TestCode: **Oxygenates SW8260B** BatchID: **215701** Analysis Date: **11/10/2015** Seq No: **6509492**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	97690	10000	100000		97.7	61.1	139	99140	1.47	24.9	
Ethanol	136900	10000	100000		137	61.7	144	139200	1.65	27.9	
Ethyl tert-butyl ether	19860	10000	20000		99.3	69.6	130	19350	2.63	20	
Isopropyl ether	20360	1000	20000		102	70.1	134	20230	0.645	20	
tert-Amyl alcohol	109100	10000	100000		109	66.5	145	110800	1.54	24.8	
tert-Amyl methyl ether	19600	1000	20000		98.0	70.1	127	19040	2.90	20	
tert-Butyl Alcohol	115200	10000	100000		115	70	149	114300	0.792	29.4	
tert-Butyl formate	92780	10000	100000		92.8	41.5	139	91720	1.15	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215758

Sample ID: **MB-215758** Client ID: Units: **ug/L** Prep Date: **11/10/2015** Run No: **304058**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215758** Analysis Date: **11/10/2015** Seq No: **6509043**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	47.93	0	50.00		95.9	70	130				
Surr: Dibromofluoromethane	49.18	0	50.00		98.4	70	130				
Surr: Toluene-d8	48.47	0	50.00		96.9	70	130				

Sample ID: **MB-215758** Client ID: Units: **ug/L** Prep Date: **11/10/2015** Run No: **304058**
SampleType: **MBLK** TestCode: **Oxygenates SW8260B** BatchID: **215758** Analysis Date: **11/10/2015** Seq No: **6509490**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-215758** Client ID: Units: **ug/L** Prep Date: **11/10/2015** Run No: **304058**
SampleType: **LCS** TestCode: **Oxygenates SW8260B** BatchID: **215758** Analysis Date: **11/10/2015** Seq No: **6509489**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	870.7	100	1000		87.1	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215758

Sample ID: **LCS-215758** Client ID: Units: **ug/L** Prep Date: **11/10/2015** Run No: **304058**
SampleType: **LCS** TestCode: **Oxygenates SW8260B** BatchID: **215758** Analysis Date: **11/10/2015** Seq No: **6509489**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethanol	938.0	100	1000		93.8	70	130				
Ethyl tert-butyl ether	189.0	100	200.0		94.5	70	130				
Isopropyl ether	196.7	10	200.0		98.4	70	130				
tert-Amyl alcohol	944.8	100	1000		94.5	70	130				
tert-Amyl methyl ether	182.1	10	200.0		91.0	70	130				
tert-Butyl Alcohol	978.3	100	1000		97.8	70	130				
tert-Butyl formate	890.9	100	1000		89.1	70	130				

Sample ID: **LCS-215758** Client ID: Units: **ug/L** Prep Date: **11/10/2015** Run No: **304085**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215758** Analysis Date: **11/11/2015** Seq No: **6510535**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	43.53	1.0	50.00		87.1	70	130				
Ethylbenzene	44.25	1.0	50.00		88.5	70	130				
Naphthalene	58.74	5.0	50.00		117	70	130				
Toluene	43.89	1.0	50.00		87.8	70	130				
Xylenes, Total	133.2	1.0	150.0		88.8	70	130				
Surr: 4-Bromofluorobenzene	50.86	0	50.00		102	70	130				
Surr: Dibromofluoromethane	49.94	0	50.00		99.9	70	130				
Surr: Toluene-d8	49.87	0	50.00		99.7	70	130				

Sample ID: **1511103-006AMS** Client ID: **MW-22** Units: **ug/L** Prep Date: **11/10/2015** Run No: **304058**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215758** Analysis Date: **11/11/2015** Seq No: **6509065**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	11160	100	5000	6437	94.4	70	135				
Ethylbenzene	5708	100	5000	741.0	99.3	73.7	135				
Naphthalene	7088	500	5000	1040	121	53.1	128				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215758

Sample ID: **1511103-006AMS** Client ID: **MW-22** Units: **ug/L** Prep Date: **11/10/2015** Run No: **304058**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215758** Analysis Date: **11/11/2015** Seq No: **6509065**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	25550	100	5000	20630	98.5	70.5	137				E
Xylenes, Total	37990	100	15000	23660	95.5	71.2	135				
Surr: 4-Bromofluorobenzene	4927	0	5000		98.5	70	130				
Surr: Dibromofluoromethane	4771	0	5000		95.4	70	130				
Surr: Toluene-d8	4964	0	5000		99.3	70	130				

Sample ID: **1511103-006AMS** Client ID: **MW-22** Units: **ug/L** Prep Date: **11/10/2015** Run No: **304058**
SampleType: **MS** TestCode: **Oxygenates SW8260B** BatchID: **215758** Analysis Date: **11/11/2015** Seq No: **6509501**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	89680	10000	100000		89.7	61.1	139				
Ethanol	94020	10000	100000		94.0	61.7	144				
Ethyl tert-butyl ether	20960	10000	20000		105	69.6	130				
Isopropyl ether	21330	1000	20000		107	70.1	134				
tert-Amyl alcohol	103500	10000	100000	3945	99.5	66.5	145				
tert-Amyl methyl ether	20020	1000	20000		100	70.1	127				
tert-Butyl Alcohol	102500	10000	100000		102	70	149				
tert-Butyl formate	92580	10000	100000		92.6	41.5	139				

Sample ID: **1511103-006AMSD** Client ID: **MW-22** Units: **ug/L** Prep Date: **11/10/2015** Run No: **304058**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215758** Analysis Date: **11/11/2015** Seq No: **6509066**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	10960	100	5000	6437	90.5	70	135	11160	1.78	20	
Ethylbenzene	5698	100	5000	741.0	99.1	73.7	135	5708	0.175	20	
Naphthalene	7360	500	5000	1040	126	53.1	128	7088	3.77	36.7	
Toluene	24920	100	5000	20630	85.8	70.5	137	25550	2.52	20	E
Xylenes, Total	37930	100	15000	23660	95.2	71.2	135	37990	0.134	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215758

Sample ID: **1511103-006AMSD** Client ID: **MW-22** Units: **ug/L** Prep Date: **11/10/2015** Run No: **304058**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215758** Analysis Date: **11/11/2015** Seq No: **6509066**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	5087	0	5000		102	70	130	4927	0	0	
Surr: Dibromofluoromethane	4717	0	5000		94.3	70	130	4771	0	0	
Surr: Toluene-d8	4899	0	5000		98.0	70	130	4964	0	0	

Sample ID: **1511103-006AMSD** Client ID: **MW-22** Units: **ug/L** Prep Date: **11/10/2015** Run No: **304058**
SampleType: **MSD** TestCode: **Oxygenates SW8260B** BatchID: **215758** Analysis Date: **11/11/2015** Seq No: **6509502**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	93790	10000	100000		93.8	61.1	139	89680	4.47	24.9	
Ethanol	118000	10000	100000		118	61.7	144	94020	22.6	27.9	
Ethyl tert-butyl ether	20730	10000	20000		104	69.6	130	20960	1.11	20	
Isopropyl ether	20670	1000	20000		103	70.1	134	21330	3.17	20	
tert-Amyl alcohol	104100	10000	100000	3945	100	66.5	145	103500	0.619	24.8	
tert-Amyl methyl ether	20140	1000	20000		101	70.1	127	20020	0.593	20	
tert-Butyl Alcohol	105300	10000	100000		105	70	149	102500	2.72	29.4	
tert-Butyl formate	89330	10000	100000		89.3	41.5	139	92580	3.58	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215769

Sample ID: **MB-215769**	Client ID:			Units: **ug/L**	Prep Date: **11/11/2015**	Run No: **304085**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **215769**	Analysis Date: **11/11/2015**	Seq No: **6509804**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	46.41	0	50.00		92.8	70	130				
Surr: Dibromofluoromethane	49.56	0	50.00		99.1	70	130				
Surr: Toluene-d8	47.63	0	50.00		95.3	70	130				

Sample ID: **MB-215769**	Client ID:			Units: **ug/L**	Prep Date: **11/11/2015**	Run No: **304085**
SampleType: **MBLK**	TestCode: **Oxygenates SW8260B**			BatchID: **215769**	Analysis Date: **11/11/2015**	Seq No: **6511395**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-215769**	Client ID:			Units: **ug/L**	Prep Date: **11/11/2015**	Run No: **304085**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **215769**	Analysis Date: **11/11/2015**	Seq No: **6510536**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	49.31	1.0	50.00		98.6	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215769

Sample ID: **LCS-215769** Client ID: Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215769** Analysis Date: **11/11/2015** Seq No: **6510536**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	51.47	1.0	50.00		103	70	130				
Naphthalene	60.81	5.0	50.00		122	70	130				
Toluene	51.04	1.0	50.00		102	70	130				
Xylenes, Total	153.4	1.0	150.0		102	70	130				
Surr: 4-Bromofluorobenzene	50.28	0	50.00		101	70	130				
Surr: Dibromofluoromethane	47.52	0	50.00		95.0	70	130				
Surr: Toluene-d8	49.74	0	50.00		99.5	70	130				

Sample ID: **LCS-215769** Client ID: Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **LCS** TestCode: **Oxygenates SW8260B** BatchID: **215769** Analysis Date: **11/11/2015** Seq No: **6511398**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	739.9	100	1000		74.0	70	130				
Ethanol	854.5	100	1000		85.4	70	130				
Ethyl tert-butyl ether	207.5	100	200.0		104	70	130				
Isopropyl ether	208.6	10	200.0		104	70	130				
tert-Amyl alcohol	720.9	100	1000		72.1	70	130				
tert-Amyl methyl ether	204.2	10	200.0		102	70	130				
tert-Butyl Alcohol	745.0	100	1000		74.5	70	130				
tert-Butyl formate	953.3	100	1000		95.3	70	130				

Sample ID: **1511103-022AMS** Client ID: **PW-1R** Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215769** Analysis Date: **11/11/2015** Seq No: **6510542**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	26810	500	25000	830.0	104	70	135				
Ethylbenzene	28780	500	25000	1195	110	73.7	135				
Naphthalene	34030	2500	25000	600.0	134	53.1	128				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215769

Sample ID: **1511103-022AMS** Client ID: **PW-1R** Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215769** Analysis Date: **11/11/2015** Seq No: **6510542**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	46610	500	25000	20050	106	70.5	137				
Xylenes, Total	97520	500	75000	13570	112	71.2	135				
Surr: 4-Bromofluorobenzene	25290	0	25000		101	70	130				
Surr: Dibromofluoromethane	23760	0	25000		95.0	70	130				
Surr: Toluene-d8	24320	0	25000		97.3	70	130				

Sample ID: **1511103-022AMS** Client ID: **PW-1R** Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **MS** TestCode: **Oxygenates SW8260B** BatchID: **215769** Analysis Date: **11/11/2015** Seq No: **6511401**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	321100	50000	500000		64.2	61.1	139				
Ethanol	362900	50000	500000		72.6	61.7	144				
Ethyl tert-butyl ether	101700	50000	100000		102	69.6	130				
Isopropyl ether	103000	5000	100000		103	70.1	134				
tert-Amyl alcohol	342200	50000	500000		68.4	66.5	145				
tert-Amyl methyl ether	98710	5000	100000		98.7	70.1	127				
tert-Butyl Alcohol	356700	50000	500000		71.3	70	149				
tert-Butyl formate	475100	50000	500000		95.0	41.5	139				

Sample ID: **1511103-022AMSD** Client ID: **PW-1R** Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215769** Analysis Date: **11/11/2015** Seq No: **6510543**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	27050	500	25000	830.0	105	70	135	26810	0.910	20	
Ethylbenzene	27800	500	25000	1195	106	73.7	135	28780	3.46	20	
Naphthalene	33550	2500	25000	600.0	132	53.1	128	34030	1.42	36.7	S
Toluene	46910	500	25000	20050	107	70.5	137	46610	0.652	20	
Xylenes, Total	96540	500	75000	13570	111	71.2	135	97520	1.01	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215769

Sample ID: **1511103-022AMSD**	Client ID: **PW-1R**				Units: **ug/L**		Prep Date: **11/11/2015**		Run No: **304085**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **215769**		Analysis Date: **11/11/2015**		Seq No: **6510543**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	25330	0	25000		101	70	130	25290	0	0	
Surr: Dibromofluoromethane	23610	0	25000		94.4	70	130	23760	0	0	
Surr: Toluene-d8	24650	0	25000		98.6	70	130	24320	0	0	

Sample ID: **1511103-022AMSD**	Client ID: **PW-1R**				Units: **ug/L**		Prep Date: **11/11/2015**		Run No: **304085**	
SampleType: **MSD**	TestCode: **Oxygenates SW8260B**				BatchID: **215769**		Analysis Date: **11/11/2015**		Seq No: **6511402**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	348300	50000	500000		69.7	61.1	139	321100	8.13	24.9	
Ethanol	404200	50000	500000		80.8	61.7	144	362900	10.8	27.9	
Ethyl tert-butyl ether	103200	50000	100000		103	69.6	130	101700	1.46	20	
Isopropyl ether	101500	5000	100000		101	70.1	134	103000	1.55	20	
tert-Amyl alcohol	387800	50000	500000		77.6	66.5	145	342200	12.5	24.8	
tert-Amyl methyl ether	99440	5000	100000		99.4	70.1	127	98710	0.742	20	
tert-Butyl Alcohol	399400	50000	500000		79.9	70	149	356700	11.3	29.4	
tert-Butyl formate	460900	50000	500000		92.2	41.5	139	475100	3.03	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215770

Sample ID: **MB-215770** Client ID: Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215770** Analysis Date: **11/11/2015** Seq No: **6509805**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	47.40	0	50.00		94.8	70	130				
Surr: Dibromofluoromethane	49.04	0	50.00		98.1	70	130				
Surr: Toluene-d8	47.62	0	50.00		95.2	70	130				

Sample ID: **MB-215770** Client ID: Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **MBLK** TestCode: **Oxygenates SW8260B** BatchID: **215770** Analysis Date: **11/11/2015** Seq No: **6511396**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-215770** Client ID: Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215770** Analysis Date: **11/11/2015** Seq No: **6510537**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	52.10	1.0	50.00		104	70	130				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215770

Sample ID: **LCS-215770** Client ID: Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215770** Analysis Date: **11/11/2015** Seq No: **6510537**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	54.32	1.0	50.00		109	70	130				
Naphthalene	59.16	5.0	50.00		118	70	130				
Toluene	52.34	1.0	50.00		105	70	130				
Xylenes, Total	159.5	1.0	150.0		106	70	130				
Surr: 4-Bromofluorobenzene	48.40	0	50.00		96.8	70	130				
Surr: Dibromofluoromethane	46.46	0	50.00		92.9	70	130				
Surr: Toluene-d8	48.73	0	50.00		97.5	70	130				

Sample ID: **LCS-215770** Client ID: Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **LCS** TestCode: **Oxygenates SW8260B** BatchID: **215770** Analysis Date: **11/11/2015** Seq No: **6511399**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	754.9	100	1000		75.5	70	130				
Ethanol	1212	100	1000		121	70	130				
Ethyl tert-butyl ether	194.6	100	200.0		97.3	70	130				
Isopropyl ether	193.4	10	200.0		96.7	70	130				
tert-Amyl alcohol	741.6	100	1000		74.2	70	130				
tert-Amyl methyl ether	186.0	10	200.0		93.0	70	130				
tert-Butyl Alcohol	773.0	100	1000		77.3	70	130				
tert-Butyl formate	874.2	100	1000		87.4	70	130				

Sample ID: **1511103-041AMS** Client ID: **MW-9** Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215770** Analysis Date: **11/11/2015** Seq No: **6510546**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	3231	50	2500	520.0	108	70	135				
Ethylbenzene	3900	50	2500	1092	112	73.7	135				
Naphthalene	3808	250	2500	471.0	133	53.1	128				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215770

Sample ID: **1511103-041AMS** Client ID: **MW-9** Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215770** Analysis Date: **11/11/2015** Seq No: **6510546**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Toluene	8851	50	2500	6152	108	70.5	137				
Xylenes, Total	17030	50	7500	8640	112	71.2	135				
Surr: 4-Bromofluorobenzene	2520	0	2500		101	70	130				
Surr: Dibromofluoromethane	2372	0	2500		94.9	70	130				
Surr: Toluene-d8	2475	0	2500		99.0	70	130				

Sample ID: **1511103-041AMS** Client ID: **MW-9** Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **MS** TestCode: **Oxygenates SW8260B** BatchID: **215770** Analysis Date: **11/11/2015** Seq No: **6511588**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	33220	5000	50000		66.4	61.1	139				
Ethanol	42050	5000	50000		84.1	61.7	144				
Ethyl tert-butyl ether	9818	5000	10000		98.2	69.6	130				
Isopropyl ether	9874	500	10000		98.7	70.1	134				
tert-Amyl alcohol	37170	5000	50000	2990	68.4	66.5	145				
tert-Amyl methyl ether	9442	500	10000		94.4	70.1	127				
tert-Butyl Alcohol	36800	5000	50000		73.6	70	149				
tert-Butyl formate	42700	5000	50000		85.4	41.5	139				

Sample ID: **1511103-041AMSD** Client ID: **MW-9** Units: **ug/L** Prep Date: **11/11/2015** Run No: **304085**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **215770** Analysis Date: **11/11/2015** Seq No: **6510547**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	3074	50	2500	520.0	102	70	135	3231	4.96	20	
Ethylbenzene	3700	50	2500	1092	104	73.7	135	3900	5.26	20	
Naphthalene	3758	250	2500	471.0	131	53.1	128	3808	1.32	36.7	S
Toluene	8505	50	2500	6152	94.1	70.5	137	8851	3.99	20	
Xylenes, Total	16160	50	7500	8640	100	71.2	135	17030	5.23	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 16-Nov-15

Client: Crawford Environmental Services
Project Name: Cloud's Chevron
Workorder: 1511103

ANALYTICAL QC SUMMARY REPORT

BatchID: 215770

Sample ID: **1511103-041AMSD**	Client ID: **MW-9**			Units: **ug/L**	Prep Date: **11/11/2015**	Run No: **304085**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **215770**	Analysis Date: **11/11/2015**	Seq No: **6510547**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	2469	0	2500		98.8	70	130	2520	0	0	
Surr: Dibromofluoromethane	2360	0	2500		94.4	70	130	2372	0	0	
Surr: Toluene-d8	2466	0	2500		98.7	70	130	2475	0	0	

Sample ID: **1511103-041AMSD**	Client ID: **MW-9**			Units: **ug/L**	Prep Date: **11/11/2015**	Run No: **304085**
SampleType: **MSD**	TestCode: **Oxygenates SW8260B**			BatchID: **215770**	Analysis Date: **11/11/2015**	Seq No: **6511589**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	34870	5000	50000		69.7	61.1	139	33220	4.82	24.9	
Ethanol	47890	5000	50000		95.8	61.7	144	42050	13.0	27.9	
Ethyl tert-butyl ether	9966	5000	10000		99.7	69.6	130	9818	1.50	20	
Isopropyl ether	9754	500	10000		97.5	70.1	134	9874	1.23	20	
tert-Amyl alcohol	39430	5000	50000	2990	72.9	66.5	145	37170	5.90	24.8	
tert-Amyl methyl ether	9582	500	10000		95.8	70.1	127	9442	1.48	20	
tert-Butyl Alcohol	42660	5000	50000		85.3	70	149	36800	14.8	29.4	
tert-Butyl formate	42610	5000	50000		85.2	41.5	139	42700	0.217	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

APPENDIX D

Data Verification Checklist

UST Programmatic QAPP Contractor Checklist				
Item #:	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	Yes		
2	Is UST Owner/Operator name, address, provided?			n/a
3	Is name, address, & phone number of current property owner provided?	Yes		
4	Is the SCDHEC Certified UST Site Rehabilitation Contractor's name, address, phone number, and certification number provided?	Yes		
5	Is the name, address ,telephone number, and certification number of the well driller that installed the boring/monitoring wells provided?			n/a
6	Is the name, address, telephone number, and certification number of the certified laboratories performing analytical analyses provided	Yes		
7	Has the facility history be summarized?			n/a
8	Has the regional geology and hydrogeology been summarized?			n/a
9	Are the receptor survey results provided as required?			n/a
10	Has the current use of the site and adjacent land been described?	Yes		
11	Has the site specific geology been described?			n/a
12	Has the primary soil type been described?			n/a
13	Have the field screening results been described?			n/a
14	Has a description of the soil sample collection and preservation been detailed?			n/a
15	Has the field screening methodology been detailed?			n/a
16	Has the monitoring well installation and development dates been provided?			n/a
17	Has the method of well development been detailed? (Table 2)			n/a
18	Has the justification been provided for the locations of the monitoring wells?			n/a
19	Have the monitoring wells been labeled in accordance with the UST QAPP guidelines?	Yes		
20	Has the groundwater sampling methodology been detailed?	Yes		
21	Have the groundwater sampling dates and groundwater measurements been provided?	Yes		
22	Has the purging methodology been detailed?	Yes		
23	Has the volume of water purged from each well been provided along with the measurements to verify purging is complete?	Yes		
24	If free-product is present, has the thickness been provided?			n/a
25	Does the report include a brief discussion of the assessment done and the results?			n/a

UST Programmatic QAPP Contractor Checklist				
26	Does the report include a brief discussion of the aquifer evaluation and the results?	Yes		
27	Does the report include a brief discussion of the fate & transport models used?			n/a
28	Are the site-conceptual tables included (Tier 1 risk evaluation)			n/a
29	Have the exposure pathways been analyzed (Tier 2 risk evauluation)			n/a
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 risk evaluation)	Yes		
31	Have recommendations for further action been provided and explained?			n/a
32	Has the soil analytical data for the site been provided in tabular format? (Table 5)			n/a
33	Has the potentiometric data for the site been provided in tabular format?	Yes		
34	Has the current and historical laboratory data been provided in tabular format	Yes		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			n/a
36	Have the Site conceptual model tables been included (Tier 1 risk evaluation)			n/a
37	Has the topographic map been provided with all the required elements?	Yes		
38	Has the site base map been provided with all the required elements?	Yes		
39	Have the CoC maps been provided?	Yes		
40	Have the potentiometric maps been provided?	Yes		
41	Have the geologic cross-sections been provided			n/a
42	Have maps showing the predicted migration of the CoCs through time been provided?			n/a
43	Has the site survey been provided and include all necessary elements? (Appendix A)			n/a
44	Have the sampling logs, chain of custody forms and analytical data package been included with all elements? (Appendix B)	Yes		
45	Is the laboratory performing the analyses properly certified? (Appendix B)	Yes		
46	Has the tax map been included with all necessary elements? (Appendix C)			n/a
47	Have the soil/boring field screening logs been provided? (Appendix D)			n/a
48	Have the well completion logs been provided? (Appendix E)			n/a
49	Have the aquifer evaluation forms,data, graphs, equations,etc. been provided? (Appendix F)			n/a
50	Have the disposal manifests been provided? (Appendix G)	Yes		
51	Has a copy of the local zoning regulations been provided? (Appendix H)			n/a

UST Programmatic QAPP Contractor Checklist				
52	Has all fate and transport modeling been provided? (Appendix I)			n/a
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			n/a
54	Has a copy of this form been attached to the final report and are explainations for any missing or incomplete data been provided?	Yes		
Comments:				

D H E C

PROMOTE PROTECT PROSPER

Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

MR CHARLES F CRAWFORD III
CRAWFORD ENVIRONMENTAL SERVICES
15 CHURCH AVENUE SW
ROANOKE VA 24011

JAN 12 2016

UST 1917 DOCKETING

Re: **Corrective Action System Evaluation (CASE) Report Review**
UST Permit# 07584, University Mart, 2367 Taylor St., Columbia, SC
Release #1 reported January 30, 1991; CA# 47811
Release #2 reported April 17, 1998; CA# 47812
UST Permit # 07777, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 31, 1991; CA# 47813
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 30, 1991; CA# 47814
Contract #IFB-5400007095-1/30/2014-EMW; PO# 4600322226
CASE report received December 16, 2015
Richland County

Dear Mr. Crawford:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (Agency) has reviewed the CASE report documenting the corrective action activities and the November 2015 groundwater sampling event. The Agency has noted a 35.64% reduction.

The semi-annual CASE # 4 report is due on or before **June 15, 2016.**
The semi-annual CASE #5 report is due on or before **December 15, 2016.**

On all correspondence regarding this site, please reference UST Permit #07584/ #07777/ #12352. If you have any questions regarding this correspondence, please contact me by telephone at (803) 898-0634, by fax at (803) 898-0673, or by e-mail at utzst@dhec.sc.gov.

Sincerely,

Sonya T. Utz, Hydrogeologist
Corrective Action Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

cc: Technical File

D H E C

PROMOTE PROTECT PROSPER

Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

SYLVAN FOOD SYSTEMS INC
1245 BOSTON AVE
WEST COLUMBIA SC 29170

JAN 12 2016

Re: **Corrective Action System Evaluation (CASE) Report Review**
UST Permit# 07584, University Mart, 2367 Taylor St., Columbia, SC
Release #1 reported January 30, 1991
Release #2 reported April 17, 1998
UST Permit # 07777, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 31, 1991
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 30, 1991
CASE report received December 16, 2015
Richland County

To Whom It May Concern:

As you are aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, Crawford Environmental Services has been retained to initiate corrective action of the impacted soil and groundwater using aggressive fluid vapor recovery (AFVR), air sparging and soil vapor extraction, and the injection of surfactants in addition to natural attenuation.

In order to keep you updated, a copy of the Corrective Action System Evaluation (CASE) Report has been sent to you by Crawford Environmental Services. Please contact me if you did not receive the report.

If you have questions concerning this correspondence, please contact me by telephone at (803) 898-0634, by fax at (803) 898-0673, or utzst@dhec.sc.gov.

Sincerely,

Sonya T. Utz, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management

cc: Technical File

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PROMOTE PROTECT PROSPER

Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

MS LINDA WARREN
C/O DOUGLAS HARLEY
1527 LYON ST
COLUMBIA SC 29204

JAN 12 2016

Re: **Corrective Action System Evaluation (CASE) Report Review**
UST Permit# 07584, University Mart, 2367 Taylor St., Columbia, SC
Release #1 reported January 30, 1991
Release #2 reported April 17, 1998
UST Permit # 07777, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 31, 1991
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 30, 1991
CASE report received December 16, 2015
Richland County

Dear Ms. Warren:

As you are aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, Crawford Environmental Services has been retained to initiate corrective action of the impacted soil and groundwater using aggressive fluid vapor recovery (AFVR), air sparging and soil vapor extraction, and the injection of surfactants in addition to natural attenuation.

In order to keep you updated, a copy of the Corrective Action System Evaluation (CASE) Report has been sent to you by Crawford Environmental Services. Please contact me if you did not receive the report.

If you have questions concerning this correspondence, please contact me by telephone at (803) 898-0634, by fax at (803) 898-0673, or utzst@dhec.sc.gov.

Sincerely,

Sonya T. Utz, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management

cc: Technical File

D H E C

PROMOTE PROTECT PROSPER

Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

GILBERT WALKER
PUBLIC HOUSING AUTHORITY
GONZALES GARDENS
PO BOX 4307
COLUMBIA SC 29240

JAN 12 2016

Re: **Corrective Action System Evaluation (CASE) Report Review**
UST Permit# 07584, University Mart, 2367 Taylor St., Columbia, SC
Release #1 reported January 30, 1991
Release #2 reported April 17, 1998
UST Permit # 07777, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 31, 1991
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 30, 1991
CASE report received December 16, 2015
Richland County

Dear Mr. Gonzales:

As you are aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, Crawford Environmental Services has been retained to initiate corrective action of the impacted soil and groundwater using aggressive fluid vapor recovery (AFVR), air sparging and soil vapor extraction, and the injection of surfactants in addition to natural attenuation.

In order to keep you updated, a copy of the Corrective Action System Evaluation (CASE) Report has been sent to you by Crawford Environmental Services. Please contact me if you did not receive the report.

If you have questions concerning this correspondence, please contact me by telephone at (803) 898-0634, by fax at (803) 898-0673, or utzst@dhec.sc.gov.

Sincerely,

Sonya T. Utz, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management

cc: Technical File

D H E C

PROMOTE PROTECT PROSPER

Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

1500 MILLWOOD AVE LLC
1330 DEVONSHIRE DR
COLUMBIA SC 29204

JAN 1 2 2016

Re: **Corrective Action System Evaluation (CASE) Report Review**
UST Permit# 07584, University Mart, 2367 Taylor St., Columbia, SC
Release #1 reported January 30, 1991
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UST Permit # 07777, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 31, 1991
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 30, 1991
CASE report received December 16, 2015
Richland County

To Whom It May Concern:

As you are aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, Crawford Environmental Services has been retained to initiate corrective action of the impacted soil and groundwater using aggressive fluid vapor recovery (AFVR), air sparging and soil vapor extraction, and the injection of surfactants in addition to natural attenuation.

In order to keep you updated, a copy of the Corrective Action System Evaluation (CASE) Report has been sent to you by Crawford Environmental Services. Please contact me if you did not receive the report.

If you have questions concerning this correspondence, please contact me by telephone at (803) 898-0634, by fax at (803) 898-0673, or utzst@dhec.sc.gov.

Sincerely,

Sonya T. Utz, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management

cc: Technical File

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PROMOTE PROTECT PROSPER

Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

JOHN M SUDDETH
1410 N MILLWOOD AVE
COLUMBIA SC 29204

JAN 12 2016

Re: **Corrective Action System Evaluation (CASE) Report Review**
UST Permit# 07584, University Mart, 2367 Taylor St., Columbia, SC
Release #1 reported January 30, 1991
Release #2 reported April 17, 1998
UST Permit # 07777, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 31, 1991
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 30, 1991
CASE report received December 16, 2015
Richland County

Dear Mr. Suddeth:

As you are aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, Crawford Environmental Services has been retained to initiate corrective action of the impacted soil and groundwater using aggressive fluid vapor recovery (AFVR), air sparging and soil vapor extraction, and the injection of surfactants in addition to natural attenuation.

In order to keep you updated, a copy of the Corrective Action System Evaluation (CASE) Report has been sent to you by Crawford Environmental Services. Please contact me if you did not receive the report.

If you have questions concerning this correspondence, please contact me by telephone at (803) 898-0634, by fax at (803) 898-0673, or utzst@dhec.sc.gov.

Sincerely,

Sonya T. Utz, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management

cc: Technical File

D H E C

PROMOTE PROTECT PROSPER

Catherine E. Heigel, Director

Promoting and protecting the health of the public and the environment

FUNG LAU
2300 TAYLOR ST SUITE D
COLUMBIA SC 29204

JAN 12 2016

Re: **Corrective Action System Evaluation (CASE) Report Review**
UST Permit# 07584, University Mart, 2367 Taylor St., Columbia, SC
Release #1 reported January 30, 1991
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UST Permit # 07777, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 31, 1991
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 30, 1991
CASE report received December 16, 2015
Richland County

Dear Fung Lau:

As you are aware, petroleum products have been identified in the soil and groundwater at the referenced facility. To prevent the release from becoming an unacceptable risk, Crawford Environmental Services has been retained to initiate corrective action of the impacted soil and groundwater using aggressive fluid vapor recovery (AFVR), air sparging and soil vapor extraction, and the injection of surfactants in addition to natural attenuation.

In order to keep you updated, a copy of the Corrective Action System Evaluation (CASE) Report has been sent to you by Crawford Environmental Services. Please contact me if you did not receive the report.

If you have questions concerning this correspondence, please contact me by telephone at (803) 898-0634, by fax at (803) 898-0673, or utzst@dhec.sc.gov.

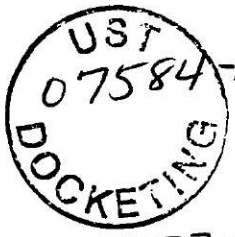
Sincerely,

Sonya T. Utz, Hydrogeologist
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management

cc: Technical File

CRAWFORD ENVIRONMENTAL SERVICES





07584 - 257 tech
07777 - 192 tech
12352 - 127 tech

June 10, 2016

Ms. Sonya Utz
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

RE: Corrective Action System Evaluation – May 2016 (Sampling Date)
Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352

Dear Ms. Utz:

Enclosed please find one copy of the May 2016 Corrective Action System Evaluation (CASE) report prepared by Crawford Environmental Services, Inc. (CES) for the referenced site. Should you have any questions regarding the enclosed material, or if additional information is required, please feel free to contact Charlie Crawford or myself at 540.343.6256.

Best Regards,

Daniel Fisher
Division Manager

cc:

COPY

CRAWFORD
ENVIRONMENTAL
SERVICES

Corrective Action System Evaluation Report

Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352
June 10, 2016
Revision 0

CORRETIVE ACTION SYSTEM EVALUATION REPORT

Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352

Submitted To:
Ms. Sonya Utz
State of South Carolina
Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Prepared For:
Ms. Sonya Utz
State of South Carolina
Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

June 10, 2016
CES Job Number: 7.0547

Prepared By:
Daniel J. Fisher
Division Manager

Reviewed By:
Charles F. Crawford
President / CEO

Approved By:
B. Thomas Houghton
P.G. #2343

CRAWFORD
ENVIRONMENTAL
SERVICES

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Appendix A - Purge Water Disposal Manifest
Appendix B - Groundwater Sampling Data Sheets
Appendix C - Laboratory Data Reports, Chain of Custodies and Field Data Information Sheets
Appendix D - Data Verification Checklist

1.0 Facility Information

The subject property is located in a primarily commercial area of Columbia, South Carolina (Figure 1). The subject sites, operating as Handy Pantry #65/University Mart and former Cloud's Chevron, is bordered by light commercial properties in all directions. A site plan depicting pertinent features of the subject property is provided as Figure 2.

1.1 Project Information Summary:

1.2.1 Site Address

Handy Pantry #65 / University Mart / Clouds Chevron
2367 Taylor Street
Columbia, South Carolina

1.2.2 Property Owner Information

Mr. Mahesh Patel
2367 Taylor Street
Columbia, South Carolina

Mr. Andrew Diggins
1600 Block Two Notch Road
Columbia, South Carolina

1.2.3 Contractor Information

Crawford Environmental Services
15 Church Avenue, SW
Roanoke, Virginia 24011
1 (540) 343-6256
Contractor Number: UCC-0388

1.2.4 Laboratory Information

Access Analytical, Inc. (AA)
7478 Carlisle Street
Irmo, SC 29063
1 (803) 781-4243
SC Certification: 32575001

Analytical Environmental Services Inc. (AES)
3785 Presidential Pkwy.
Atlanta, GA 30340
1 (770) 457-8177
SC Certification: 98016003

2.0 Corrective Action Activities

Corrective Action activities at the facility for this phase of work included the following:

-Regular O&M of the Air Sparge / Soil Vapor Extraction Systems.
-Monitoring Well Maintenance
-Bi-Annual Sampling Event

2.1 Water Sample Collection

A comprehensive groundwater sampling event, including; recording equilibrated static water levels, product thicknesses, and the collection of chemical samples was completed by CES personnel between May 15 and May 18, 2016. CES personnel utilized an electronic water level indicator for water level measurements and an oil/water interface probe for free phase product measurements. Samples for the shallow wells were collected utilizing disposable polyethylene bailers. Shallow wells that exhibited groundwater above the screened bracket were purged of at least three well volumes or purged till dry before sample collection. Deep and intermediate wells exhibiting groundwater above the screened bracket were purged utilizing submersible pumps with dedicated tubing. For sample collection, disposable polyethylene bailers were lowered slowly to the top of the water column (after purging in some cases) allowed to fill one volume, then removed. Disposal records for the 230-gallons of purge water generated are included as Appendix A. Groundwater was then transferred to the appropriate sampling containers and was then placed in coolers, maintaining 4°C, and delivered to an independent laboratory. Groundwater chemical samples were submitted to Access Analytical, Inc., {SC Certification: 32575001} for analysis.

2.1.1 Groundwater Sampling

Equilibrated static water levels and free-product thicknesses were recorded for monitoring wells MW-2, MW-3, MW-4, MW-5, MW-5AR, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-15, MW-18, MW-19, MW-20, MW-22, MW-23, MW-26, MW-27, MW-28, MW-29, MW-30, MW-31, MW-32, MW-33, MW-34, MW-35, MW-36, MW-37, MW-38, MW-39, MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, MW-48, MW-51, MW-53, MW-54, MW-55, MW-56, MW-59, MW-63, MW-67, MW-70, PW-1R, DW-1, DW-2, DW-3, DW-4, DW-5, DW-6, DW-7, and DW-9. Groundwater sampling data sheets are included as Appendix B.

During the referenced sampling event, CES was unable to access monitoring wells MW-49 and MW-50 due to a locked gate and monitoring wells MW-25, MW-53, MW-57, MW-60, MW-61, MW-64, MW-66 and MW-68 were unable to be located. CES also utilized a metal detector to locate the wells, however, the overgrown site conditions did not permit the location of the aforementioned monitoring wells. Monitoring well MW-15 maintained free phase petroleum and were not sampled. Monitoring well MW-1 did not maintain sufficient water columns to collect groundwater samples. Monitoring wells MW-17 and MW-58 were obstructed by construction materials and monitoring wells MW-62 was obstructed by a trailer causing these wells to not be sampled.

A surface water sample, SW-1, was taken from the drainage ditch on the east side of Ontario Street.

CES sampled the monitoring wells, as part of the May 2016 sampling event, for the following chemical analyses:
Benzene/Toluene/Ethylbenzene/Xylenes (BTEX), naphthalene, Methyl Tert-Butyl Ether (MTBE), Tert-Amyl Methyl Ether (TAME), Tert-Butyl Alcohol (TBA), and Tert-Amyl Alcohol (TAA).

During the sampling event CES collected duplicate samples of monitoring wells MW-10, MW-35 and PW-1R. Review of the duplicate samples collected from aforementioned monitoring well samples did not yield significant data gaps.

In addition to duplicate samples, CES also collected daily field blank samples at the conclusion of the sample events. The samples were collected at the conclusion of the day to be representative of all samples that were collected during that day. Sealed trip blank samples were also stored with samples during each day of the sample event.

Table 2 presents the laboratory data for the submitted groundwater samples collected as part of this assessment. The groundwater concentration maps are included as Figure 3. The groundwater elevation map is included as Figure 4.

3.0 Summary

During the corrective action activities performed at the subject property, CES conducted a comprehensive groundwater monitoring event, in an effort to determine the effectiveness of the current corrective action plan. The qualitative and quantitative data collected from recent assessment activities indicates the following regarding current site conditions;

1. Groundwater from monitoring wells MW-3, MW-9, MW-12, MW-17, MW-18, MW-19, MW-20, MW-22, MW-23, MW-25, MW-33, MW-35, MW-37, MW-5AR, PW-1R and DW-3 and surface water SW-1 exhibited hydrocarbon constituent concentrations above the SSTLs for the chemicals of concern.

2. CES calculated a COC reduction of 58.81 percent during this phase of work.

3. Free-phase petroleum was observed at monitoring wells MW-15. During the last sampling event in November 2015, free-phase petroleum was observed in monitoring well MW-62, in which free-phase petroleum had not been historically detected. CES mobilizing to the subject site on December 16, 2015 and no longer found the presence of free product at MW-62. CES personnel obtained a sample and the corresponding analytical results are included in Table 2.

4. Based on the results of the previous sampling events, CES is scheduled to install injection wells proximal to MW-10 and MW-15 to perform limited surfactant injection / extraction events. CES has completed negotiations with the off-site property owner and well installation is scheduled for June 26, 2016 with the first injection event scheduled for July 15, 2016.

Tables

Table 1: Summary of Groundwater Elevation Data
Table 2: Summary of Groundwater Analytical Data
Table 3: Site Specific Target Levels Summary

CRAWFORD
ENVIRONMENTAL
SERVICES

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-1	27	17	27	93.89	5/15/2016	NA	DRY	NA	NA	DRY
					11/3/2015	NA	DRY	NA	NA	DRY
					5/29/2015	NA	DRY	NA	NA	DRY
					11/11/2014	NA	DRY	NA	NA	DRY
					4/2/2014	NA	DRY	NA	NA	DRY
MW-2	30	20	30	94.70	5/16/2016	NA	20.08	NA	NA	74.62
					11/3/2015	NA	20.32	NA	NA	74.38
					5/29/2015	22.56	22.57	0.01	72.14	72.13
					11/4/2014	NA	23.03	NA	NA	71.67
					4/2/2014	NA	21.12	NA	NA	73.58
MW-3	29	19	29	94.45	5/16/2016	NA	19.84	NA	NA	74.61
					11/3/2015	NA	23.29	NA	NA	71.16
					5/29/2015	23.2	23.29	0.09	71.25	71.16
					4/2/2014	NA	21.40	NA	NA	73.05
					11/12/2014	NA	23.16	NA	NA	71.29
MW-4	28	18	28	94.85	5/16/2016	NA	19.20	NA	NA	75.65
					11/3/2015	NA	20.35	NA	NA	74.50
					5/29/2015	NA	21.52	NA	NA	73.33
					11/11/2014	NA	21.76	NA	NA	73.09
					4/2/2014	NA	21.31	NA	NA	73.54
MW-5	26	16	26	95.26	5/16/2016	NA	19.75	NA	NA	75.51
					11/3/2015	NA	DRY	NA	NA	DRY
					5/29/2015	NA	DRY	NA	NA	DRY
					11/11/2014	NA	DRY	NA	NA	DRY
					4/2/2014	NA	DRY	NA	NA	DRY
MW-6	30	20	30	94.96	5/17/2016	NA	20.59	NA	NA	74.37
					11/3/2015	NA	21.21	NA	NA	73.75
					5/29/2015	NA	22.38	NA	NA	72.58
					11/11/2014	NA	23.98	NA	NA	70.98
					4/3/2014	NA	22.61	NA	NA	72.35
MW-7	30	20	30	95.93	5/16/2016	NA	20.98	NA	NA	74.95
					11/3/2015	NA	21.79	NA	NA	74.14
					5/29/2015	NA	23.48	NA	NA	72.45
					11/11/2014	NA	24.12	NA	NA	71.81
					4/3/2014	NA	23.02	NA	NA	72.91
MW-8	28	18.5	28	94.79	5/17/2016	NA	18.75	NA	NA	76.04
					11/3/2015	NA	19.19	NA	NA	75.60
					5/29/2015	NA	20.08	NA	NA	74.71
					11/11/2014	NA	21.43	NA	NA	73.36
					4/3/2014	NA	19.95	NA	NA	74.84
MW-9	30	20	30	92.30	5/16/2016	NA	18.78	NA	NA	73.52
					11/3/2015	NA	20.04	NA	NA	72.26
					5/28/2015	NA	21.19	NA	NA	71.11
					11/11/2014	NA	21.69	NA	NA	70.61
					4/2/2014	NA	20.60	NA	NA	71.70
MW-10	28	18	28	85.98	5/18/2016	NA	14.52	NA	NA	71.46
					11/3/2015	NA	14.58	NA	NA	71.40
					5/28/2015	NA	16.64	NA	NA	69.34
					11/11/2014	Interface Probe Failure - 1.25-Feet of Product Observed in Bailer				
					4/1/2014	NA	17.69	NA	NA	68.29
MW-11	30	Unknown		88.46	5/18/2016	NA	16.66	NA	NA	71.80
					11/3/2015	NA	17.16	NA	NA	71.30
					5/29/2015	NA	18.93	NA	NA	69.53
					11/11/2014	NA	19.38	NA	NA	69.08
					4/2/2014	NA	18.61	NA	NA	69.85
MW-12	24.65	Unknown		72.80	5/18/2016	NA	2.73	NA	NA	70.07
					11/3/2015	NA	3.15	NA	NA	69.65
					5/28/2015	NA	4.38	NA	NA	68.42
					11/11/2014	NA	4.63	NA	NA	68.17
					4/2/2014	NA	4.20	NA	NA	68.60
MW-13	30.1	Unknown		80.44	5/16/2016	NA	9.71	NA	NA	70.73
					11/3/2015	NA	9.82	NA	NA	70.62
					5/28/2015	NA	11.71	NA	NA	68.73
					11/11/2014	NA	12.15	NA	NA	68.29
					4/1/2014	NA	11.13	NA	NA	69.31
MW-15	25	15	25	86.44	5/18/2016	14.58	15.02	0.13	71.86	71.42
					11/3/2015	14.51	14.64	0.13	71.93	71.80
					5/29/2015	15.45	15.61	0.15	69.99	69.83
					11/11/2014	Interface Probe Failure - 0.25-Feet of Product Observed in Bailer				
					4/1/2014	15.60	16.00	0.60	69.84	70.88*
MW-16	25	15	25	88.19	5/18/2016	NA	16.29	NA	NA	70.15
					11/3/2015	NA	16.29	NA	NA	70.15
					5/29/2015	Unable to Locate				
					11/12/2014	NA	18.98	NA	NA	69.21
					4/2/2014	NA	17.54	NA	NA	70.65

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron
Address: 2367 Taylor Street Columbia, South Carolina
UST Permit ID: 07584 / 07777 / 12352
CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-17	22	20	30	92.45	5/16/2016	Not Sampled due to Obstruction				
					11/3/2015	NA	20.47	NA	NA	71.98
					5/28/2015	NA	22.70	NA	NA	69.75
					11/12/2014	NA	23.45	NA	NA	69.00
					4/2/2014	NA	22.00	NA	NA	70.45
MW-18	30	20	30	94.81	5/15/2016	NA	22.04	NA	NA	72.77
					11/3/2015	NA	22.28	NA	NA	72.53
					5/28/2015	NA	24.41	NA	NA	70.40
					11/12/2014	NA	25.08	NA	NA	69.73
					4/2/2014	NA	23.68	NA	NA	71.13
MW-19	30	20	30	93.96	5/18/2016	NA	21.76	NA	NA	72.20
					11/3/2015	NA	21.81	NA	NA	72.15
					5/28/2015	NA	24.00	NA	NA	69.96
					11/13/2014	NA	24.56	NA	NA	69.40
					4/3/2014	NA	23.33	NA	NA	70.63
MW-20	25	15	25	94.12	5/15/2016	NA	20.41	NA	NA	73.71
					11/3/2015	NA	20.18	NA	NA	73.94
					5/28/2015	22.67	22.61	0.06	71.45	71.51
					11/13/2014	NA	23.28	NA	NA	70.84
					4/3/2014	NA	21.95	NA	NA	72.17
MW-22	30	20	30	94.25	5/15/2016	NA	19.61	NA	NA	74.64
					11/3/2015	NA	19.01	NA	NA	75.24
					5/28/2015	NA	21.85	NA	NA	72.40
					11/11/2014	NA	22.68	NA	NA	71.57
					4/3/2014	NA	21.11	NA	NA	73.14
MW-23	30	20	30	94.43	5/18/2016	NA	21.95	NA	NA	72.48
					11/3/2015	NA	21.95	NA	NA	72.48
					5/28/2015	NA	24.25	NA	NA	70.18
					11/13/2014	NA	24.98	NA	NA	69.45
					4/3/2014	NA	23.65	NA	NA	70.78
MW-25	25.6	Unknown		93.09	5/15/2016	Unable to Locate				
					11/3/2015	NA	17.73	NA	NA	75.36
					5/28/2015	NA	20.65	NA	NA	72.44
					11/10/2014	NA	21.60	NA	NA	71.49
					4/1/2014	NA	19.71	NA	NA	73.38
MW-26	30	Unknown		95.96	5/17/2016	NA	20.24	NA	NA	75.72
					11/3/2015	NA	21.06	NA	NA	74.90
					6/5/2015	NA	22.49	NA	NA	73.47
					11/11/2014	NA	22.95	NA	NA	73.01
					4/3/2014	NA	20.01	NA	NA	75.95
MW-27	30	15	30	91.40	5/17/2016	NA	15.62	NA	NA	75.78
					11/3/2015	NA	11.21	NA	NA	80.19
					5/28/2015	NA	17.75	NA	NA	73.65
					11/13/2014	NA	18.85	NA	NA	72.55
					4/1/2014	NA	14.65	NA	NA	76.75
MW-28	30	15	30	91.46	5/17/2016	NA	15.90	NA	NA	75.56
					11/3/2015	NA	13.08	NA	NA	78.38
					5/28/2015	NA	17.97	NA	NA	73.49
					11/13/2014	NA	19.75	NA	NA	71.71
					4/1/2014	NA	15.63	NA	NA	75.83
MW-29	30	15	30	91.09	5/17/2016	NA	15.88	NA	NA	75.21
					11/3/2015	NA	13.19	NA	NA	77.90
					5/28/2015	17.91	17.92	0.01	73.18	73.17
					11/13/2014	NA	19.92	NA	NA	71.17
					4/1/2014	NA	15.51	NA	NA	75.58
MW-30	30	15	30	92.77	5/15/2016	NA	19.27	NA	NA	73.50
					11/3/2015	NA	17.43	NA	NA	75.34
					5/28/2015	NA	25.70	NA	NA	66.07
					11/10/2014	NA	22.90	NA	NA	69.87
					4/1/2014	NA	20.50	NA	NA	72.27
MW-31	35	20	35	95.20	5/17/2016	NA	22.98	NA	NA	72.22
					11/3/2015	NA	22.53	NA	NA	72.67
					5/28/2015	25.61	25.62	0.01	69.59	69.58
					11/12/2014	NA	26.36	NA	NA	68.84
					4/2/2014	NA	24.41	NA	NA	70.79
MW-32	30	15	30	92.87	5/17/2016	NA	19.75	NA	NA	73.12
					11/3/2015	NA	19.12	NA	NA	73.75
					5/28/2015	NA	22.00	NA	NA	70.87
					11/12/2014	NA	23.16	NA	NA	69.71
					4/2/2014	NA	21.28	NA	NA	71.59
MW-33	35	20	35	93.84	5/15/2016	NA	21.57	NA	NA	72.27
					11/3/2015	NA	21.48	NA	NA	72.36
					5/28/2015	NA	23.83	NA	NA	70.01
					11/12/2014	NA	24.65	NA	NA	69.19
					4/1/2014	NA	23.18	NA	NA	70.66

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron
Address: 2367 Taylor Street Columbia, South Carolina
UST Permit ID: 07584 / 07777 / 12352
CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-34	35	20	35	94.77	5/15/2016	NA	22.38	NA	NA	72.39
					11/3/2015	NA	21.52	NA	NA	73.25
					5/28/2015	NA	24.72	NA	NA	70.05
					11/12/2014	NA	25.49	NA	NA	69.28
					4/1/2014	NA	24.06	NA	NA	70.71
MW-35	35	20	35	93.71	5/16/2016	NA	21.48	NA	NA	72.23
					11/3/2015	NA	21.37	NA	NA	72.34
					5/28/2015	NA	23.80	NA	NA	69.91
					11/12/2014	NA	24.66	NA	NA	69.05
					4/1/2014	NA	21.35	NA	NA	72.36
MW-36	35	20	35	93.89	5/15/2016	NA	21.36	NA	NA	72.53
					11/3/2015	NA	21.36	NA	NA	72.53
					5/28/2015	NA	23.63	NA	NA	70.26
					11/12/2014	NA	24.72	NA	NA	69.17
					4/1/2014	NA	22.84	NA	NA	71.05
MW-37	35	20	35	93.78	5/16/2016	NA	21.61	NA	NA	72.17
					11/3/2015	NA	21.36	NA	NA	72.42
					5/28/2015	NA	23.98	NA	NA	69.80
					11/12/2014	NA	24.87	NA	NA	68.91
					4/1/2014	NA	22.24	NA	NA	71.54
MW-38	35	20	35	95.53	5/18/2016	NA	24.83	NA	NA	70.70
					11/3/2015	NA	22.89	NA	NA	72.64
					6/2/2015	NA	25.26	NA	NA	70.27
					11/12/2014	NA	26.17	NA	NA	69.36
					4/1/2014	NA	24.61	NA	NA	70.92
MW-39	35	20	35	96.19	5/18/2016	NA	24.02	NA	NA	72.17
					11/3/2015	NA	23.79	NA	NA	72.40
					6/2/2015	NA	26.45	NA	NA	69.74
					11/12/2014	NA	27.36	NA	NA	68.83
					4/2/2014	NA	25.59	NA	NA	70.60
MW-40	35	20	35	95.69	5/18/2016	NA	25.25	NA	NA	70.44
					11/3/2015	NA	23.43	NA	NA	72.26
					6/2/2015	NA	26.12	NA	NA	69.57
					11/12/2014	NA	27.01	NA	NA	68.68
					4/2/2014	NA	25.29	NA	NA	70.40
MW-41	35	20	35	94.85	5/18/2016	NA	23.71	NA	NA	71.14
					11/3/2015	NA	22.77	NA	NA	72.08
					6/2/2015	NA	25.69	NA	NA	69.16
					11/11/2014	NA	26.99	NA	NA	67.86
					4/1/2014	NA	24.70	NA	NA	70.15
MW-42	35	20	35	95.81	5/18/2016	NA	23.73	NA	NA	72.08
					11/3/2015	NA	23.46	NA	NA	72.35
					6/2/2015	NA	26.25	NA	NA	69.56
					11/12/2014	NA	27.22	NA	NA	68.59
					4/1/2014	NA	25.35	NA	NA	70.46
MW-43	40	20	40	95.15	5/18/2016	NA	22.04	NA	NA	73.11
					11/3/2015	NA	22.21	NA	NA	72.94
					5/28/2015	NA	24.66	NA	NA	70.49
					11/11/2014	NA	25.61	NA	NA	69.54
					4/2/2014	NA	24.00	NA	NA	71.15
MW-44	31	16	31	94.57	5/18/2016	NA	20.11	NA	NA	74.46
					11/3/2015	NA	20.33	NA	NA	74.24
					5/28/2015	NA	22.70	NA	NA	71.87
					11/11/2014	NA	24.23	NA	NA	70.34
					4/1/2014	NA	24.42	NA	NA	70.15
MW-45	30	15	30	92.51	5/18/2016	NA	19.43	NA	NA	73.08
					11/3/2015	NA	19.45	NA	NA	73.06
					5/28/2015	NA	21.75	NA	NA	70.76
					11/11/2014	NA	22.63	NA	NA	69.88
					4/1/2014	NA	21.22	NA	NA	71.29
MW-46	35	20	35	94.50	5/16/2016	NA	21.70	NA	NA	72.80
					11/3/2015	NA	21.84	NA	NA	72.66
					5/28/2015	NA	24.19	NA	NA	70.31
					11/11/2014	NA	24.95	NA	NA	69.55
					4/1/2014	NA	23.55	NA	NA	70.95
MW-48	30	15	30	89.95	5/18/2016	NA	18.21	NA	NA	71.74
					11/3/2015	Unable to Access - Locked Gate				
					5/29/2015	NA	19.63	NA	NA	70.32
					11/11/2014	Unable to Access - Locked Gate				
					4/2/2014	NA	19.70	NA	NA	70.25
MW-49	30	15	30	88.18	5/15/2016	Unable to Access - Locked Gate				
					11/3/2015					
					5/29/2015					
					11/11/2014					
					4/2/2014					

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-50	30	15	30	84.09	5/15/2016	Unable to Access - Locked Gate				
					11/3/2015					
					5/29/2015					
					11/11/2014					
					4/2/2014					
MW-51	35	20	35	93.91	5/18/2016	NA	20.76	NA	NA	73.15
					11/3/2015	NA	21.87	NA	NA	72.04
					5/29/2015	NA	23.72	NA	NA	70.19
					11/11/2014	NA	24.29	NA	NA	69.62
					4/2/2014	NA	21.23	NA	NA	72.68
MW-53	20	5	20	79.60	5/15/2016	Unable to Locate- Overgrown Field				
					11/3/2015	NA	8.49	NA	NA	71.11
					5/28/2015	NA	10.50	NA	NA	69.10
					11/11/2014	NA	11.02	NA	NA	68.58
					4/3/2014	NA	9.60	NA	NA	70.00
MW-54	20	5	20	77.58	5/18/2016	NA	10.15	NA	NA	67.43
					11/3/2015	NA	9.83	NA	NA	67.75
					5/28/2015	NA	11.27	NA	NA	66.31
					11/11/2014	Unable to Locate - Overgrown Field				
					4/1/2014	NA	11.31	NA	NA	66.27
MW-55	14	4	14	71.22	5/18/2016	NA	1.55	NA	NA	69.67
					11/3/2015	NA	1.19	NA	NA	70.03
					5/28/2015	NA	3.83	NA	NA	67.39
					11/11/2014	Unable to Locate - Overgrown Field				
					4/3/2014	NA	2.51	NA	NA	68.71
MW-56	20	5	20	76.39	5/18/2016	NA	6.76	NA	NA	69.63
					11/3/2015	NA	6.4	NA	NA	69.99
					5/28/2015	NA	8.22	NA	NA	68.17
					11/11/2014	Unable to Locate - Overgrown Field				
					4/3/2014	NA	5.12	NA	NA	71.27
MW-58	19	4	19	76.37	5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	NA	4.52	NA	NA	71.85
					5/29/2015	NA	6.85	NA	NA	69.52
					11/11/2014	Abandoned				
					4/2/2014					
MW-59	17	2	17	68.02	5/18/2016	NA	5.46	NA	NA	62.56
					11/3/2015	NA	5.04	NA	NA	62.98
					5/28/2015	NA	6.46	NA	NA	61.56
					11/11/2014	NA	6.69	NA	NA	61.33
					4/2/2014	NA	6.05	NA	NA	61.97
MW-60	14	4	14	67.94	5/18/2016	Unable to Locate				
					11/3/2015					
					5/28/2015					
					11/11/2014					
					4/2/2014					
MW-62	35	20	35	94.05	5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	22.15	22.67	0.52	71.90	71.38
					5/28/2015	22.21	23.71	1.5	71.84	70.34
					11/12/2014	NA	24.75	NA	NA	69.30
					4/1/2014	NA	22.32	NA	NA	71.73
MW-63	35	20	35	94.65	5/18/2016	NA	21.66	NA	NA	72.99
					11/3/2015	NA	24.05	NA	NA	70.60
					5/28/2015	24.04	24.05	0.01	70.61	70.60
					11/12/2015	Unable to Locate				
					4/2/2014	NA	23.07	NA	NA	71.58
MW-65	35	20	35	94.04	5/15/2016	Unable to Locate - Paved over				
					11/3/2015					
					5/28/2015					
					11/11/2014					
					4/2/2014					
MW-67	35	20	35	96.10	5/18/2016	NA	23.73	NA	NA	72.37
					11/3/2015	NA	23.52	NA	NA	72.58
					6/2/2015	NA	26.29	NA	NA	69.81
					11/12/2014	NA	27.28	NA	NA	68.82
					4/1/2014	NA	24.44	NA	NA	71.66
MW-70	35	20	35	95.49	5/18/2016	NA	23.11	NA	NA	72.38
					11/3/2015	NA	22.89	NA	NA	72.60
					5/28/2015	NA	25.60	NA	NA	69.89
					11/11/2014	NA	26.22	NA	NA	69.27
					4/2/2014	NA	24.70	NA	NA	70.79
MW-5AR	28	18	28	94.18	5/15/2015	NA	19.59	NA	NA	74.59
					11/3/2015	NA	16.39	NA	NA	77.79
					5/28/2015	NA	20.91	NA	NA	73.27
					11/13/2014	NA	22.64	NA	NA	71.54
					4/1/2014	NA	21.24	NA	NA	72.94

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
PW-1R	50	45	50	93.75	5/18/2016	NA	21.03	NA	NA	72.72
					11/3/2015	NA	21.43	NA	NA	72.32
					5/29/2015	23.19	23.20	0.01	70.56	70.55
					11/13/2014	NA	23.92	NA	NA	69.83
					4/3/2014	NA	23.11	NA	NA	70.64
DW-1	70	65	70	94.66	5/16/2016	NA	42.71	NA	NA	51.95
					11/3/2015	NA	46.28	NA	NA	48.38
					5/29/2015	NA	46.28	NA	NA	48.38
					11/10/2014	NA	45.42	NA	NA	49.24
					4/2/2014	NA	45.00	NA	NA	49.66
DW-2	75	70	75	94.02	5/16/2016	NA	41.99	NA	NA	52.03
					11/3/2015	NA	43.07	NA	NA	50.95
					11/11/2014	NA	44.88	NA	NA	49.14
					4/2/2014	NA	44.34	NA	NA	49.68
DW-3	52	47	52	93.75	5/18/2016	NA	21.70	NA	NA	72.05
					11/3/2015	NA	21.29	NA	NA	72.46
					5/28/2015	NA	23.93	NA	NA	69.82
					11/13/2014	NA	24.42	NA	NA	69.33
					4/3/2014	NA	24.40	NA	NA	69.35
DW-4	110	105	110	93.79	5/18/2016	NA	42.31	NA	NA	51.48
					11/3/2015	NA	43.34	NA	NA	50.45
					5/28/2015	NA	44.51	NA	NA	49.28
					11/13/2014	NA	3.45	NA	NA	90.34
					4/3/2014	NA	44.60	NA	NA	49.19
DW-5	70	65	70	93.74	5/16/2016	NA	42.12	NA	NA	51.62
					11/3/2015	NA	42.89	NA	NA	50.85
					5/28/2015	NA	44.45	NA	NA	49.29
					11/12/2014	NA	44.75	NA	NA	48.99
					4/1/2014	NA	44.22	NA	NA	49.52
DW-6	70	65	70	95.90	5/18/2016	NA	44.10	NA	NA	51.80
					11/3/2015	NA	44.59	NA	NA	51.31
					6/2/2015	NA	46.16	NA	NA	49.74
					11/12/2014	NA	46.64	NA	NA	49.26
					4/1/2014	NA	45.86	NA	NA	50.04
DW-7	55	50	55	72.79	5/18/2016	NA	21.82	NA	NA	50.97
					11/3/2015	NA	22.97	NA	NA	49.82
					5/28/2015	NA	24.32	NA	NA	48.47
					11/11/2014	NA	24.75	NA	NA	48.04
					4/3/2014	NA	24.00	NA	NA	48.79
DW-8	55	50	55	68.63	5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	NA	19.43	NA	NA	49.20
					5/28/2015	NA	5.37	NA	NA	63.26
					11/11/2014	Abandoned				
					4/2/2014					
DW-9	65	60	65	76.47	5/18/2016	NA	22.42	NA	NA	54.05
					11/3/2015	NA	23.62	NA	NA	52.85
					5/28/2015	NA	24.90	NA	NA	51.57
					11/11/2014	NA	24.44	NA	NA	52.03
					4/2/2014	NA	25.00	NA	NA	51.47

INA = Information not available

* = GW Elevation Corrected for The Presence of Free Product

n/a = not applicable

CRAWFORD ENVIRONMENTAL SERVICES

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron | UST | 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina | Crawford Project No. | 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-1	4/2/2014	Dry								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
MW-2	4/2/2014	170	41	200	960	320	150	230	1	6.8
	11/4/2014	140	300	220	1300	410	160	210	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/4/2015	0.61	0.48	1.4	5.5	<1	2.6	<100	<10	<100
	5/16/2016	11	0.83 J	0.98 J	49	18	12	<100	<10	<100
MW-3	4/2/2014	6900	18000	1200	16000	1800	600	980	560.000	340
	11/12/2014	4600	11000	620	8700	1300	280	<5000	310.000	<5000
	5/29/2015	0.09-Feet of Free Product								
	11/4/2015	3000	8700	600	7200	720	360	<2000	140	<2000
	5/16/2016	7800	22000	1800	21000	2500	870	<5000	410 J	<5000
MW-4	4/2/2014	<1	<1	<1	<1	3.5	<5	<100	10.000	<100
	11/11/2014	<1	<1	<1	<1	1.6	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	0.87 J	<5	<100	<10	<100
MW-5	4/2/2014	Dry								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/16/2016	0.29 J	<1	<1	<1	<1	<5	<100	<10	<100
MW-6	4/3/2014	2.6	<1	2.4	10	2.5	4.2	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	0.8	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	1.7	<5	<100	<10	<100
MW-7	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	0.71	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-8	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-9	4/2/2014	830	7500	1700	14000	50	590	1700	5000	5000
	11/11/2014	380	11000	1900	13000	5	650	1100	<10	<100
	5/28/2015	250	5700	1200	8200	<50	480	<5000	<500	<5000
	11/4/2015	520	6200	1100	8600	<50	470	3000	<500	<5000
	5/16/2016	78	1900	1000	4300	<1	440	200	<10	<100
MW-10	4/1/2014	1800	5700	350	8500	50	690	5000	500	5000
	11/11/2014	1.25-Feet of Free Product								
	5/28/2015	66	76	67	860	<1	370	<100	<10	<100
	11/4/2015	10	18	4.5	120	<1	46	<100	<10	<100
	5/18/2016	88	11	22	97	<1	170	<100	<10	<100
MW-11	4/2/2014	2.3	4.1	11	4.1	<1	4.4	120	<10	<100
	11/11/2014	0.53	<1	<1	<1	<1	<5	80	<10	58
	5/29/2015	0.51	<1	<1	3.8	<1	6.6	50	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-12	4/2/2014	2.9	0.67	1.6	0.91	18	4.7	630	9	<100
	11/11/2014	990	19	910	140	21	180	3600	14	<100
	5/28/2015	53	2.7	430	14	22	44	2300	<10	<100
	11/4/2015	110	2	53	25	<1	10	1800	8	<100
	5/18/2016	260	83	710	330	17	190	1300	<10	<100
MW-13	4/1/2014	0.62	8.8	4.5	86	<1	31	10	<10	<100
	11/11/2014	<1	<1	<	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<1	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-15	4/1/2014	0.60-Feet of Free Product								
	11/11/2014	0.25-Feet of Free Product								
	5/29/2015	0.16-Feet of Free Product								
	11/3/2015	0.14-Feet of Free Product								
	5/15/2016	0.44-Feet of Free Product								
MW-16	4/2/2014	<1	<1	<1	<1	<1	3.4	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	Unable to Locate								
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-17	4/2/2014	280	5100	450	13000	50	850	2200	500	5000
	11/12/2014	32	3000	450	8300	<10	690	270	<100	<1000
	5/28/2015	210	7500	480	12000	<50	830	2200	<500	<5000
	11/4/2015	280	10000	660	13000	<100	720	<10000	<1000	<10000
	5/15/2016	Not Sampled due to Obstruction								
MW-18	4/2/2014	1900	7200	630	8300	340	370	4900	70.000	5000
	11/12/2014	3100	11000	560	8700	510	290	12000	<1000	<10000
	5/28/2015	970	2500	180	4100	230	180	3000	33.000	<100
	11/3/2015	990	5800	600	8900	93	260	<10000	<1000	<10000
	5/15/2016	260	1900	220	4900	20	220	690	<10	<100
MW-19	4/3/2014	300	1800	490	12000	50	900	610	500	5000
	11/13/2014	1400	2800	1600	24000	<50	1400	1300	<50	<5000
	5/28/2015	2100	17000	330	16000	<50	1200	6200	<500	<5000
	11/3/2015	2900	19000	720	17000	<100	1100	5400	<1000	<10000
	5/18/2016	2900	19000	1100	22000	200	1400	4300 J	<500	<5000
MW-20	4/3/2014	1800	11000	460	11000	50	960	3100	65	5000
	11/13/2014	1400	12000	500	14000	120	1100	<10000	<1000	<10000
	5/29/2015	0.06-Feet of Free Product								
	11/3/2015	930	11000	1000	17000	<50	1400	<5000	<500	<5000
	5/15/2016	690	10000	2100	23000	<50	1600	<5000	<500	<5000
MW-22	4/3/2014	5700	12000	880	23000	50	990	3600	500	5000
	11/11/2014	6300	23000	700	21000	<20	1200	9600	<20	<140
	6/5/2015	4800	16000	760	26000	<100	840	<10000	<1000	<10000
	11/3/2015	6400	20000	740	24000	<100	1000	3900	<1000	<10000
	5/15/2016	1900	11000	1500	28000	<50	1400	<5000	<500	<5000
MW-23	4/3/2014	4200	16000	880	19000	120	1100	5900	500.000	5000
	11/13/2014	890	3600	450	16000	<50	1200	1500	<50	<340
	5/28/2015	570	1500	89	8300	<50	660	<5000	<500	<5000
	11/3/2015	2.9	8.5	1.5	190	<1	52	<100	<10	<100
	5/18/2016	280	990	110	4200	7.3	470	520	<10	<100
MW-25	4/1/2014	5.5	200	320	4400	<1	1300	170	<10	<100
	11/10/2014	38	140	200	2600	1.9	490	2800	<10	<100
	5/28/2015	29	140	190	3000	<1	560	430	<10	<100
	11/3/2015	14	150	200	2600	<1	340	390	<10	<100
	5/15/2016	Unable to Locate								
MW-26	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-27	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-28	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-29	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron | UST | 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina | Crawford Project No. | 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-30	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/10/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-31	4/2/2014	0.9	<1	<1	<1	2.7	<5	59	<10	<100
	11/12/2014	30	9.8	310	9.3	4.1	160	460	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-32	4/2/2014	0.94	<1	1.9	2.4	<1	6.6	170	<10	<100
	11/12/2014	4	13	72	10	<1	45	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	2.8 J	<100	<10	<100
MW-33	4/1/2014	560	5200	2500	6900	50	670	4100	500.000	5000
	11/12/2014	130	410	210	550	1.2	71	1000	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	29	<10	<100
	11/3/2015	240	7500	1600	11000	<50	430	<5000	<500	<5000
	5/15/2016	260	3200	1400	4700	4.3	390	210	<10	<100
MW-34	4/1/2014	<1	<1	<1	<1	<1	<5	39	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	39	<10	<100
	5/28/2015	<1	1.1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-35	4/1/2014	3700	4300	2000	6200	160	550	5600	54	5000
	11/12/2014	6000	7200	2800	7400	330	700	4700	76	<100
	5/28/2015	3300	5100	1500	4700	<50	640	4400	<500	<5000
	11/3/2015	1900	2200	1100	3300	84	530	2300	28	<100
	5/16/2016	130	130	23	490	4.6	46	120	<10	<100
MW-36	4/1/2014	5.1	<1	38	<1	<1	55	96	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	1.3	<1	2.3	<1	<5	<100	<10	<100
	11/3/2015	0.74	<1	1.6	<1	<1	16	<100	<10	<100
	5/15/2016	1	<1	14	0.47 J	<1	54	<100	<10	<100
MW-37	4/1/2014	<1	<1	<1	<1	<1	3.7	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	3.5	<1	<1	5.4	<1	5.5	77	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	0.95 J	<100	<10	<100
MW-38	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-39	4/2/2014	<1	3.2	2.2	14	<1	3.3	<100	<10	<100
	11/12/2014	11	1500	1000	3700	<1	340	220	<10	<100
	6/2/2015	1.3	160	140	1100	<1	160	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	1.2	1.9	4.9	<1	<5	<100	<10	<100
MW-40	4/2/2014	5.8	14	2	580	<1	24	<100	<10	<100
	11/12/2014	140	970	300	2900	12	150	600	<10	<100
	6/2/2015	5.2	47	3.9	590	<1	38	<100	<10	<100
	11/4/2015	0.51	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	1.4	<1	<1	<5	<100	<10	<100
MW-41	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-42	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	0.31 J	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron | UST | 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina | Crawford Project No. | 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-43	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-44	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-45	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-46	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-48	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	Unable to Access - Locked Gate								
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	Unable to Access - Locked Gate								
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-49	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
MW-50	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
MW-51	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-53	4/3/2014	<1	<1	<1	<1	<1	4.1	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	4.1	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-54	4/1/2014	<1	<1	<1	<1	9.6	<5	<100	6.700	<100
	11/11/2014	Unable to Locate								
	5/28/2015	<1	<1	<1	<1	6.4	<5	140	<10	<100
	11/4/2015	<1	<1	<1	<1	1.5	<5	<100	<10	<100
	5/18/2016	0.60 J	<1	<1	<1	5.0	<5	60 J	<10	<100
MW-55	4/3/2014	10	1	3.5	<1	24	3.9	98	6.400	<100
	11/11/2014	Unable to Locate								
	5/28/2015	1000	40	410	260	190	180	1700	15	<100
	11/4/2015	640	64	200	230	160	120	1200	11	56
	5/18/2016	950	44	320	210	220	130	2600	15	<100
MW-56	4/3/2014	<1	<1	<1	<1	<1	<5	50	<10	<100
	11/11/2014	Unable to Locate								
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-58	4/2/2014	Abandoned								
	11/11/2014									
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	Not Sampled due to Obstruction								

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-59	4/2/2014	28	2.8	300	6.4	130	45	2600	42	160
	11/11/2014	81	3.6	730	14	91	96	4500	27	<100
	5/28/2015	1400	23	1100	620	89	290	3900	34	<100
	11/4/2015	1300	48	440	850	58	250	2800	19	<100
	5/18/2016	1900	51	950	760	96	260	4300	28	<100
MW-60	4/2/2014	Unable to Locate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
MW-62	4/1/2014	0.86	<1	<1	<1	3	3.3	260	<10	<100
	11/12/2014	51	<1	<1	0.93	2.6	65	730	<10	<100
	5/29/2015	1.50-Feet of Free Product								
	12/17/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	Not Sampled due to Obstruction								
MW-63	4/2/2014	<1	<1	<1	<1	<1	5	120	<10	<100
	11/12/2014	Unable to Locate								
	5/29/2001	0.01-Feet of Free Product								
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-65	4/2/2014	Unable to Locate - Paved over								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
MW-67	4/1/2014	<1	<1	<1	<1	<1	5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-70	4/2/2014	<1	<1	<1	<1	<1	5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	1.5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	0.44 J	<1	<5	<100	<10	<100
MW-5AR	4/1/2014	12000	13000	2400	13000	70	1000	<5000	160,000	<5000
	11/13/2014	830	180	98	670	13	130	<100	13,000	<100
	5/28/2015	2500	1200	280	1300	43	460	650	52,000	<100
	11/3/2015	5200	10000	810	5300	<100	580	<10000	<1000	<10000
	5/15/2016	7000	6400	1200	8000	<100	890	<10000	<1000	<10000
PW-1R	4/3/2014	460	3400	320	9200	<50	<250	710	<500	<5000
	11/13/2014	850	6900	580	18000	<50	1300	<5000	<500	<5000
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	830	20000	1200	14000	<500	600	<50000	<5000	<50000
	5/18/2016	210	1200	170	3200	6.8	200	380	<10	<100
DW-1	4/2/2014	0.45	1.2	1.7	7.2	<1.0	<5.0	<100	<10	<100
	11/10/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-2	4/2/2014	<1.0	<1.0	<1.0	<1.0	7.1	4.1	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	10	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	8.7	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-3	4/3/2014	9800	22000	3700	17000	990	780	10000	190	<5000
	11/13/2014	2000	20000	2800	10000	23	650	2700	<20	<140
	5/28/2015	310	4000	79	3100	6.5	130	750	<10	<100
	11/3/2015	4300	16000	2300	11000	230	800	2600	50	<2000
	5/18/2016	2600	10000	1400	8200	160	410	<5000	<500	<5000
DW-4	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
DW-5	4/1/2014	3300	68	37	1000	940	81	4300	83,000	<100
	11/12/2014	6700	380	240	3100	1400	190	5300	110,000	<100
	5/28/2015	6900	660	420	3800	1200	290	6300	<500	<5000
	11/4/2015	5900	490	200	1800	1100	170	4800	89,000	<100
	5/16/2016	9200	1600	750	5300	1400	470	4300	95 J	<100
DW-6	4/1/2014	8.5	1.2	1.6	7.2	3	5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-7	4/3/2014	0.52	0.46	<1.0	1.4	2.6	4.2	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	1.2	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-8	4/2/2014	Abandoned								
	11/11/2014									
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	Not Sampled due to Obstruction								
DW-9	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	2.8	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	42	<1	<1	<1	<5	<100	<10	<100
SW-1	4/2/2014	180	8.4	30	53	42	6.5	350	9,500	100
	11/12/2014	Unable to Access - Overgrown Brush								
	5/28/2015	230	18	89	160	30	24	590	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	44	<10	<100
	5/18/2016	130	18	53	92	12	16	430	<10	<100

BDL= Below Detectable Limit
RBSL= Risk Based Screening Levels
NE= Not Established

CRAWFORD ENVIRONMENTAL SERVICES

1,2 DCA = 1,2 Dichloroethane
J = Estimated value detected below reporting limit

Table 1

Facility Name: Handy Pantry #66 / University Mart & Claude Chaurse
Address: 2367 Taylor Street Columbia, South Carolina

LIST
Crawford Project No.

03984 / 07777 / 12352
7.054T

Site Specific Target Level Summary

Well ID	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-2	Initial	140.0	280.0	56.0	460.0	380.0	54.0	200.0	9.2	140.0	1719.2	
	SSTL	77.0	280.0	56.0	460.0	380.0	54.0	200.0	9.2	140.0	1656.2	
	Initial > SSTL	63.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.0	
	Subsequent	11.00	0.88	0.99	49.0	18.0	12.0	100.0	10.0	100.0	301.8	
	SSTL	77.0	280.0	56.0	460.0	380.0	54.0	200.0	9.2	140.0	1656.2	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-3	Initial	3000.0	74000.0	2900.0	45000.0	3300.0	260.0	2800.0	340.0	1300.0	22360.0	
	SSTL	111.0	74000.0	2900.0	45000.0	1976.0	108.0	2800.0	340.0	1300.0	17585.0	
	Initial > SSTL	2889.0	0.0	0.0	0.0	1324.0	152.0	0.0	0.0	0.0	4365.0	
	Subsequent	7800.0	22000.0	1800.0	21000.0	2500.0	870.0	5800.0	800.0	5000.0	69470.0	
	SSTL	111.0	74000.0	2900.0	45000.0	1976.0	108.0	2800.0	340.0	1300.0	17965.0	
	Subsequent > SSTL	7689.0	14800.0	1540.0	16800.0	524.0	762.0	0.0	0.0	0.0	41515.0	
MW-6	Initial	50.0	50.0	50.0	30.5	949.0	50.0	1000.0	100.0	1000.0	3279.5	
	SSTL	50.0	50.0	50.0	30.5	949.0	50.0	1000.0	100.0	1000.0	3279.5	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Subsequent	0.3	1.0	1.0	1.0	1.0	5.0	100.0	10.0	100.0	219.3	
	SSTL	50.0	50.0	50.0	30.5	949.0	50.0	1000.0	100.0	1000.0	3279.5	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-9	Initial	4100.0	21000.0	2500.0	19000.0	150.0	960.0	1400.0	3300.0	20000.0	72510.0	
	SSTL	35.0	7134.0	2500.0	19000.0	150.0	68.0	809.0	270.0	15626.0	45594.0	
	Initial > SSTL	4065.0	13866.0	0.0	0.0	0.0	892.0	591.0	1730.0	4374.0	31716.0	
	Subsequent	78	1988	1000	4388	1	440	200	18	100	8029.0	
	SSTL	35.0	7134.0	2500.0	19000.0	150.0	68.0	809.0	270.0	15626.0	45594.0	
	Subsequent > SSTL	43.0	0.0	0.0	0.0	0.0	372.0	0.0	0.0	0.0	415.0	
MW-10	Initial	740.0	7900.0	2500.0	15000.0	2500.0	350.0	50000.0	5000.0	50000.0	134490.0	
	SSTL	24.0	7900.0	2500.0	15000.0	294.0	53.0	709.0	301.0	11042.0	38213.0	
	Initial > SSTL	716.0	0.0	0.0	0.0	2206.0	297.0	49207.0	4699.0	38958.0	96277.0	
	Subsequent	68	11	22	97	1	170	100	10	100	599.0	
	SSTL	24.0	7900.0	2500.0	15000.0	294.0	53.0	709.0	301.0	11042.0	38213.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-12	Initial	1.7	5.0	11.0	5.0	5.6	4.7	370.0	1.5	10.0	423.5	
	SSTL	1.7	5.0	11.0	5.0	5.6	4.7	370.0	1.5	10.0	423.5	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	
	Subsequent	256	83	710	880	17	100	1300	10	100	1.0	
	SSTL	1.7	5.0	11.0	5.0	5.6	4.7	370.0	1.5	10.0	423.5	
	Subsequent > SSTL	254.3	78.0	699.0	325.0	11.4	188.3	930.0	0.0	0.0	2487.0	
MW-15	Initial	Free Product										Free Product
	SSTL	15.0	3196.0	3700.0	21980.0	738.0	45.0	492.0	199.0	5836.0	36698.0	
	Initial > SSTL											
	Subsequent											
	SSTL	15.0	3196.0	3700.0	21980.0	738.0	45.0	492.0	199.0	5836.0	36698.0	
	Subsequent > SSTL										0.0	

Table 3

Facility Name: Handy Pantry #65 / University Mart & Cloud Chevron — UST: 07584 / 07777 / 12352
Address: 2307 Taylor Street Columbia, South Carolina — Cranford Project No.: T.0547

Site Specific Target Level Summary

Well ID	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-17	Initial	1400.0	26000.0	2500.0	23000.0	1000.0	1000.0	5400.0	2000.0	28000.0	80300.0	
	SSTL	92.0	6931.0	2500.0	21680.0	1000.0	66.0	773.0	283.0	14286.0	47231.0	
	Initial > SSTL	1308.0	19065.0	0.0	1320.0	0.0	934.0	4627.0	1737.0	5714.0	33069.0	
	Subsequent	280	10000	660	13000	100	720	10000	1000.0	10000	45760.0	
	SSTL	92.0	6931.0	2500.0	21680.0	1000.0	66.0	773.0	283.0	14286.0	47231.0	
	Subsequent > SSTL	248.0	3369.0	0.0	0.0	0.0	654.0	9827.0	737.0	0.0	14235.0	
MW-18	Initial	1900.0	7200.0	650.0	8300.0	340.0	370.0	4600.0	70.0	5000.0	28710.0	
	SSTL	40.0	16926.0	3700.0	21680.0	4360.0	348.0	938.0	4969.0	54462.0	109743.0	
	Initial > SSTL	1860.0	0.0	0.0	0.0	0.0	22.0	3662.0	0.0	0.0	5884.0	
	Subsequent	280	1900	220	4900	30	220	830	70.00	100	8370.0	
	SSTL	40.0	16926.0	3700.0	21680.0	4360.0	348.0	938.0	4969.0	54462.0	109743.0	
	Subsequent > SSTL	220.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	220.0	
MW-19	Initial	3000.0	1900.0	480.0	12000.0	80.0	360.0	810.0	500.0	5000.0	23930.0	
	SSTL	54.0	11061.0	3700.0	21680.0	16880.0	66.0	1065.0	320.0	36814.0	90880.0	
	Initial > SSTL	2946.0	0.0	0.0	0.0	0.0	294.0	0.0	180.0	0.0	1240.0	
	Subsequent	2900	19000	1100	22300	200	1400	4300	500.00	5000	55400.0	
	SSTL	54.0	11061.0	3700.0	21680.0	16880.0	66.0	1065.0	320.0	36814.0	90880.0	
	Subsequent > SSTL	2846.0	7919.0	0.0	620.0	0.0	1314.0	3235.0	0.0	0.0	16034.0	
MW-20	Initial	412.0	2930.0	726.0	6820.0	88.7	817.0	2850.0	200.0	2000.0	16845.7	
	SSTL	80.0	2930.0	726.0	6820.0	88.7	106.0	1400.0	200.0	2000.0	16360.7	
	Initial > SSTL	329.0	0.0	0.0	0.0	0.0	709.0	1447.0	0.0	0.0	2485.0	
	Subsequent	990.0	16000.0	2700.0	23000.0	90.0	1600.0	5000.0	500.0	5000.0	47940.0	
	SSTL	80.0	2930.0	726.0	6820.0	88.7	106.0	1400.0	200.0	2000.0	16360.7	
	Subsequent > SSTL	857.0	7070.0	1972.0	14180.0	0.0	1492.0	0.0	0.0	0.0	34721.0	
MW-22	Initial	5300.0	17000.0	2900.0	20000.0	1800.0	840.0	6300.0	530.0	20000.0	71170.0	
	SSTL	50.0	17000.0	2900.0	20000.0	1800.0	112.0	1400.0	530.0	20000.0	63701.0	
	Initial > SSTL	5210.0	0.0	0.0	0.0	0.0	578.0	4731.0	0.0	0.0	8469.0	
	Subsequent	1900	11000	1500	28000	30	1400	5000	500.00	5000	54350.0	
	SSTL	50.0	17000.0	2900.0	20000.0	1800.0	112.0	1400.0	530.0	20000.0	63701.0	
	Subsequent > SSTL	1810.0	0.0	0.0	8000.0	0.0	1288.0	0.0	0.0	0.0	11098.0	
MW-23	Initial	4200.0	16000.0	880.0	19000.0	130.0	1100.0	5900.0	500.0	5000.0	52700.0	
	SSTL	72.0	14880.0	3700.0	21680.0	23360.0	100.0	1278.0	358.0	26478.0	113913.0	
	Initial > SSTL	4128.0	1120.0	0.0	0.0	0.0	1000.0	4621.0	141.0	0.0	11010.0	
	Subsequent	280	500	110	4200	7.3	470	530	10	100	6887.3	
	SSTL	72.0	14880.0	3700.0	21680.0	23360.0	100.0	1278.0	358.0	26478.0	113913.0	
	Subsequent > SSTL	208.0	0.0	0.0	0.0	0.0	370.0	0.0	0.0	0.0	578.0	
MW-25	Initial	5000.0	30000.0	1900.0	23000.0	5000.0	5000.0	100000.0	10000.0	100000.0	353900.0	
	SSTL	104.0	30000.0	1900.0	23000.0	5000.0	121.0	1812.0	415.0	60494.0	99646.0	
	Initial > SSTL	4896.0	0.0	0.0	0.0	0.0	4879.0	98388.0	9585.0	39506.0	157254.0	
	Subsequent	14	150	200	2500	1	240	250	10	100	3465.0	
	SSTL	104.0	30000.0	1900.0	23000.0	5000.0	121.0	1812.0	415.0	60494.0	99646.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	319.0	0.0	0.0	0.0	319.0	

Facility Name:	Handy Pantry #65 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address:	2387 Taylor Street Columbia, South Carolina	Crawford Project No.	7.0547

Site Specific Target Level Summary

Well ID	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-31	Initial	57.0	90.0	520.0	250.0	12.0	210.0	510.0	50.0	500.0	2199.0	
	SSTL	51.0	90.0	520.0	250.0	12.0	210.0	510.0	50.0	500.0	2193.0	
	Initial > SSTL	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	
	Subsequent	1.0	1.0	1.0	1.0	1.0	5.0	100.0	10.0	100.0	220.0	
	SSTL	51.0	90.0	520.0	250.0	12.0	210.0	510.0	50.0	500.0	2193.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-33	Initial	520.0	7200.0	1500.0	12000.0	560.0	410.0	1136.0	1000.0	10000.0	31530.0	
	SSTL	53.0	7200.0	1500.0	12000.0	560.0	410.0	1136.0	1000.0	10000.0	31359.0	
	Initial > SSTL	467.0	0.0	0.0	0.0	0.0	0.0	2064.0	0.0	0.0	2531.0	
	Subsequent	260	3200	1400	4700	4.5	380	2100	10.00	100	12164.5	
	SSTL	53.0	7200.0	1500.0	12000.0	560.0	410.0	1136.0	1000.0	10000.0	33859.0	
	Subsequent > SSTL	207.0	0.0	0.0	0.0	0.0	0.0	964.0	0.0	0.0	1171.0	
MW-35	Initial	4400.0	8000.0	1700.0	3500.0	380.0	590.0	5200.0	51.0	5000.0	22821.0	
	SSTL	56.0	2000.0	1700.0	3500.0	380.0	542.0	1161.0	51.0	5000.0	14330.0	
	Initial > SSTL	4344.0	6.0	0.0	0.0	0.0	38.0	4119.0	0.0	0.0	8501.0	
	Subsequent	130	100	22	430	4.5	45	120	10	100	1053.5	
	SSTL	56.0	2000.0	1700.0	3500.0	380.0	542.0	1161.0	51.0	5000.0	14330.0	
	Subsequent > SSTL	74.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74.0	
MW-37	Initial	240.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1959.0	
	SSTL	90.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1809.0	
	Initial > SSTL	150.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0	
	Subsequent	1	1	1	1	1	0.05	100	10	100	215.0	
	SSTL	90.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1809.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	56.0	
MW-39	Initial	12.0	1300.0	460.0	4200.0	200.0	330.0	5000.0	500.0	5000.0	17052.0	
	SSTL	10.0	1300.0	460.0	4200.0	200.0	330.0	1607.0	500.0	5000.0	13990.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	3393.0	0.0	0.0	3393.0	
	Subsequent	1	1.2	1.0	6.0	5	5	100	10	100	228.0	
	SSTL	10.0	1300.0	460.0	4200.0	200.0	330.0	1607.0	500.0	5000.0	13990.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-40	Initial	290.0	2900.0	650.0	7100.0	580.0	530.0	10000.0	1000.0	10000.0	32970.0	
	SSTL	113.0	2900.0	650.0	7100.0	580.0	530.0	1876.0	1000.0	10000.0	24999.0	
	Initial > SSTL	177.0	0.0	0.0	0.0	0.0	0.0	8124.0	0.0	0.0	8301.0	
	Subsequent	0.5	1	1	1	1	5	100	10	100	218.5	
	SSTL	113.0	2900.0	650.0	7100.0	580.0	530.0	1876.0	1000.0	10000.0	24999.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-41	Initial	293.0	1000.0	1100.0	1000.0	1880.0	470.0	20000.0	2000.0	20000.0	49743.0	
	SSTL	257.0	1000.0	1100.0	1000.0	1880.0	470.0	3234.0	2000.0	20000.0	30011.0	
	Initial > SSTL	36.0	0.0	0.0	0.0	0.0	0.0	16766.0	0.0	0.0	16802.0	
	Subsequent	1	1	1	1	1	5	100	10	100	220.0	
	SSTL	257.0	1000.0	1100.0	1000.0	1880.0	470.0	3234.0	2000.0	20000.0	30011.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Table 3

Facility Name:	Handy Pantry #66 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address	2307 Taylor Street Columbia, South Carolina	Closure/ Project No.	7.0547

Site Specific Target Level Summary

Well ID	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-54	Initial	5.0	5.0	5.0	5.0	5.0	5.0	100.0	10.0	100.0	240.0	
	SSTL	5.0	5.0	5.0	5.0	5.0	5.0	110.0	3.0	14.0	156.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	86.0	84.0	
	Subsequent	0.6	1	1	1	5	5	99	10	100	183.6	
	SSTL	5.0	5.0	5.0	5.0	5.0	5.0	110.0	3.0	14.0	156.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-58	Initial	4.8	25.0	20.0	25.0	42.0	11.0	1800.8	15.0	100.0	2065.8	
	SSTL	4.8	25.0	20.0	25.0	51.0	11.0	279.0	15.0	100.0	530.8	
	Initial > SSTL	0.0	0.0	0.0	0.0	42.0	0.0	1521.8	0.0	0.0	0.0	
	Subsequent	1	1	1	1	1	5	100	10	100	220.0	
	SSTL	1.0	1.0	1.0	1.0	1.0	5.0	100.0	10.0	100.0	220.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-65	Initial	420.8	398.0	234.0	252.0	16.4	168.0	648.0	50.0	500.0	2668.4	
	SSTL	326.8	398.0	234.0	252.0	16.4	168.0	648.0	50.0	500.0	2602.4	
	Initial > SSTL	94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Unable to Locate - Paved Over
	Subsequent	Unable to Locate - Paved Over										
	SSTL	326.8	398.0	234.0	252.0	16.4	168.0	648.0	50.0	500.0	2602.4	
	Subsequent > SSTL	Unable to Locate - Paved Over										
MW-5AR	Initial	9288.0	10000.0	1400.0	4400.0	180.0	910.0	1300.0	1000.0	10000.0	38278.0	
	SSTL	83.0	1000.0	1400.0	4400.0	180.0	168.0	1300.0	381.0	10000.0	18832.0	
	Initial > SSTL	9117.0	0.0	0.0	0.0	0.0	742.0	0.0	619.0	0.0	19438.0	
	Subsequent	7000	8400	1200	8000	100	890	10000	1000.00	10000	44590.0	
	SSTL	83.0	1000.0	1400.0	4400.0	180.0	168.0	1300.0	381.0	10000.0	18832.0	
	Subsequent > SSTL	6917.0	7400.0	0.0	3600.0	0.0	722.0	0.0	0.0	0.0	18639.0	
PW-1R	Initial	460.8	3400.0	320.0	6000.0	640.0	398.0	710.0	500.0	5000.0	18868.8	
	SSTL	58.0	11928.0	3700.0	21660.0	290.0	19798.0	1114.0	330.0	26044.0	87742.0	
	Initial > SSTL	402.8	0.0	0.0	0.0	0.0	0.0	0.0	170.0	0.0	572.8	
	Subsequent	210.8	1200.8	570.0	3000.0	6.8	200.0	380.0	10.0	1000.0	6578.6	
	SSTL	58.0	11928.0	3700.0	21660.0	290.0	19798.0	1114.0	330.0	26044.0	87742.0	
	Subsequent > SSTL	152.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	152.8	
DW-3	Initial	3688.0	19688.0	2200.0	100000.0	1000.0	620.0	3600.0	2000.0	20000.0	61328.0	
	SSTL	46.0	8470.0	2200.0	100000.0	1000.0	620.0	3600.0	2000.0	20000.0	47935.0	
	Initial > SSTL	2555.0	10538.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13093.0	
	Subsequent	2600	10000	3400	8200	150	410	5000	500.000	5000	33278.0	
	SSTL	46.0	8470.0	2200.0	100000.0	1000.0	620.0	3600.0	2000.0	20000.0	47935.0	
	Subsequent > SSTL	2555.0	1530.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4085.8	
SW-1	Initial	130.8	2.8	23.0	36.0	17.0	8.5	340.0	2.6	23.0	583.0	
	SSTL	5.8	2.8	23.0	36.0	17.0	8.5	340.0	2.6	23.0	355.9	
	Initial > SSTL	125.8	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	225.8	
	Subsequent	130	10	53	92	12	10	450	92	100	881.0	
	SSTL	5.8	2.8	23.0	36.0	17.0	8.5	340.0	2.6	23.0	355.9	
	Subsequent > SSTL	125.8	15.2	30.0	56.0	0.0	9.5	190.0	7.4	77.0	510.1	

SSTL = Site Specific Target Level
RBSL= Risk Based Screening Levels
MBBE = Methyl Tert-Butyl Ether
n/a = not applicable
0.0 - Excluded from Calculations

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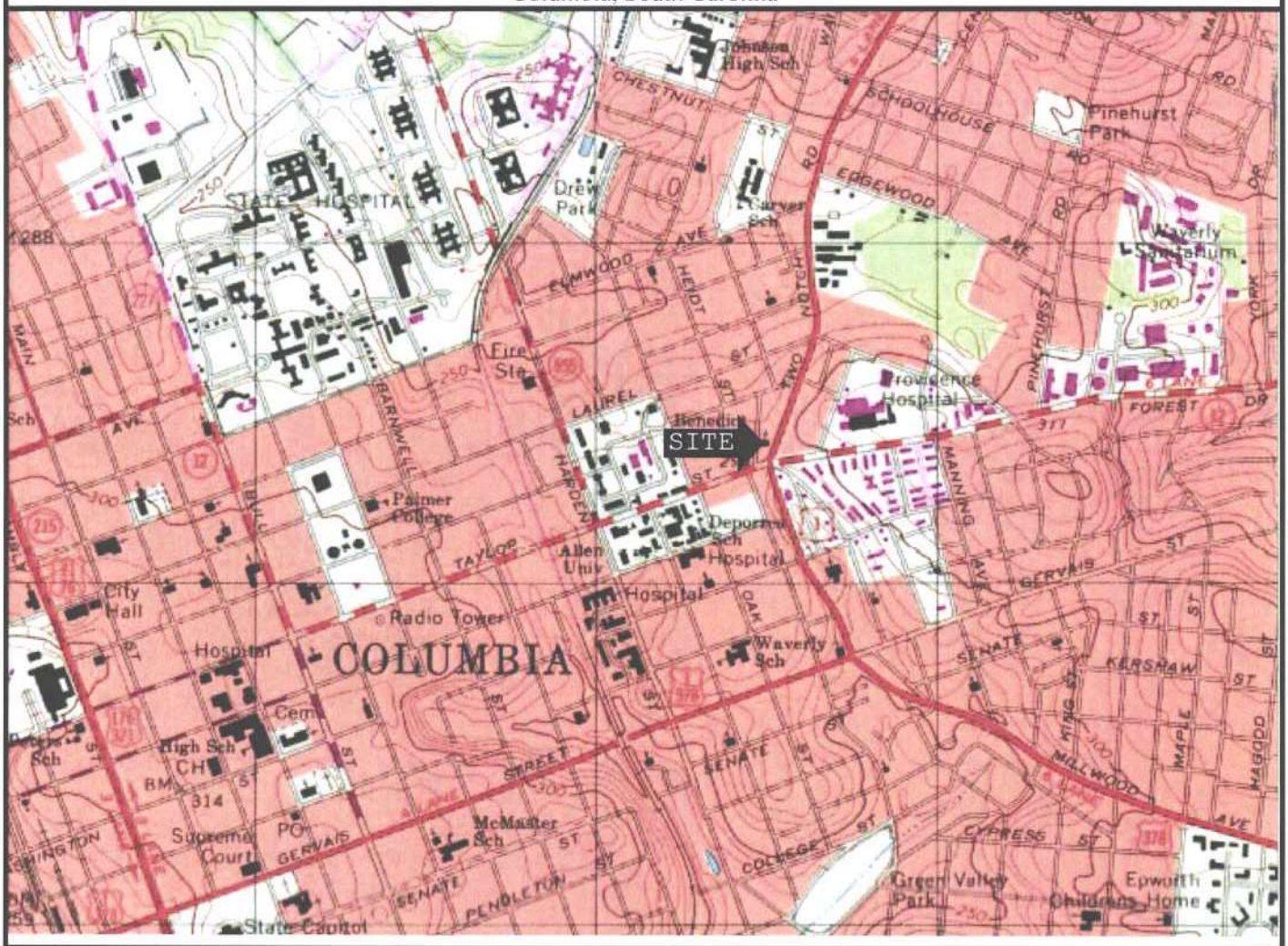
Initial>SSTL	325242.00
Subsequent>SSTL	133959.10
COC Reduction	58.81%

Figures

Figure 1: Topographic Map
Figure 2: Site Facility Base Map
Figure 3: Groundwater Chemicals of Concern Map
Figure 4: Groundwater Elevation Map

FIGURE 1

Site Location Map
Handy Pantry #65 / University Mart / Clouds Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina



CRAWFORD ENVIRONMENTAL SERVICES

15 Church Avenue, SW
Roanoke Virginia, 24011

540-343-6256 (office) 540-343-6259 (fax)

NORTH COLUMBIA, SOUTH CAROLINA

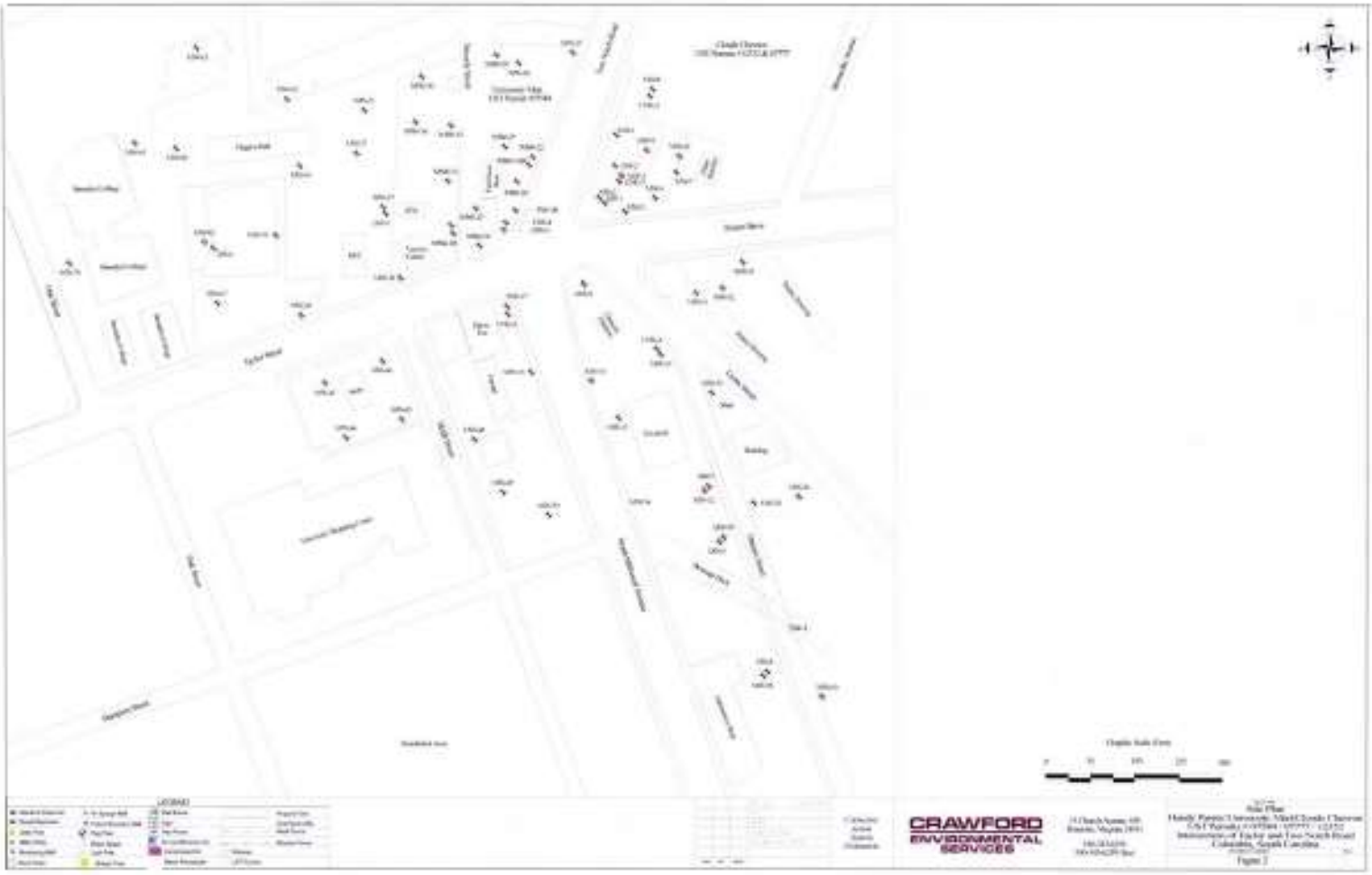
Source: U.S.G.S. Topographic Map of the Columbia North Quadrangle, Virginia, 7.5 Minute Series (1977, revised 1988)
Scale: 1:24,000 Contour Interval: 20 Feet
Vertical Datum: National Geodetic Vertical Datum 1929
Horizontal Datum: North American Datum1927

Project: CASE Report

Client: SCDHEC

CES Job #: 7.0547

Latitude:
034°00'42.72"N
Longitude:
081°01'00.13"W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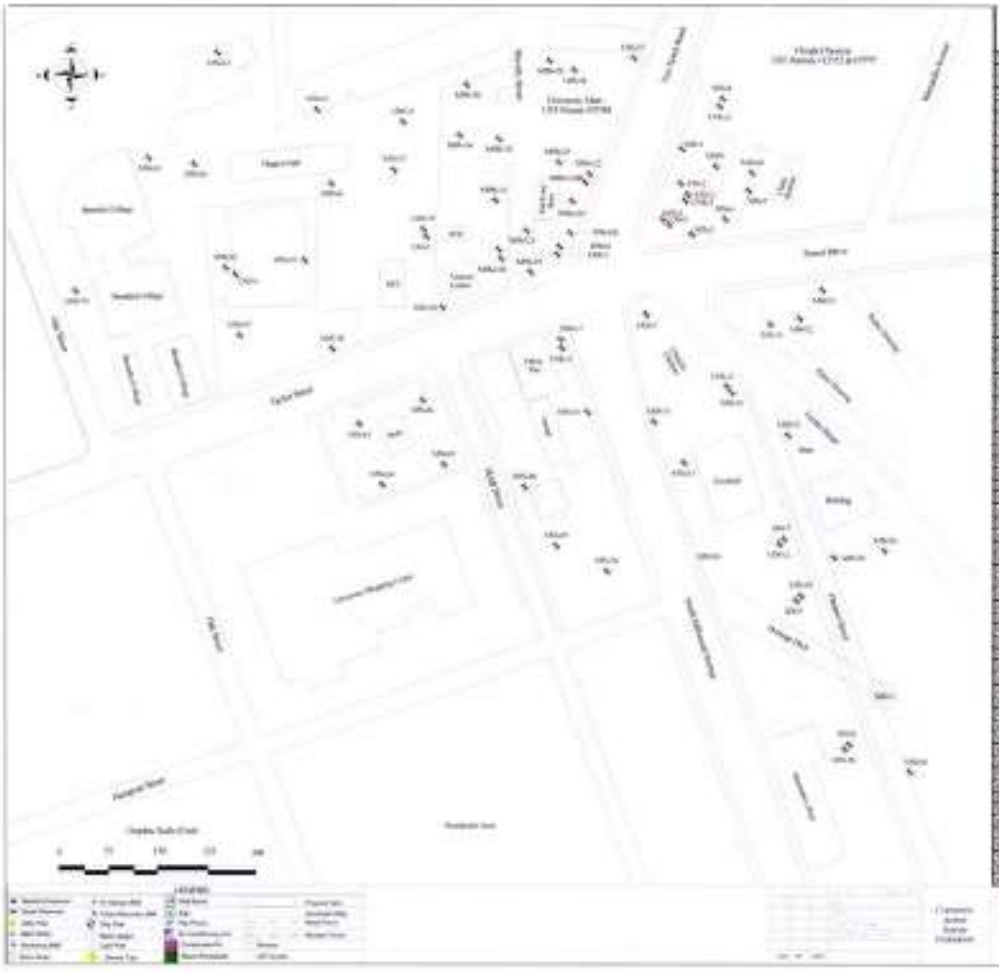
SERVICES



Well ID	Date	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAAB	TBA
MW-1	5/16/2019	Dry								
MW-2	5/16/2019	<1	0.51 J	0.65 J	81	5	12	<100	<10	<100
MW-3	5/16/2019	1900	23000	1900	21800	1200	870	<5000	670 J	<5000
MW-4	5/16/2019	<1	<1	<1	<1	0.47 J	<5	<100	<10	<100
MW-5	5/16/2019	0.29 J	<1	<1	<1	<1	<5	<100	<10	<100
MW-6	5/17/2019	<1	<1	<1	<1	1.1	<5	<100	<10	<100
MW-7	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-8	5/17/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-9	5/16/2019	78	1000	1000	4200	<1	440	300	<10	<100
MW-10	5/16/2019	88	1	58	67	<1	170	<100	<10	<100
MW-11	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-12	5/16/2019	250	50	710	330	17	760	1200	<10	<100
MW-13	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-14	5/16/2019	Well Damaged - Unable to Sample								
MW-15	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-16	5/16/2019	Not Sampled due to Obstruction								
MW-17	5/16/2019	260	1600	320	2900	77	120	590	<10	<100
MW-18	5/16/2019	2200	12000	1100	23000	200	1300	4300 J	<500	14000
MW-19	5/16/2019	640	10000	1100	23000	<10	1000	25000	<500	15000
MW-20	5/16/2019	1900	11000	1100	23000	<10	1000	24000	<500	15000
MW-21	5/16/2019	280	940	110	1200	7.1	170	530	<10	<100
MW-22	5/16/2019	Unable to Locate								
MW-23	5/17/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-24	5/17/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-25	5/17/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-26	5/17/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-27	5/17/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-28	5/17/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-29	5/17/2019	<1	<1	<1	<1	<1	0.81 J	<100	<10	<100
MW-30	5/16/2019	260	300	140	1700	4.3	300	210	<10	<100
MW-31	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-32	5/16/2019	100	130	20	450	4.6	46	120	<10	<100
MW-33	5/16/2019	1	<1	16	0.47 J	<1	72	<100	<10	<100
MW-34	5/16/2019	<1	<1	<1	<1	<1	0.55 J	<100	<10	<100
MW-35	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-36	5/16/2019	<1	1.2	<1	0.8 J	<1	<5	<100	<10	<100
MW-37	5/16/2019	<1	<1	1.4	<1	<1	<5	<100	<10	<100
MW-38	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-39	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-40	5/16/2019	<1	<1	0.37 J	<1	<1	<5	<100	<10	<100
MW-41	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-42	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-43	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-44	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-45	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-46	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-47	5/16/2019	Unable to Access - Locked Gate								
MW-48	5/16/2019	Unable to Access - Locked Gate								
MW-49	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-50	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-51	5/16/2019	0.55 J	<1	<1	<1	0.8	<5	58 J	<10	<100
MW-52	5/16/2019	560	44	160	210	190	120	1900	70	<100
MW-53	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-54	5/16/2019	Not Sampled due to Obstruction								
MW-55	5/16/2019	1900	31	920	760	36	260	1300	88	<100
MW-56	5/16/2019	Unable to Locate								
MW-57	5/16/2019	Not Sampled due to Obstruction								
MW-58	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-59	5/16/2019	Unable to Locate - Paved over								
MW-60	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-61	5/16/2019	<1	<1	<1	0.44 J	<1	<5	<100	<10	<100
MW-61R	5/16/2019	2100	940	1200	7400	130	360	11000	1000	17000
MW-62	5/16/2019	370	1200	110	1200	6.9	260	580	<10	<100
DW-1	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-2	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-3	5/16/2019	2600	13000	1300	9000	160	270	16000	1500	24000
DW-4	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-5	5/16/2019	5200	1500	700	3300	1400	670	4400	76 J	<100
DW-6	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-7	5/16/2019	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-8	5/16/2019	Not Sampled due to Obstruction								
DW-9	5/16/2019	<1	82	<1	<1	<1	<5	<100	<10	<100
DW-10	5/16/2019	190	15	23	80	12	16	430	<10	<100

CRAWFORD ENVIRONMENTAL SERVICES



Monitoring Well	Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Recovered (ft)	Monitoring Well Elevation (ft)
MW-1	94.89	5/15/2018	NA	19.04	NA	NA	75.85
MW-2	94.76	5/15/2018	NA	20.08	NA	NA	74.68
MW-3	94.81	5/15/2018	NA	19.64	NA	NA	75.17
MW-4	94.81	5/15/2018	NA	19.19	NA	NA	75.62
MW-5	95.28	5/15/2018	NA	19.75	NA	NA	75.53
MW-6	94.91	5/15/2018	NA	20.10	NA	NA	74.81
MW-7	91.83	5/15/2018	NA	20.68	NA	NA	71.15
MW-8	94.03	5/15/2018	NA	19.20	NA	NA	74.83
MW-9	93.93	5/15/2018	NA	19.79	NA	NA	74.14
MW-10	95.99	5/15/2018	NA	21.02	NA	NA	74.97
MW-11	96.43	5/15/2018	NA	19.96	NA	NA	76.47
MW-12	93.89	5/15/2018	NA	9.64	NA	NA	84.25
MW-13	95.44	5/15/2018	NA	9.71	NA	NA	85.73
MW-14	96.31	5/15/2018	14.28	15.02	0.74	11.96	71.42
MW-15	95.73	5/15/2018	NA	19.29	NA	NA	76.44
MW-16	97.47	5/15/2018	Not Measured due to Obstructions				
MW-17	97.81	5/15/2018	NA	22.03	NA	NA	75.78
MW-18	97.55	5/15/2018	NA	21.75	NA	NA	75.80
MW-19	92.12	5/15/2018	NA	20.41	NA	NA	71.71
MW-20	94.82	5/15/2018	NA	19.31	NA	NA	75.51
MW-21	94.43	5/15/2018	NA	21.69	NA	NA	72.74
MW-22	93.69	5/15/2018	Well Locked				
MW-23	97.98	5/17/2018	NA	22.04	NA	NA	75.94
MW-24	97.44	5/17/2018	NA	19.58	NA	NA	77.86
MW-25	91.46	5/17/2018	NA	19.58	NA	NA	71.88
MW-26	91.89	5/17/2018	NA	19.68	NA	NA	72.21
MW-27	93.47	5/17/2018	NA	19.20	NA	NA	74.27
MW-28	97.50	5/17/2018	NA	23.79	NA	NA	73.71
MW-29	93.87	5/17/2018	NA	19.75	NA	NA	74.12
MW-30	97.84	5/17/2018	NA	21.93	NA	NA	75.91
MW-31	94.77	5/17/2018	NA	21.97	NA	NA	72.80
MW-32	93.77	5/17/2018	NA	21.83	NA	NA	71.94
MW-33	93.89	5/17/2018	NA	21.83	NA	NA	72.06
MW-34	93.89	5/17/2018	NA	21.81	NA	NA	72.08
MW-35	93.93	5/17/2018	NA	19.83	NA	NA	74.10
MW-36	98.19	5/17/2018	NA	24.08	NA	NA	74.11
MW-40	96.03	5/18/2018	NA	20.20	NA	NA	75.83
MW-41	94.85	5/18/2018	NA	20.71	NA	NA	74.14
MW-42	96.81	5/18/2018	NA	22.73	NA	NA	74.08
MW-43	96.32	5/18/2018	NA	22.66	NA	NA	73.66
MW-44	94.57	5/18/2018	NA	19.15	NA	NA	75.42
MW-45	92.51	5/18/2018	NA	19.43	NA	NA	73.08
MW-46	93.89	5/18/2018	NA	20.41	NA	NA	73.48
MW-47	97.66	5/18/2018	NA	21.78	NA	NA	75.88
MW-48	97.50	5/18/2018	NA	19.91	NA	NA	77.59
MW-49	97.76	5/18/2018	Unable to Access - Locked Gate				
MW-50	98.08	5/18/2018	Unable to Access - Locked Gate				
MW-51	98.03	5/18/2018	Unable to Locate - Overgrown Land				
MW-52	97.81	5/18/2018	NA	23.06	NA	NA	74.75
MW-53	97.88	5/18/2018	Unable to Locate - Overgrown Land				
MW-54	97.88	5/18/2018	NA	20.19	NA	NA	77.69
MW-55	97.83	5/18/2018	NA	1.02	NA	NA	96.81
MW-56	96.36	5/18/2018	NA	0.75	NA	NA	95.61
MW-57	96.27	5/18/2018	Not Surveyed due to Obstructions				
MW-58	94.60	5/18/2018	NA	20.08	NA	NA	74.52
MW-59	97.84	5/18/2018	Unable to Locate - Overgrown Brush				
MW-60	97.76	5/18/2018	Not Surveyed due to Obstructions				
MW-61	94.69	5/18/2018	NA	21.85	NA	NA	72.84
MW-62	91.91	5/18/2018	Unable to Locate - Paved Over				
MW-63	96.78	5/18/2018	NA	22.11	NA	NA	74.67
MW-64	97.49	5/18/2018	NA	20.11	NA	NA	77.38
MW-65	97.76	5/18/2018	NA	19.91	NA	NA	77.85
MW-66	97.76	5/18/2018	NA	21.87	NA	NA	75.89
MW-67	98.03	5/18/2018	Not Surveyed due to Obstructions				
MW-68	94.47	5/18/2018	NA	22.40	NA	NA	72.07

APPENDIX A

Purge Water Disposal Manifest

CRAWFORD
ENVIRONMENTAL
SERVICES

CRAWFORD
ENVIRONMENTAL SERVICES

June 4, 2016

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201

Re: Purge Water Report- Development & Groundwater Sampling
Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352

Dear Project Manager;

The letter presents the certification that Crawford Environmental Services (CES) treated purge waters referenced below with a granular activated carbon unit prior to discharge. This was completed in accordance with the conditions laid out in the "Proposed Conditions for use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater" produced by the SCDHEC Bureau of Water.

A total of 230 gallons were treated on May 16, 17 and 18 for the above referenced facility.

A record of treatment is available upon request. If you have any questions or comments please feel free to contact us at 540-798-5068.

Sincerely,

Daniel Fisher
Division Manager
Crawford Environmental Services

APPENDIX B

Groundwater Sampling Data Sheets

CRAWFORD
ENVIRONMENTAL
SERVICES

GROUNDWATER SAMPLING LOG

SITE NAME	Clouds Chevron	SITE LOCATION	Taylor & Two Notch Road, Columbia, South Carolina
WELL NO	MW-1	SAMPLE ID	DATE

PURGING DATA

WELL DIAMETER (inches)	TOTAL WELL DEPTH (Feet Below Ground Surface) 27	WELL SCREEN INTERVAL DEPTH: 17 feet to 27 feet	STATIC DEPTH TO WATER (feet)		PURGE PUMP TYPE OR BAILER

WELL VOLUME PURGE: 1 WELL VOLUME (CASING VOLUME) = TOTAL WELL DEPTH (feet) − STATIC DEPTH TO WATER (feet) × WELL CAPACITY (gallons/feet)

TIME	CUMULATIVE VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	±	pH (SU)	±	COND (µS)	±	DO (mg/L)	±	ORP (mV) (NTU)	±	COLOR	ODOR

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.80

SAMPLING DATA

SAMPLED BY (PRINT)	SAMPLER(S) SIGNATURE(S)	SAMPLING DATE	SAMPLING TIME
PUMP OR TUBING DEPTH IN WELL (feet)	PUMP MATERIAL CODE	FIELD-FILTERED (Y/N) (Please Explain Exceptions Below)	FILTER SIZE
DUPLICATE COLLECTED (Y/N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
LABEL INFO	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
—	2	CG	40 ml	HCL	—	—	8260B		
—	2	CG	40 ml	HCL	—	—	8011		

REMARKS: Dry. Not Sampled

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After-Vacuum Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO: MW-2
SAMPLE ID: MW02
DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 30
WELL SCREEN INTERVAL DEPTH: 20 feet to 30 feet
STATIC DEPTH TO WATER (feet): 20.08
PURGE PUMP TYPE OR BAILER: —

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
feet feet X gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Y	pH (s.u.)	X	COND. (µS)	Y	DO (mg/L)	Y	TURBIDITY (NTU)	Y	COLOR	ODOR
1252	—	—	22.6	—	5.74	—	84.9	—	1.42	—	32.	—	Stay	slight

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): [illegible]
SAMPLER'S SIGNATURE(S): [illegible]
SAMPLING DATE: 5/16/16
SAMPLING TIME: 1252
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y
Filtration Equipment Type: 0
FILTER SIZE:
DUPLICATE COLLECTED: Y 0

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE IDENTIFICATION	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	B	—
—	1	CG	40 ml	HCL	—	—	MW		—

REMARKS: missing lock N.P.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA:
pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

UNK-3 not sampled DTW = 18.28' BTOC

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-3 | SAMPLE ID: MW03 | DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2 | Total Well Depth (feet): 29 | WELL SCREEN INTERVAL DEPTH: 9 feet to 29 feet | STATIC DEPTH TO WATER (feet): 19.84 | PURGE PUMP TYPE OR BAILER

WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL DEPTH (feet) − STATIC DEPTH TO WATER (feet) × WELL CAPACITY (gallons/feet)

TIME	VOLUME PURGED (gallons)	CUM. VOLUME PURGED (gallons)	TEMP (°C)		pH		COND. (mS)		ORP (mV)		DUPE QUIZ (#/10)		COLOR	ODOR
0950	–	–	23.2	–	6.19	–	76.4	–	0.74	–	12	–	Clr	Stary

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" (Bent) = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 8" = 2.61; 10" = 4.08; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): [illegible] | SAMPLER SIGNATURE: [illegible] | SAMPLING DATE: 5/16/16 | SAMPLING TIME: 0950

PUMP OR TUBING DEPTH IN WELL (feet): – | TUBING MATERIAL CODE: – | FIELD FILTERED: Y / N | FILTER SIZE: 0

SAMPLE ID	# OF CONTAINERS	SAMPLE CONTAINER SPECIFICATION: MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOLUME PRESERVATIVE ADDED (ml)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
–	MW3	CG	40 ml	HCL	–	–	8260B	B	–
	[illegible]	CG	40 ml	HCL			[illegible]		

REMARKS: missing lock, Cap Broken.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

FIELD PARAMETER STABILIZATION [MINUTES]

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-4 | SAMPLE ID: MW04 | DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): | Total Well Depth (feet): 28 | WELL SCREEN INTERVAL DEPTH: 18 feet to 28 feet | STATIC DEPTH TO WATER (feet): 19.20 | PURGE PUMP TYPE OR BAILER: —

WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL DEPTH 28 feet − STATIC DEPTH TO WATER 28 feet × WELL CAPACITY gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	±	pH (pH)	±	COND (µS)	±	DO (mg/L)	±	TURB IDITY (NTU)	±	COLOR	ODOR
1001	—	—	22.8	—	5.48	—	15.7	—	3.57	—	24		slcy	none

WELL CAPACITY (gallons per foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): [signature] | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING DATE: 5/16/16 | SAMPLING TIME: 1001

PUMP OR TUBING DEPTH IN WELL (feet): — | TUBING MATERIAL CODE: — | FIELD FILTERED: Y / N | FILTER SIZE: Filtration Equipment Type:

DUPLICATE COLLECTED: Y / N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
TIMES IN CELL	SPARGE	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	FLOW RATE ADDED (ml/min)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	B	—
—						—			—

REMARKS: N.P. Missing Lock

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SP = Straw (Tested Pump Gravity Drain); O = Other (specify)

STANDARD DEPTH CHECK

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-5 | SAMPLE ID: MW05 | DATE: 5/16/16

PURGING DATA

Well Diameter (inches): 2 | Total Well Depth (feet): 26 | Well Screen Interval: Depth 16 feet to 26 feet | Static Depth to Water (feet): 19.75 | Purge Pump Type or Bailer: NA

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH feet − STATIC DEPTH TO WATER feet) × WELL CAPACITY (gallons/foot)

TIME	VOLUME PURGED (gallons)	CUM. VOLUME PURGED (gallons)	TEMP (°C)	±	pH (unit)	±	COND. (mS)	±	DO (mg/L)	±	TURBIDITY (NTUs)	±	COLOR	ODOR
1350	–	–	23.6	±	5.61	–	126.4	–	3.17	–	27	–	clay	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 2.61

SAMPLING DATA

SAMPLED BY (PRINT): [illegible] | SAMPLER'S SIGNATURE(S): [signature] | SAMPLING DATE: 5/16/16 | SAMPLING TIME: 1350

PUMP OR TUBING DEPTH IN WELL (feet): – | TUBING MATERIAL CODE: – | FIELD FILTERED: Y / N | FILTER SIZE: 0

SAMPLE CONTAINER SPECIFICATION: NO. CONTAINERS	TYPE	MATERIAL CODE	VOLUME/WEIGHT	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
–	3	CG	40 ml	HCL	–	–	82609	B	–
–	1	CG	40 ml	HCL					

REMARKS: Well ~20' Deep not 26' missing lock/well tag.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (specify)

STABILIZATION CRITERIA: NO Purge,

pH ± 0.2 units; Temperature: ± 0.2°C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-6 | PAGE NO: MW06 | DATE: 5/17/16

PURGING DATA

WELL DIAMETER (inches): 2 | TOTAL WELL DEPTH (feet): 30 | WELL SCREEN INTERVAL DEPTH: 20 feet to 30 | STATIC DEPTH TO WATER (feet): 20.59 | PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGED: 1 WELL VOLUME = TOTAL WELL DEPTH (feet) 30 - STATIC DEPTH TO WATER (feet) x (feet/foot) gallons/foot = gallons

TIME	TOTAL VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	pH	SPC (mS/cm)	ORP (mV)	DO (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
1536	-	-	22.3	5.86	184.6	1.50	24	Slightly	none	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RB | SAMPLER SIGNATURE: [signature] | SAMPLING DATE: 5/17/16 | TIME: 1636

PUMP OR TUBING DEPTH IN WELL (feet): - | TUBING MATERIAL CODE: - | FIELD FILTERED: Y / N | FILTER SIZE: µm

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL/min)
SAMPLE CONTAINER SPECIFICATION	#3	CG	40 ml	HCL	---	---	8260B	B	
	1	PG	40 ml	HCL			[illegible]		

REMARKS: missing lock. M.P. inner Cap Broken

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (specify)

FIELD-FILTRATION EQUIPMENT USED: pH, +/- 0.2 units; Temperature, +/- 0.2 °C; Specific Conductance, +/- 3%; Dissolved Oxygen, +/- 0.2 mg/L or +/- 10%; Turbidity, +/- 0.5 (1) or +/- 5%



GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron		SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina	
WELL NO: MW-7	SAMPLE ID: MW07		DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 30	WELL SCREEN INTERVAL DEPTH: 20 feet to 30 feet	STATIC DEPTH TO WATER (feet): 20.98	PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE = 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) x WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	±	pH (SU)	±	COND (mS)	±	DO (mg/L)	±	TURB (NTU)	±	COLOR	ODOR
1415	—	—	22.1	—	5.60	—	206	—	6.00	—	8.6	—	Clr	none

WELL CAPACITY (Gallons per Foot): 0.75" = 0.02, 1" = 0.04, 1.25" = 0.06, 2" = 0.16, 3" = 0.32, 4" = 0.65, 5" = 1.02, 6" = 1.47, 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): DG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 5/16/16	SAMPLING TIME: 1415
PUMP OR TUBING DEPTH IN WELL (feet): —	TUBING MATERIAL CODE: —	FIELD FILTERED: Y / N	FILTER SIZE:
FILTRATION EFFECTED:		Filtration Equipment Type:	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
LABEL ID CODE	NO. OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATION TYPE	TOTAL PRESERVATION VOLUME	TIME pH			
—	3	CG	40 ml	HCl			8260B	B	
—		CG	40 ml	HCL			[signature]		

REMARKS: N.P.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Aqua Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Stone Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron		SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina	
WELL NO: MW-8	SAMPLE ID: MW08		DATE: 5/17/16

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 28	WELL SCREEN INTERVAL DEPTH: 18 feet to 28 feet	STATIC DEPTH TO WATER (feet): 18.75	PURGE PUMP TYPE OR BAILER: —

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

feet feet gals/ft-foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (s.u.)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
1618	—	—	22.9	—	5.54	—	82.2	—	3.58	—	15	—	clr	none.

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02 1" = 0.04 1.25" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): DS	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 5/17/16	SAMPLING TIME: 1618
PUMP OR TUBING DEPTH IN WELL (feet): —	TUBING MATERIAL CODE: —	FIELD FILTERED: Y / N	FILTER SIZE:
DUPLICATE COLLECTED: Y / N		Filtration Equipment Type:	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	TOTAL VOL ADDED (ml)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	B	—
—	1	CG	40 ml	HCL	—	—	[illegible]		—

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO: MW-9
SAMPLE ID: MW09
DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 30
WELL SCREEN INTERVAL DEPTH: 20 feet to 30 feet
STATIC DEPTH TO WATER (feet): 18.78
PURGE PUMP TYPE OR BAILER: RFPP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
30 feet 18.78 feet X 0.16 gallons/foot 1.80 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	%	pH (pH)	%	COND (µS)	%	DO (mg/L)	%	TURB (NTU)	%	COLOR	ODOR
1136	—	—	23.7	—	5.61	—	293	—	1.46	—	13	—	clr	Strong
1142	1.5	1.5	23.4	.3	5.41	.20	271	22	1.30	.16	492	479	cly	
1149	1	2.5	23.3	.1	4.76	.65	265	6	1.11	.19	167	325		
1158	1	3.5	23.3	—	4.68	.08	262	3	1.19	.08	84	83	sl cly	
1205	.5	4	23.2	.1	4.52	.16	260	2	1.26	.07	31	53	sl cly	
1216	.5	4.5	23.1	.1	4.59	.07	260	—	1.27	.01	15	16	clr	
1226	.5	5	23.2	.1	4.59	—	262	2	1.29	.02	12	3		
1231	.5	5.5	23.2	—	4.60	.01	261	1	1.29	—	11	1		
1238	.5	6	23.2	—	4.60	—	261	—	1.29	—	8.5	-	clr	Strong

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.32; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (FIRM): RS
SAMPLER'S SIGNATURE(S): [signature]
SAMPLING DATE: 5/16/16
SAMPLING TIME: 1238
FIELD FILTERED: Y (N) FILTER SIZE
Filtration Equipment Type
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
DUPLICATE COLLECTED: (Y) N 1240

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE IDENTIFIER	COMPOSITE	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (ml)	FINAL pH			
—	3	CG	40 ml	HCL		—	8260B	B	
—	4	CG	40 ml	HCL		—	[illegible]		

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polyethylene; S = Silicone; T = Teflon; O = Other (specify)

SAMPLING EQUIPMENT CODES: APP = Atlas Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (specify)

STABILIZATION CRITERIA
pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-10
SAMPLE ID: MW10
DATE: 5/18/16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 28
WELL SCREEN INTERVAL DEPTH: 8 feet to 28 feet
STATIC DEPTH TO WATER (feet): 14.52
PURGE PUMP TYPE OR BAILER: RFPP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH) 28 feet - (STATIC DEPTH TO WATER) 14.52 feet x (WELL CAPACITY) 0.16 gallons/foot = 2.16 gallons

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	TEMP (°C)	X	pH (pH)		COND (mS)	X	DO (mg/L)	X	TURBIDITY (NTU)	X	COLOR	ODOR
0930			23.7		4.92		692		1.29		25		Clr	Stong
0938	2	2	23.1	.6	4.71	.21	384	308	1.46	.17	846	821	clr	
0949	1	3	22.9	.2	4.21	.50	402	18	1.33	.13	392	454		
1000	1	4	22.8	.1	4.19	.02	415	13	1.35	.02	105	287		
1009	.5	4.5	22.9	.1	4.11	.08	418	3	1.37	.02	29	76	clr	
1016	.5	5	22.9	–	4.10	.01	415	3	1.35	.02	12	17		
1021	.5	5.5	22.9	–	4.12	.02	416	1	1.36	.01	11	1		
1028	.5	6	22.9	–	4.13	.01	417	1	1.35	.01	9.8	[illegible]	Clr	Stong

WELL CAPACITY (gallons/foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.47; 8" = 2.6; 12" = 5.8

SAMPLING DATA

SAMPLER BY (PRINT): DE
SAMPLER SIGNATURE: [signature]
SAMPLING DATE: 5/18/16
SAMPLING TIME: 1028
FIELD FILTERED: Y O
FILTER SIZE:
FIELD FILTERED: Y O
FILTRATION EQUIPMENT TYPE:
PURGE OR TURBIDITY DEPTH IN WELL BORE: –
DUPLICATE COLLECTED: O
TUBING MATERIAL CODE: –
@ 1030

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	CONTAINER	MATERIAL CODE	VOLUME	PRESERVATION CODE	TOTAL VOLUME ADDED	FINAL VOLUME			
—	3	CG	40 ml	HCL		—	8260B	B	
	[illegible]	[illegible]	[illegible]	~~HCL~~		—	~~[illegible]~~		

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (specify)

SAMPLING EQUIPMENT CODES: APP = Air Piston Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (specify)

STABILIZATION CRITERIA:
pH = 0.2 Unit; Temperature = 0.2 °C; Specific Conductance = 5%; Dissolved Oxygen = 0.2 mg/L or 10%; Turbidity = 10 NTU or 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron		SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina	
WELL NO: MW-11	SAMPLE ID: MW11		DATE: 5·18·16

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 30	WELL SCREEN INTERVAL DEPTH: ? feet to ? feet	STATIC DEPTH TO WATER (feet): 16.66	PURGE PUMP TYPE OR BAILER: RFPP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH) 30 feet − (STATIC DEPTH TO WATER) 16.66 feet × WELL CAPACITY 0.16 gallons/foot = 2.13 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	LH (ppm)	Δ	COND (mS)	Δ	DO (mg/L)	Δ	TURB (NTU)	Δ	COLOR	ODOR
1315			20.9	—	4.73	—	146.7	—	1.15	—	18	—	Clr	Slight
1320	2	2	20.6	.3	4.61	.12	134.7	7	1.12	.03	4000	—	Cry	
1325	1	3	20.5	.1	4.23	.38	142.1	24	1.07	.05	321	—		
1330	1	4	20.4	.1	4.21	.02	126.1	16	1.06	.01	102	219		
1335	.5	4.5	20.4	—	4.25	.03	118.9	72	0.94	.07	26	76	Clr	
1340	.5	5	20.4	—	4.27	.02	110.7	8.2	0.92	.07	41	15		
1345	.5	5.5	20.5	.1	4.26	.01	108.5	22	0.93	.01	13	28		
1350	.5	6	20.5	—	4.26	—	108.2	.3	0.91	.02	10	3		

WELL CAPACITY (gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): DS	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 5·18·16	SAMPLING TIME: 1350
PUMP OR TUBING DEPTH IN WELL (feet): —	TUBING MATERIAL CODE: —	FIELD-FILTERED: Y / Filtration Equipment Type: O	FILTER SIZE:
DUPLICATE COLLECTED:			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
[illegible]	[illegible]	[illegible]	[illegible]	PRESERVATIVE TYPE	[illegible]	FINAL pH			
—	~~—~~ 3	CG	40 ml	HCL	—	—	8260B	B	
	~~—~~	~~CG~~	~~40 ml~~	~~HCL~~			~~8011~~		

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Atlas Peristaltic Pump; B = Bailer; BP = Bladder Pump; BSP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SS = Stainless Steel (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO.: MW-12
SAMPLE ID: MW12
DATE: 5/18/16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 24.65
WELL SCREEN INTERVAL DEPTH: ? feet to ? feet
STATIC DEPTH TO WATER (feet): 2.73
PURGE PUMP TYPE OR BAILER: GSP

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH 24.65 feet) STATIC DEPTH TO WATER 2.73 feet x WELL CAPACITY 0.16 gallons/foot 3.51 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (pH)	Δ	CONC (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
0930	—	—	24.7	—	4.59		319	—	1.92	—	21	—	cw	slight
0935	5	5	23.9	.8	4.17	.42	246	73	1.71	.21	372	371	cw	
0940	2	7	23.6	.3	4.06	.11	214	32	1.60	.11	147	245	cw	
0945	1	8	23.7	.1	4.09	.03	216	2	1.62	.02	63	84	cw	
0950	1	9	23.7	—	4.10	.01	220	4	1.57	.05	14	49	cw	
0955	1	10	23.6	.1	4.12	.02	218	2	1.58	.01	18	4	cw	
1000	1	11	23.7	.1	4.15	.03	217	1	1.57	.01	12	6	cw	
1006	1	12	23.7	—	4.10	.05	218	1	1.59	.02	9.0	3	clr	slight

WELL CAPACITY (Gallons Per Foot): 0.75" 0.02; 1" 0.04; 1.25" 0.06; 2" 0.17; 3" 0.37; 4" 0.65; 5" 0.65; 6" 1.47; 12" 5.88

SAMPLING DATA

SAMPLED BY (PRINT): [illegible]
SAMPLER'S SIGNATURE: [signature]
SAMPLING DATE: 5/18/16
SAMPLING TIME: 1006
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y O
FILTER SIZE: Filtration Equipment Type
DUPLICATE COLLECTED: Y

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
	3	CG	40 ml	HCL	—	—	8260B	B	
	~~1~~	~~CG~~	~~40 ml~~	~~HCL~~			MW		

REMARKS: Purge

MATERIAL CODES: AG Amber Glass; CG Clear Glass; PE Polyethylene; PP Polypropylene; S Silicone; T Teflon; O Other (Specify)

SAMPLING EQUIPMENT CODES: APP Alter Peristaltic Pump; B Bailer; BP Bladder Pump; [illegible] Pump; RPPP Reverse Flow Point Site Pump; SP Stainless Steel Gravity Bailer; O Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO: MW-13
SAMPLE ID: MW13
DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 30.1
WELL SCREEN INTERVAL DEPTH: ? feet to ? feet
STATIC DEPTH TO WATER (feet): 9.71
PURGE PUMP TYPE OR BAILER: ESP
WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH 30.1 feet / STATIC DEPTH TO WATER 9.71 feet) / WELL CAPACITY 0.16 gallons/foot 3.26 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (pH)	Δ	CONC (µS)	Δ	DO (mg/L)	Δ	TURB (NTU)	Δ	COLOR	ODOR
1105			23.3	—	4.42	—	139.7		3.27		26	—	cr	none
1116	2	2	23.3	—	3.41	1.01	131.6	8.1	3.21	.06	442	466	cry	
1125	2	4	23.1	.2	3.99	.08	121.2	10.4	3.19	.02	186	306		
1132	1	5	22.9	.2	4.06	.07	126.1	4.9	3.20	.01	35	151	cr	
1141	1	6	22.8	.1	4.01	.05	125.5	.6	3.19	.01	15	20		
1146	1	7	22.7	.1	4.00	.01	125.1	.4	3.19	—	26	11		
1151	1	8	22.8	.1	3.45	.05	125.3	.2	3.18	.01	18	8		
1200	1	9	22.7	.1	3.45	—	124.8	.5	3.17	.01	14	4		
1206	1	10	22.6	.1	3.92	.03	124.9	.1	3.18	.01	12	2		
1212	1	11	22.8	.2	3.93	.11	125.2	.3	3.18	—	7.8	4.2	Clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" 0.02 1" 0.04 1.25" 0.06 2" 0.16 3" 0.36 4" 0.64 5" 1.02 6" 1.47 12" 1.96

SAMPLING DATA

SAMPLED BY (PRINT): [signature]
SAMPLER(S) SIGNATURE(S): [signature]
SAMPLING DATE: 5/16/16
SAMPLING TIME: 1212
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y (N) FILTER SIZE: Filtration Equipment Type:
DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE FLOW	NO. CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
—	3	CG	40 ml	HCl	—	—	8260B	B	—
	1	~~CG~~	~~40 ml~~	~~HCl~~			[illegible]		

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Air Piston Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-L5 | SAMPLE ID: | DATE:

PURGING DATA

DTP 14.58 DTW 15.02

WELL DIAMETER (inches): | Total Well Depth (feet): #25 | WELL SCREEN INTERVAL DEPTH: 5 feet to 25 feet | STATIC DEPTH TO WATER (feet): | PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH feet) STATIC DEPTH TO WATER feet) X WELL CAPACITY gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (pH)	Δ	COND. (pS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR

No measurements Recorded. FP Present.

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.35; 4" = 0.65; 5" = 1.0; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): | SAMPLER(S) SIGNATURE(S): | SAMPLING RATE: | SAMPLING TIME:

PUMP OR TUBING DEPTH IN WELL (feet): | TUBING MATERIAL CODE: | FIELD FILTERED: Y N | FILTER SIZE: Filtration Equipment Type:

DUPLICATE COLLECTED: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	NUMBER OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH			
---	2	CG	40 ml	HCL	---	---	8260B		
---	2	CG	40 ml	HCL		---	5011		

REMARKS:

Not sampled. Free-Product Present.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SP = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA:

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO: MW-16
SAMPLE ID: MW16
DATE: 5/18/16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 25
WELL SCREEN INTERVAL DEPTH: 5 feet to 25 feet
STATIC DEPTH TO WATER (feet): 16.29
PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
( ) feet ( ) feet X ( ) gallons/foot = ( ) gallons

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)		pH (SU)		COND (µS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR
0958			22.7		3.94		217		1.58		546		Clay	Slight

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): [illegible]
SAMPLER'S SIGNATURE(S): [illegible]
SAMPLING DATE: 5/18/16
SAMPLING TIME: 0958
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y / N
FILTER SIZE: 0
Filtration Equipment Type:
DUPLICATE COLLECTED: Y / N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE PARTS	CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	TOTAL PRESERVATIVE VOLUME (ml)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	B	—
	1	~~CG~~	~~40 ml~~	~~HCL~~			[illegible]		

REMARKS: well cap broken, No Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SP = Straw Method (Tubing Gravity Drain); O = Other (Specify)

* Stabilization Criteria:
pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-17

SAMPLE ID:

DATE:

PURGING DATA

WELL DIAMETER (inches)	Total Well Depth (feet)	WELL SCREEN INTERVAL DEPTH	STATIC DEPTH TO WATER (feet)	PURGE PUMP TYPE OR BAILER
	22	20 feet to 30 feet		

WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL DEPTH (feet) 22 − STATIC DEPTH TO WATER (feet) X WELL CAPACITY (gals/ft) (gallons)

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	X	pH (pH)	X	COND (mS)	X	DO (mg/L)	X	TURB IDITY (NTU)	X	COLOR	ODOR

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):

SAMPLER(S) SIGNATURE(S):

SAMPLING DATE:

SAMPLING TIME:

PUMP OR TUBING DEPTH IN WELL (feet):

TUBING MATERIAL CODE:

FIELD FILTERED: Y N FILTER SIZE:

Filtration Equipment Type:

DUPLICATE COLLECTED: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
LABELED BY (Y)	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME PRESERVED (ml)	FINAL pH			
—	2	CG	40 ml	HCL	—	—	8260B		—
—	2	CG	40 ml	HCL			8011		—

REMARKS: Underneath Dirt Pile Not Sampled. See photograph

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other Specific

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SP = Straw Method (Transparent Tube Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-18
SAMPLE ID: MW18
DATE: 5/15/16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 30
WELL SCREEN INTERVAL DEPTH: 20 feet to 30 feet
STATIC DEPTH TO WATER (feet): 22.04
PURGE PUMP TYPE OR BAILER: —

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH ... feet) STATIC DEPTH TO WATER ... feet) X WELL CAPACITY ... gallons/foot ... gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Y	pH (pH)		COND. (mS)	Y	DO (mg/L)	Y	TURBIDITY (NTU)	Y	COLOR	ODOR
1231	—	—	22.0	—	5.12	—	254	—	1.09	—	42	—	slow	Stony

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.35; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): DS
SAMPLER(S) SIGNATURE(S): [signature]
SAMPLING DATE: 5/15/16
SAMPLING TIME: 1231
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y / O
FILTER SIZE: Filtration Equipment Type:
DUPLICATE COLLECTED: Y / N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	DESCRIPTION	VOLUME	PRESERVATIVE TYPE	TOTAL VOLUME PRESERVATIVE (ml)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	B	—
	~~1~~	~~CG~~	~~40 ml~~	~~HCL~~	—	—	~~[illegible]~~		

REMARKS: missing well cap/tag/lock/1 bolt No Purge, Sheen Noted

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Stainless; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Using Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 unit; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO: MW-19
SAMPLE ID: MW19
DATE: 5·18·16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 30
WELL SCREEN INTERVAL DEPTH: 20 feet to 30 feet
STATIC DEPTH TO WATER (feet): 21.76
PURGE PUMP TYPE OR BAILER: N/A
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) x WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	%	pH (su)	%	COND (µS)	%	DO (mg/L)	%	TURBIDITY (NTU)	%	COLOR	ODOR
1326	—	—	23.7	—	4.96	—	270	—	0.95	—	25	—	clr	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RS
SAMPLER (SIGNATURE): [signature]
SAMPLING DATE: 5·18·16
SAMPLING TIME: 1326
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y / N (Filtration Equipment Type)
FILTER SIZE:
DUPLICATE COLLECTED: Y / N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED PER CONTAINER (ml)	TIME (s)			
—	3	CG	40 ml	HCL	—	—	8260B	B	
		CG	40 ml	HCL			80[illegible]		

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron		SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina	
WELL NO: MW-20	SAMPLE ID: MW20		DATE: 5/15/16

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 25	WELL SCREEN INTERVAL DEPTH: 15 feet to 25 feet	STATIC DEPTH TO WATER (feet): 20.41	PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL DEPTH (feet) - STATIC DEPTH TO WATER (feet) X WELL CAPACITY (gallons/foot) gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	V	pH (su)	V	COND (mS)	V	DO (mg/L)	V	TURB (NTU)	V	COLOR	ODOR
0921	–	–	21.7	–	5.60	–	253	–	1.03	–	16	–	Sldy	Strong

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): DB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 5/15/16	SAMPLING TIME: 0921
PUMP OR TUBING DEPTH IN WELL (feet): –	TUBING MATERIAL CODE: –	FIELD FILTERED: Y / Filtration Equipment Type: O	FILTER SIZE:
DUPLICATE COLLECTED: Y / Ø			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATION TYPE	TOTAL VOLUME ADDED (ml)	FINAL pH			
–	~~1~~ 3	CG	40 ml	HCL	–	–	8260B	B	
	~~1~~	~~CG~~	~~40 ml~~	~~HCL~~			~~[illegible]~~		

REMARKS: NP, No well tag/lock,

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Inter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO: MW22
SAMPLE ID: MW22
DATE: 5/15/16

PURGING DATA

WELL DIAMETER (inches): 2
TOTAL WELL DEPTH (feet): 30
WELL SCREEN INTERVAL DEPTH: 20 feet to 30 feet
STATIC DEPTH TO WATER (feet): 19.61
PURGE PUMP TYPE OR BAILER: RFPP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH 30 feet) - (STATIC DEPTH TO WATER 19.61 feet) x WELL CAPACITY 0.16 gallons/foot = 1.66 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (pH)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURB (NTU)	Δ	COLOR	ODOR
0940		—	21.9	—	5.72	—	374		1.47	—	21	—	clr	Stang
0945	1	1	21.7	.2	5.61	[illegible]	361	13	1.12	.35	82	61	stang	
0950	1.5	2.5	21.4	.3	5.50	.11	318	43	1.11	.01	96	14		
0955	1	3.5	21.2	.2	5.59	.09	301	17	1.06	.05	31	65	clr	
1000	.5	4	21.1	.1	5.55	.04	299	2	1.04	.03	18	13		
1005	.5	4.5	21.0	.1	5.51	.04	299	—	1.15	.06	13	5		
1010	.5	5	21.1	.1	5.53	.02	297	2	1.11	.04	12	1		
1015	.5	5.5	21.2	.1	5.50	.03	295	2	1.13	.02	13	1		
1020	.5	6	21.2	—	5.53	.03	296	1	1.12	.01	10	3		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.9

SAMPLING DATA

SAMPLED BY (PRINT): RS
SAMPLER SIGNATURE(S): [signature]
SAMPLING DATE: 5/15/16
SAMPLING TIME: 1020
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y
FILTER SIZE: 0
Filtration Equipment Type:
DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE PER CL	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME PURGED (ml)	FINAL pH			
—	3	CG	40 ml	HCl	—	—	82600	13	—
—	0	~~CG~~	~~40 ml~~	~~HCl~~	—	—	[illegible]		—

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SP = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNOWATER SAMPLING LOG

SITE NAME: Clouds Chevron | LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL ID: MW-23 | SAMPLE ID: MW23 | DATE: 5-18-16

PURGING DATA

WELL DIAMETER (inches): 2 | Total Well Depth (feet): 30 | WELL SCREEN INTERVAL DEPTH: 20 feet to 30 feet | STATIC DEPTH TO WATER (feet): 21.95 | PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) x WELL CAPACITY = gallons/feet

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)		pH (std)		COND (mS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR
1342	-	-	23.0	-	4.72	-	282	-	0.81	-	13	-	clr	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02 | 1" = 0.04 | 1.25" = 0.06 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 5" = 1.02 | 6" = 1.47 | 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RE | SAMPLER'S SIGNATURE: | SAMPLING INITIATED: 5-18-16 | SAMPLING TIME: 1342

PUMP OR TUBING DEPTH IN WELL (feet): - | TUBING MATERIAL CODE: - | FIELD FILTERED: Y (N) | FILTER SIZE:

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE KEY	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
	~~2~~ 3	~~CG~~ CG	~~40 ml~~ 40 ml	~~HCL~~ HCL			~~8260B~~ 8260B	B	

REMARKS: NO Purge

MATERIAL CODES: AG - Amber Glass; CG - Clear Glass; PE - Polyethylene; PP - Polypropylene; S - Stainless; T - Teflon; O - Other (Specify)

SAMPLING EQUIPMENT CODES: APP - Alex Peristaltic Pump; B - Bailer; BP - Bladder Pump; SSP - Stainless Steel Submersible Pump; RFPP - Reverse Flow Peristaltic Pump; SM - Straw Method (Tubing gravity Drain); O - Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron		SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina	
WELL NO: MW-25	SAMPLE ID:		DATE:

PURGING DATA

WELL DIAMETER (inches)	Total Well Depth (feet): 25.6	WELL SCREEN INTERVAL DEPTH: ? feet to ? feet	STATIC DEPTH TO WATER (feet)	PURGE PUMP TYPE OR BAILER

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH) - (STATIC DEPTH TO WATER) 2 WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	A	pH (pH)	A	COND (µS)	A	DO (mg/L)	A	TURBIDITY (NTU)	A	COLOR	ODOR

WELL CAPACITY (Gallons Per Foot): 0.75" 0.02 4" 0.04 4.25" 0.06 [illegible] 0.16 [illegible] 4" [illegible] 6" [illegible] 8" [illegible] 12" [illegible]

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE:	SAMPLING TIME:
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD FILTERED: Y N	FILTER SIZE:
DUPLICATE COLLECTED: Y N		Filtration Equipment Type:	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
LABELED BY	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	ANALYSIS ADDED INTENDED (ml)	TOTAL (ml)			
---	1	CG	40 ml	HCL	---	---	82606		---
---	2	CG	40 ml	HCL			8011		---

REMARKS: Not Located

MATERIAL CODES: AG - Amber Glass; CG - Clear Glass; PE - Polyethylene; PP - Polypropylene; S - Stainless; T - Teflon; O - Other (Specify)

SAMPLING EQUIPMENT CODES: APP - After Peristaltic Pump; B - Bailer; BP - Bladder Pump; ESP - Electric Submersible Pump; RFPP - Reverse Flow Peristaltic Pump; SP - Straw Method (Tubing Gravity Drain); O - Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-26

SAMPLE ID: MW26

DATE: 5/17/16

PURGING DATA

WELL DIAMETER (inches): 2

Total Well Depth (feet): 30

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH) 30 feet

WELL SCREEN INTERVAL DEPTH: ? feet to ? feet

STATIC DEPTH TO WATER (feet): 20.24

STATIC DEPTH TO WATER (feet): 20.24

WELL CAPACITY: 0.16 gallons/foot

PURGE PUMP TYPE OR BAILER: ~~RF~~ RP

1.56 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)		pH (ph)		COND (µS)		DO (mg/L)		TURB DIST (NTU)		COLOR	ODOR
1515			22.6		5.46		135.6		6.27		26		clr	none
1526	2	2	21.3	1.3	5.41	.05	130.2	5.4	6.03	.24	49		slug	↓
1531	1	3	21.4	.1	5.39	.02	129.1	1.1	5.41	.12	13		clr	↓
1540	1	4	21.5	.1	5.38	.01	128.1	1	5.93	.02	12		↓	↓
1547	+	5	21.5	—	5.38	—	128.1	—	5.93	—	10.0	—	clr	none.

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): [illegible]

SAMPLER (SIGNATURE): [signature]

SAMPLING DATE: 5/17/16

SAMPLING TIME: 1547

PUMP OR TUBING DEPTH IN WELL (feet): —

TUBING MATERIAL CODE: —

FIELD-FILTERED: Y / Y

FILTER SIZE: 0

DUPLICATE COLLECTED: Y / Y

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE NO.	TOTAL NO.	TYPE CODE	VOLUME	PRESERVATION CODE	TOTAL PRESERVATIVE (ml)	TOTAL pH			
—	2 3.	CG	40 ml	HCL	—	—	8260B	B	
—	[illegible]	CG	40 ml	HCL	—		[illegible]		

REMARKS: missing lock/well trg. well cover bolts broken.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Atlas Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-27

SAMPLE ID: MW27

DATE: 5/17/16

PURGING DATA

WELL DIAMETER (inches): 2

Total Well Depth (feet): 30

WELL SCREEN INTERVAL DEPTH: 15 feet to 30 feet

STATIC DEPTH TO WATER (feet): 15.62

PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) x WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)		pH (pH)		COND (mS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR
1350	—	—	20.9	—	6.11	—	363	—	3.47	—	9.1	—	clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 4" = 0.65; 6" = 1.47; 8" = 2.6; 12" = 5.8

SAMPLING DATA

SAMPLED BY (PRINT): [signature]

SAMPLER'S SIGNATURE: [signature]

SAMPLING DATE: 5/17/16

SAMPLING TIME: 1350

PUMP OR TUBING DEPTH IN WELL (feet): —

TUBING MATERIAL CODE: —

FIELD FILTERED: Y N

FILTER SIZE: 0

DUPLICATE COLLECTED: 0

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
	1.3	CG	40 ml	HCL			8260B	B	

REMARKS: missing Lock / Bolt broken in mh cover N.P.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Stone Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-28
SAMPLE ID: MW28
DATE: 5/17/16

PURGING DATA

WELL DIAMETER (inches): 2
TOTAL WELL DEPTH (feet): 30
WELL SCREEN INTERVAL DEPTH: 5 feet to 30 feet
STATIC DEPTH TO WATER (feet): 15.90
PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH) - (STATIC DEPTH TO WATER) x WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)		pH (pH)		COND (µS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR
1356	—	—	19.4	—	6.07	—	171.7	—	1.16	—	19.6	—	Slcmg	Slight

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RS
SAMPLER(S) SIGNATURE(S): [signature]
SAMPLING DATE: 5/17/16
SAMPLING TIME: 1356

PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y (N)
FILTER SIZE:
Filtration Equipment Type:
DUPLICATE COLLECTED: (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID NO.	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATION CODE	TOTAL VOLUME PURGED (ml)	TEMP (°C)			
—	3	CG	40 ml	HCL	—	—	8260B	B	—
	~~1~~	~~CG~~	~~40 ml~~	~~HCL~~			~~[illegible]~~		

REMARKS: N.P.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ≤ 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-29

SAMPLE ID: MW29

DATE: 5/17/16

PURGING DATA

WELL DIAMETER (inches): | Total Well Depth (feet): 30 | WELL SCREEN INTERVAL DEPTH: 15 feet to 30 feet | STATIC DEPTH TO WATER (feet): 15.88 | PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH feet) - (STATIC DEPTH TO WATER feet) X WELL CAPACITY (gallons/foot) gallons

Time	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (ph)	Δ	COND (mS)	Δ	DO (mg/L)	Δ	TURB IDITY (NTU)	Δ	COLOR	ODOR
1347	-	-	19.7	-	6.80	-	161.9	-	2.18	-	6.5	-	Cr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.47; 8" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RB

SAMPLER(S) SIGNATURE(S): [signature]

SAMPLING DATE: 5/17/16

SAMPLING TIME: 1347

PUMP OR TUBING DEPTH IN WELL (feet): -

TUBING MATERIAL CODE: -

FIELD FILTERED: Y (N)

FILTER SIZE: Flatrokes Equipment Type

DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH			
	3	CG	40 ml	HCL			8260B	B	
	1	~~CG~~	~~40 ml~~	~~HCL~~			~~8011~~		

REMARKS: N.P.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Anti-Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SH = Slow Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two North Road, Columbia, South Carolina

WELL NO: MW-30 | SAMPLE ID: MW30 | DATE: 5/15/16

PURGING DATA

WELL DIAMETER (inches): 2 | TOTAL WELL DEPTH (feet): 30 | WELL SCREEN INTERVAL DEPTH: 5 feet to 30 feet | STATIC DEPTH TO WATER (feet): 19.27 | PURGE PUMP TYPE OR BAILER: —

WELL VOLUME PURGED: ___ gallons | 1 WELL VOLUME = ___ gallons | TOTAL WELL DEPTH = ___ feet | STATIC DEPTH TO WATER = ___ feet | 1 WELL CAPACITY = ___ gallons/foot

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	±	pH (SU)	±	COND (µS)	±	DO (mg/L)	±	TURBIDITY (NTU)	±	COLOR	ODOR
1753	—	—	20.8	—	5.21	—	384	—	2.83	—	9.2	—	clr	none

WELL CAPACITY (gallons/foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.47; 8" = 2.61; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): DS | SAMPLER'S SIGNATURE: [signature] | SAMPLING INITIATED AT: 5/15/16 | SAMPLING ENDED AT: 1753

PUMP OR TUBING DEPTH IN WELL (feet): — | TUBING MATERIAL CODE: — | FIELD FILTERED: Y (N) | FILTER SIZE: ___ µm | Filtration Equipment Type: ___

SAMPLE CONTAINER SPECIFICATION: SAMPLE ID	NO. CONTAINERS	CONTAINER MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
	~~3~~ 4	CG	40 ml	HCl	—	—	8260B	B	—

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (specify)

SAMPLING EQUIPMENT CODES: APP = Alpha Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; O = Other (specify)

STABILIZATION CRITERIA

pH: ± 0.2 unit; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: Mw-31

SAMPLE ID: Mw31

DATE: 5/17/16

PURGING DATA

WELL DIAMETER (inches): 2

Total Well Depth (feet): 35

WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet

STATIC DEPTH TO WATER (feet): 22.98

PURGE PUMP TYPE OR BAILER: —

WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL DEPTH (feet) - STATIC DEPTH TO WATER (feet) x WELL CAPACITY (gallons/foot) (gallons)

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)		pH (pH)		CONC (mS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR
1701	-	-	20.2	-	5.33	-	81.3	-	4.46	-	11	-	Clr	none

WELL CAPACITY (gallons per foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RS

SAMPLER(S) SIGNATURE(S): [signature]

SAMPLING DATE: 5/17/16

SAMPLING TIME: 1701

PUMP OR TUBING DEPTH IN WELL (feet): —

FILTERED: Y

FIELD-FILTERED: Y

FILTER SIZE: 0

DUPLICATE COLLECTED: —

MATERIAL CODE: —

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATION USED	TOTAL VOLUME PRESERVATIVE (ml)	LOT NO.			
	3	CG	40 ml	HCL			8260B	B	
	~~4~~	~~CG~~	~~40 ml~~	~~HCL~~			~~[illegible]~~		

REMARKS: No lock/well tag. Manhole filled w/ Ants.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Some Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-32 | SAMPLE ID: MW32 | DATE: 5/17/16

PURGING DATA

WELL DIAMETER (inches): 2 | TOTAL WELL DEPTH (feet): 30 | WELL SCREEN INTERVAL DEPTH: 5 feet to 30 feet | STATIC DEPTH TO WATER (feet): 19.75 | PURGE PUMP TYPE OR BAILER: —

WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL DEPTH (feet) − STATIC DEPTH TO WATER (feet) × WELL CAPACITY (Gallons Per Foot)

TIME	VOLUME PURGED (Gallons)	CUMULATIVE VOLUME PURGED (Gallons)	TEMP (°C)	✓	pH (std)	✓	COND (µS)	✓	DO (mg/l)	✓	TURB (NTU)	✓	COLOR	ODOR
1633	—	—	22.2	—	5.67	—	122.5	—	1.17	—	8	—	clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: RK | SAMPLER SIGNATURE(S): [signature] | SAMPLING DATE: 5/17/16 | SAMPLE TIME: 1633

PUMP OR TUBING DEPTH IN WELL (feet): — | TUBING MATERIAL CODE: — | FIELD FILTERED: Y (N) | FILTER SIZE: —

DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION: SAMPLE CONTAINER QUANTITY	SAMPLE CONTAINER MATERIAL CODE	SAMPLE VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	FIELD FILTERED (Y/N)	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
~~3~~ 4	CG	40 ml	HCL		8260B	B	

REMARKS: N.P. Missing Lock

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; FPP = Positive Gas Displacement Pump; PP = Peristaltic Pump; O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 3%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO.: MW-33
SAMPLE ID: MW33
DATE: 5/15/16

PURGING DATA

WELL DIAMETER (in.): 2
TOTAL WELL DEPTH (feet): 35
WELL SCREEN INTERVAL DEPTH: 20 to 35 feet
STATIC DEPTH TO WATER (feet): 21.57
PURGE PUMP TYPE OR BAILER: ~~SYS#6~~
WELL VOLUME PURGE: 1 WELL VOLUME
TOTAL WELL DEPTH (feet)
STATIC DEPTH TO WATER (feet)
WELL DIAMETER (inches)

TIME	GALLONS PURGED (gallons)	CUM'L VOLUME PURGED (gallons)	TEMP (°C)		pH (SU)		COND (µS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR
0829	—	—	22.4	—	5.44	—	250	—	1.29	—	~~36~~	—	Gray	Strong

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RS
SAMPLER SIGNATURE(S):
SAMPLING DATE: 5/15/16
SAMPLING TIME: 0829
PURGE OR SAMPLE
DEPTH TO WELL (feet)
TIME PURGED
TIME SAMPLED
WATER SAMPLE
MATERIAL CODE

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
MATERIAL CODE	VOLUME	ADDITIVE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED	FINAL pH			
—	#3	CG	40 ml	HCl			8260B	B	
	"	CG	40 ml	HCl			6010		

NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (specify)

SAMPLING EQUIPMENT CODES: APP = After-Vacuum Pressure Pump; B = Bailer; BP = Bladder Pump; PSP = Peristaltic Submersible Pump; RFPP = Reverse Flow Positive Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (specify)

FIELD MEASUREMENTS

pH: ± 0.2 unit; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO: MW-34
SAMPLE ID: MW34
DATE: 5/15/16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 35
WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet
STATIC DEPTH TO WATER (feet): 22.38
PURGE PUMP TYPE OR BAILER: —

WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL DEPTH (feet) − STATIC DEPTH TO WATER (feet) × WELL CAPACITY (gallons/foot) = gallons

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	TEMP (°C)	±	pH (Sn)	±	COND (mS)	±	DO (mg/L)	±	TURB (NTU)	±	COLOR	ODOR
1651	—	—	21.6	—	4.49	—	66.5	—	2.38	—	18	—	clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" 0.02; 1" 0.04; 1.25" 0.06; 2" 0.16; 3" 0.37; 4" 0.65; 5" 1.02; 6" 1.47; 12" 1.44

SAMPLING DATA

SAMPLED BY (PRINT): RS
SAMPLER(S) SIGNATURE(S): [signature]
SAMPLING DATE: 5/15/16
SAMPLING TIME: 1651
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y O
FILTER SIZE: Filtration Equipment Type
DUPLICATE COLLECTED: O

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID	# CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	TOTAL VOLUME PRESERVATIVE (ml)	TIME			
—	13	CG	40 ml	HCL	—	—	8260B	B	—
	1	~~CG~~	~~40 ml~~	~~HCL~~			~~[illegible]~~		

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (specify)

SAMPLING EQUIPMENT CODES: APP = Alto Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Stony Method Tubing Gravity Drain; O = Other (specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron		SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina	
WELL NO: Mw-35	SAMPLE ID: Mw35		DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 35	WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet	STATIC DEPTH TO WATER (feet): 21.48	PURGE PUMP TYPE OR BAILER: —

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH ... feet) - (STATIC DEPTH TO WATER ... feet) X WELL CAPACITY ... gallons/foot ... gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Y	pH (pH)	Y	COND (µS)	Y	DO (mg/L)	Y	TURB (NTU)	Y	COLOR	ODOR
1819	—	—	22.1	—	4.22	—	85.0	—	1.07	—	32	—	Sl Cln	Slight

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.66; 6" = 1.02; 8" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RG	SAMPLER'S SIGNATURE(S): [signature]	SAMPLING DATE: 5/16/16	SAMPLING TIME: 1819
PUMP OR TUBING DEPTH IN WELL (feet): —	TUBING MATERIAL CODE: —	FIELD FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE:
DUPLICATE COLLECTED: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE IDENTIFICATION	# CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
	3	CG	40 ml	HCl	—	—	8260B	B	
	1	[illegible]	[illegible]	[illegible]			[illegible]		

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; S = Silicone Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-36
SAMPLE ID: MW36
DATE: 5/15/16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 35
WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet
STATIC DEPTH TO WATER (feet): 21.36
PURGE PUMP TYPE OR BAILER: —

WELL VOLUME PURGE: 1 WELL VOLUME
TOTAL WELL DEPTH: feet
STATIC DEPTH TO WATER: feet
WELL CAPACITY: gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)		pH (Wt)		COND (µS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR
1601	–	–	21.9	–	5.34	–	142.6	–	1.09	–	29	–	Slow	Slight

WELL CAPACITY (Gallons Per Foot): 0.75" 0.02 1" 0.04 1.25" 0.06 2" 0.16 3" 0.37 4" 0.65 6" 1.47 8" 2.6 12" 5.88

SAMPLING DATA

SAMPLED BY (FIRST): RS
SAMPLER(S) SIGNATURE(S): [signature]
SAMPLING DATE: 5/15/16
SAMPLING TIME: 1601
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y N
FILTER SIZE: Filtration Equipment Type:
DUPLICATE COLLECTED: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
TOTAL # OF CONTAINERS		VOLUME		PRESERVATIVE	TOTAL VOLUME ADDED (ml)	FINAL pH			
	3	CG	40 ml	HCL			8260B	B	
		~~CG~~	~~40 ml~~	~~HCL~~			[illegible]		

REMARKS: No Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (specify)

SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electrical Submersible Pump; RPPP = Reverse Flow Permeable Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (specify)

STABILIZATION CRITERIA
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-37

SAMPLE ID: MW37

DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2

Total Well Depth (feet): 35

WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet

STATIC DEPTH TO WATER (feet): 21.61

PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)		pH (pH)		CONC (µS)		DO (mg/L)		TURB (NTU)		COLOR	ODOR
1725	–	–	21.8	–	4.03	–	82.3	–	3.60	–	15	–	Cr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.1; 3" = 0.3; 4" = 0.65; 6" = 1.0; 8" = 1.4; 12" = 5.8

SAMPLING DATA

SAMPLED BY (PRINT): DG

SAMPLER'S SIGNATURE: [signature]

SAMPLING DATE: 5/16/16

SAMPLING TIME: 1725

PUMP OR TUBING DEPTH IN WELL (feet): –

TUBING MATERIAL CODE: –

FIELD FILTERED: Y / N

FILTER SIZE: 0

DUPLICATE COLLECTED: Y / N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
–	4 3	CG	40 ml	HCL	–		8260B	B	
	4	~~CG~~	~~40 ml~~	~~HCL~~			MW		

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Aqua Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron		SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina	
WELL NO: MW-38	SAMPLE ID: MW38		DATE: 5·18·16

PURGING DATA

WELL DIAMETER (inches): 2	TOTAL WELL DEPTH (feet): 35	WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet	STATIC DEPTH TO WATER (feet): 24.83	PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH ___ feet) STATIC DEPTH TO WATER (feet) ___ x WELL CAPACITY ___ gallons/foot ___ gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	∆	dH (ppm)	∆	COND. (µS)	∆	DO (mg/L)	∆	TURBIDITY (NTU)	∆	COLOR	ODOR
1338	—	—	23.5	—	3.89	—	78.2	—	5.68	—	29	—	c/r	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 3.36

SAMPLING DATA

SAMPLED BY (PRINT): RS	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 5·18·16	SAMPLING TIME: 1338
PUMP OR TUBING DEPTH IN WELL (feet): —	TUBING MATERIAL CODE: —	FIELD FILTERED: Y (N)	FILTER SIZE:
DUPLICATE COLLECTED: (N)		Filtration Equipment Type:	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID	CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME PRESERVATIVE (ml)	TIME (ml)			
—	-3	CG	40 ml	HCL	—	—	8260B	B	—
—	~~-3~~	~~CG~~	~~40 ml~~	~~HCL~~			~~8260~~		—

REMARKS: No Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Stainless; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Aner Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPP = Reverse Flow Peristaltic Pump; SM = Slow Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Cloude Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-39

SAMPLE ID: MW39

DATE:

PURGING DATA

WELL DIAMETER (inches): | Total Well Depth (feet): 35 | WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet | STATIC DEPTH TO WATER (feet): 24.02 | PURGE PUMP TYPE OR BAILER: B

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH) feet | STATIC DEPTH TO WATER (feet) | WELL CAPACITY (gallons/foot) (Gallons)

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)				COND (µS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR
1510	–	–	21.6	–	5.37	–	192	–	2.17	–	30	–	Clr	

WELL CAPACITY (Gallons Per Foot): 0.75" 0.02; 1" 0.04; 1.25" 0.06; 2" 0.16; 2" 0.16; 4" 0.65; 6" 1.02; 8" 1.47; 12" 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RL

SAMPLER(S) SIGNATURE(S): [signature]

SAMPLING DATE: 5-18-16

SAMPLING TIME: 1510

PUMP OR TUBING DEPTH IN WELL (feet): –

TUBING MATERIAL CODE: –

FIELD FILTERED: Y (N)

FILTER SIZE: Filtration Equipment Type

DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID	# CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL (Y)			
–	~~2~~ 3	CG	40 ml	HCL	–	–	8260B	B	
	~~2~~	~~CG~~	~~40 ml~~	~~HCL~~			8011		

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Pump or Pump; SM = Single Machine (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-40

SAMPLE ID:

DATE:

PURGING DATA

WELL DIAMETER (inches): | Total Well Depth (feet): 35 | WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet | STATIC DEPTH TO WATER (feet): | PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH (feet) - STATIC DEPTH TO WATER (feet)) WELL CAPACITY (gallons/foot)

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Y	pH (ml)	Y	CONC. (µS)	Y	DO (mg/L)	Y	TURB (NTU)	Y	COLOR	ODOR

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):

SAMPLER(S) SIGNATURE(S):

SAMPLING DATE:

SAMPLING TIME:

PUMP OR TUBING DEPTH IN WELL (feet):

TUBING MATERIAL CODE:

FIELD FILTERED: Y N

FILTER SIZE:

Filtration Equipment Type:

DUPLICATE COLLECTED: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID NO.	# CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH			
	2	CG	40 ml	HCL			8260B		
	2	CG	40 ml	HCL			8011		

REMARKS: Not shown on Map. Two MW41's are on map.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-41
SAMPLE ID: MW41
DATE: 5·18·16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 35
WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet
STATIC DEPTH TO WATER (feet): 23.71
PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) x WELL CAPACITY
feet feet x gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	±	pH (s.u.)	±	COND (µS)	±	DO (mg/L)	±	TURB (NTU)	±	COLOR	ODOR
1524	–	–	22.1	–	6.14	–	139.2	–	2.47	–	12	–	Clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): DS
SAMPLER(S) SIGNATURE(S): [signature]
SAMPLING DATE: 5·18·16
SAMPLING TIME: 1524
PUMP OR TUBING DEPTH IN WELL (feet): –
TUBING MATERIAL CODE: –
FIELD-FILTERED: Y (N)
FILTER SIZE: Filtration Equipment Type:
DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID	CONTAINER	MATERIAL CODE	VOLUME	PRESERVATION TYPE	TOTAL ACID/BASE (ml)	TIME (pH)			
–	3	CG	40 ml	HCL	–	–	8260B	B	–
	~~2~~	~~CG~~	~~40 ml~~	~~HCL~~	–	–	~~8011~~		–

REMARKS: On Map - Shown at SE Corner of Higgins Hall.

MATERIAL CODES: AG - Amber Glass; CG - Clear Glass; PE - Polyethylene; PP - Polypropylene; S - Silicone; T - Teflon; O - Other (Specify)

SAMPLING EQUIPMENT CODES: APP - Alter Peristaltic Pump; B - Bailer; BP - Bladder Pump; ESP - Electric Submersible Pump; RPPP - Reverse Flow Peristaltic Pump; SM - Straw Method (Tubing Gravity Drain); O - Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-42
SAMPLE ID: MW42
DATE: 5/18/16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 35
WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet
STATIC DEPTH TO WATER (feet): 23.73
PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
feet feet X gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	∆	pH (pH)	∆	COND (µS)	∆	DO (mg/L)	∆	TURB (NTU)	∆	COLOR	ODOR
1447	—	—	22.5	—	6.13	—	149.3	—	2.17	—	12.4	—	Clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02 1" = 0.04 1.25" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 12" = 1.08

SAMPLING DATA

SAMPLED BY (PRINT): RS
SAMPLER(S) SIGNATURE(S): [signature]
SAMPLING DATE: 5·18·16
SAMPLING TIME: 1447
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y (N)
FILTER SIZE:
Filtration Equipment Type:
HOURS ON EQUIPMENT:

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE INTERVAL	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	LOT #			
—	13	CG	40 ml	HCL	—	—	8260B	B	—
—	~~1~~	~~CG~~	~~40 ml~~	~~HCL~~	—	—	~~8260B~~		—

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (specify)

SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; NFPP = Reverse Flow Peristaltic Pump; SM = Slow Methods Tubing Gravity Drain; O = Other (specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-43

SAMPLE ID: MW43

DATE: 5/18/16

PURGING DATA

WELL DIAMETER (inches): 2

TOTAL WELL DEPTH (feet): 40

WELL SCREEN INTERVAL DEPTH: 20 feet 40 feet

STATIC DEPTH TO WATER (feet): 22.04

PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = 1 TIME WELL DEPTH

TIME	OTHER PURGED (gallons)	TOTAL VOLUME PURGED (gallons)	TEMP (°C)				COND (mS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR
0859	—	—	22.4	—	7.01	—	96.7	—	6.34	—	015	—	Clr	none

WELL CAPACITY: 0.75" = 0.02; 1" = 0.05; 1.25" = 0.08; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.87

SAMPLING DATA

SAMPLED BY (PRINT): RS

SAMPLER'S SIGNATURE: [signature]

PUMP OR TUBING DEPTH IN WELL (feet): —

TUBING MATERIAL CODE: —

SAMPLING DATE: 5/18/16

SAMPLING TIME: 0859

FIELD FILTERED: Y / N

FILTER SIZE: 0

SURFACE COLLECTED: 0

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	TOTAL VOLUME ADDED (ml)	FINAL pH			
	3	CG	40 ml	HCL			8260B	B	
	1	~~CG~~	~~40 ml~~	~~HCL~~					

REMARKS: Broken locking cap / [illegible] well [illegible]

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Slow Method (Tubing Gravity Drain); O = Other (specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-44

SAMPLE ID: MW44

DATE: 5/18/16

PURGING DATA

WELL DIAMETER (inches): 2

Total Well Depth (feet): 31

WELL SCREEN INTERVAL: DEPTH 16 feet to 31 feet

STATIC DEPTH TO WATER (feet): 20.11

PURGE PUMP TYPE OR BAILER: [illegible]

WELL VOLUME PURGE: 1 WELL VOLUME - TOTAL WELL DEPTH - STATIC DEPTH TO WATER X WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	TEMP (°C)	Y	pH (pH)	Y	COND. (µS)	Y	DO (mg/L)	Y	TURB. (NTU)	Y	COLOR	ODOR
0927	—	—	21.5	—	4.60	—	102.4	—	4.44	—	9.1	—	clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RB

SAMPLER'S SIGNATURE(S): [signature]

SAMPLING DATE: 5/18/16

SAMPLING TIME: 0927

PUMP OR TUBING DEPTH IN WELL (feet): —

TUBING MATERIAL CODE: —

FIELD FILTERED: Y (N)

FILTER SIZE: Filtration Equipment Type

DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
—	~~2~~ 3	CG	40 ml	HCL	—	—	8260B	B	—
—	~~2~~	~~CG~~	~~40 ml~~	~~HCL~~	—	—	~~8011~~		—

REMARKS: missing lock NO Purge

MATERIAL CODES: AG - Amber Glass; CG - Clear Glass; PE - Polyethylene; PP - Polypropylene; S - Silicone; T - Teflon; O - Other (Specify)

SAMPLING EQUIPMENT CODES: APP - Atlas Peristaltic Pump; B - Bailer; BP - Bladder Pump; ESP - Electric Submersible Pump; RPPP - Reverse Flow Peristaltic Pump; SM - Straw Method (Tubing Gravity Drain); O - Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Cloverdale Groves

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-45

SAMPLE ID: MW45

DATE: 5/18/16

PURGING DATA

WELL DIAMETER: 2

TUBING INSIDE DIAM.: 30

WELL VOLUME PURGED: 1 WELL VOLUME

WELL SCREEN INTERVAL DEPTH: 15 TO 30

DEPTH TO WATER (Before): 19.43

PURGE PUMP TYPE OR BAILER: —

TIME	VOLUME PURGED (gallons)	CUM. VOLUME PURGED (gallons)	FIELD	pH (S.U.)		(SU)		DO (mg/l)		TURBIDITY (NTUs)		COLOR	ODOR
0915	—	—	2.9	—	4.71	—	32.3	—	5.09	—	18	—	Clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.80

SAMPLING DATA

SAMPLED BY (PRINT): B. S.

PUMP OR TUBING DEPTH IN WELL (feet): —

TIME SAMPLE WITHDRAWN FROM WELL: —

SAMPLING DATE: 5/18/16

SAMPLING TIME: 0915

FIELD FILTERED: Y / N

FILTER SIZE: Laboratory / Field (Peristaltic Pump) / Other

SAMPLE CONTAINER SPECIFICATION

CONTAINER MATERIAL CODE	CONTAINER VOLUME	SPECIFIED VOLUME	NUMBER OF CONTAINERS	PRESERVATIVE USED	TOTAL VOLUME PURGED (ml)	pH (lab verified)	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
—	3	OG	40 ml	HCl	—	—	8260B	B	—
—	1	—	—	—	—	—	—	—	—

RELINQUISHED BY: —

RECEIVED BY: —

RELINQUISHED BY: —

RECEIVED BY: —

RELINQUISHED BY: —

RECEIVED BY: —

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Steel; T = Teflon; O = Other (Describe)

SAMPLING EQUIPMENT CODES: APP = Alpha Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Describe)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 3%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

ND Purge

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-46 | SAMPLE ID: MW46 | DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2 | Total Well Depth (feet): 35 | WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet | STATIC DEPTH TO WATER (feet): 21.70 | PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH) - (STATIC DEPTH TO WATER) = WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)		pH (pH)		COND (µS)		DO (mg/L)		TURB (NTU)		COLOR	ODOR
1137	—	—	[illegible]	—	4.23	—	82.6	—	6.57	—	12	—	clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" 0.02; 1" 0.04; 1.25" 0.06; 2" 0.16; 3" 0.37; 4" 0.65; 5" 1.0; 6" 1.47; 12" 0.04

SAMPLING DATA

SAMPLED BY (FIRM): PS | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING DATE: 5/16/16 | SAMPLING TIME: 1137

PUMP OR TUBING DEPTH IN WELL (feet): — | TUBING MATERIAL CODE: — | FIELD FILTERED: Y | FILTER SIZE: 0

DUPLICATE COLLECTED: Y | Filtration Equipment Type:

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL ALL PRESERVATIVES (ml)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	B	
—	1	~~CG~~	~~40 ml~~	~~HCL~~			[illegible]		

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Slow Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA:

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-48
SAMPLE ID: MW48
DATE: 5/18/16

PURGING DATA

WELL DIAMETER (inches): 2
Total well Depth (feet): 30
WELL SCREEN INTERVAL DEPTH: 15 feet to 30 feet
STATIC DEPTH TO WATER (feet): 18.21
PURGE PUMP TYPE OR BAILER: —

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
feet feet X gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)		pH (pH)		COND (µS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR
0943	—	—	21.5	—	4.37	—	59.4	—	7.28	—	62	—	slcy	no

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): CS
SAMPLER SIGNATURE(S): [signature]
SAMPLING DATE: 5/18/16
SAMPLING TIME: 0943
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y O
FILTER SIZE: Filtration Equipment Type:
DUPLICATE COLLECTED: Y O

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	TOTAL # OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME PRESERVATIVE (ml)	FINAL pH			
—	~~4~~ 3	CG	40 ml	HCL	—	—	8260B	B	
—	~~—~~	~~CG~~	~~40 ml~~	~~HCL~~	—		~~[illegible]~~		

REMARKS: Star Beauty well

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Air Piston Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Slow Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO.: MW-49

SAMPLE ID:

DATE:

PURGING DATA

WELL DIAMETER (inches): | Total Well Depth (feet): 30 | WELL SCREEN INTERVAL DEPTH: 15 feet to 30 feet | STATIC DEPTH TO WATER (feet): | PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH) - (STATIC DEPTH TO WATER) x (WELL CAPACITY)

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)		pH (pH)		COND (mS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 1" = 0.1; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):

SAMPLER'S SIGNATURE(S):

SAMPLING DATE:

SAMPLING TIME:

PUMP OR TUBING DEPTH IN WELL (feet):

TUBING MATERIAL CODE:

FIELD-FILTERED: Y N

FILTER SIZE:

DUPLICATE COLLECTED: Y N

Filtration Equipment Type:

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			
—	2	CG	40 ml	HCL	—	—	8260B		
—	2	CG	40 ml	HCL	—	—	8011		—

REMARKS:

Gate Locked, Not Sampled

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Slow Method (Turning Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Claude Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-50

SAMPLE ID:

DATE:

PURGING DATA

WELL DIAMETER (inches): | Total Well Depth (feet): 30 | WELL SCREEN INTERVAL DEPTH: 5 feet to 30 feet | STATIC DEPTH TO WATER (feet): | PURGE PUMP TYPE ON BAILER

WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL DEPTH (feet) - STATIC DEPTH TO WATER (feet) x WELL CAPACITY (gallons/foot) (gallons)

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Y	pH (pH)	Y	COND (µS)	Y	DO (mg/L)	Y	TURBIDITY (NTU)	Y	COLOR	ODOR

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.87

SAMPLING DATA

SAMPLED BY (PRINT):

SAMPLER(S) SIGNATURE(S):

SAMPLING DATE:

SAMPLING TIME:

PUMP OR TUBING DEPTH IN WELL (feet):

TUBING MATERIAL CODE:

FIELD FILTERED: Y N

FILTER SIZE: Filtration Equipment Type:

DUPLICATE COLLECTED: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE TYPE CODE	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATION USED	TOTAL VOLUME APPROXIMATE (ml)	PH (pH)			
—	2	CG	40 ml	HCL	—	—	8260B		—
—	2	CG	40 ml	HCL		—	8011		—

REMARKS: Gate Locked. Not Sampled

MATERIAL CODES: AG - Amber Glass; CG - Clear Glass; PE - Polyethylene; PP - Polypropylene; S - Silicone; T - Teflon; O - Other (Specify)

SAMPLING EQUIPMENT CODES: APP - Atlas Peristaltic Pump; B - Bailer; BP - Bladder Pump; ESP - Electric Submersible Pump; RFPP - Reverse Flow Peristaltic Pump; SM - Straw Method (Tubing Gravity Drain); O - Other (Specify)

STABILIZATION CRITERIA:

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-S1 | SAMPLE ID: MWS1 | DATE: 5/18/16

PURGING DATA

WELL DIAMETER (inches): 2 | Total Well Depth (feet): 35 | WELL SCREEN INTERVAL: 20 feet to 35 feet | STATIC DEPTH TO WATER (feet): 20.76 | PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) x WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	pH	COND. (µS)	Eh (mV)	DO (mg/L)	TURB. (NTUs)	COLOR	ODOR
1405	-	-	22.6	4.10	96.4	6.01	23	-	clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02 | 1" = 0.04 | 1.25" = 0.06 | 2" = 0.16 | 3" = 0.37 | 4" = 0.65 | 5" = 1.02 | 6" = 1.47 | 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): BS | SAMPLER'S SIGNATURE(S): [signature] | SAMPLING DATE: 5.18.16 | SAMPLING TIME: 1405

PUMP OR TUBING DEPTH IN WELL (feet): - | TUBING MATERIAL CODE: - | FIELD FILTERED: Y / N | FILTER SIZE: - µm

Turbidity (Optional) Equipment Type: O

SAMPLE CONTAINER SPECIFICATION: AMOUNT PRESERVED	# CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
-	-3	CG	40 ml	HCL	-	-	8260B	B	
-	~~-~~	~~CG~~	~~40 ml~~	~~HCL~~			~~BTEX~~		

REMARKS: No Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alex Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; FPP = Fisher-Peristaltic Pump Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: 10 NTUs or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-53

SAMPLE ID:

DATE:

PURGING DATA

WELL DIAMETER (inches): | Total Well Depth (feet): 20 | WELL SCREEN INTERVAL DEPTH: 5 feet 20 feet | STATIC DEPTH TO WATER (feet): | PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH ___ feet) - (STATIC DEPTH TO WATER ___ feet) × WELL CAPACITY ___ gallons/foot ___ gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (pH)	Δ	COND (mS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):

SAMPLER(S) SIGNATURE(S):

SAMPLING DATE:

SAMPLING TIME:

PUMP OR TUBING DEPTH IN WELL (feet):

TUBING MATERIAL CODE:

FIELD FILTERED: Y / N

FILTER SIZE:

Filtration Equipment Type:

DUPLICATE COLLECTED: Y / N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH			
	2	CG	40 ml	HCL			8260B		
	2	CG	40 ml	HCL			8011		

REMARKS: Not Located. Tall Grass.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

Site NAME: Cloates Chevron — Site LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-54 — SAMPLE ID: MW54 — DATE: 5.18.16

PURGING DATA

WELL DIAMETER (inches): 2 — Total Well Depth (feet): 20 — WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL VOLUME (gal): 20 — WELL SCREEN INTERVAL DEPTH: 5 to 20 Feet — STATIC DEPTH TO WATER (feet): 10.15 — PURGE PUMP TYPE OR BAILER: N/A

TIME	GALLONS PURGED (gallons)	CASING VOLUME PURGED (gallons)	TEMP (°C)	pH	SPC (µS/cm)	TEMP (°C)	DO (mg/L)	DO (%)	TURBIDITY (NTUs)	COLOR	ODOR
1230	—	—	22.6	4.04	301	0.96	43	—	Silty	none	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.80

SAMPLING DATA

SAMPLED BY (PRINT): DS — SAMPLER SIGNATURE(S): [signature] — SAMPLING DATE: 5.18.16 — SAMPLING TIME: 1230

PUMP OR TUBING DEPTH IN WELL (feet): — — TUBING MATERIAL CODE: — — FIELD FILTERED: Y / N — FILTER SIZE: µm

SAMPLE CONTAINER SPECIFICATION: CONTAINER MATERIAL CODE	NUMBER OF CONTAINERS	VOLUME/ WEIGHT	SAMPLE PRESERVATION: PRESERVATIVE TYPE	PRESERVATIVE USED (Y/N)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
—	3	40 ml	HCL	—	—	8260B	B	

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alkl Peristaltic Pump; B = Bailer; BP = Bladder Pump; SSP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: Mw-55 | SAMPLE ID: Mw55 | DATE: 5·18·16

PURGING DATA

WELL DIAMETER (inches): 2 | Total Well Depth (feet): 14 | WELL SCREEN INTERVAL DEPTH: 4 feet to 14 feet | STATIC DEPTH TO WATER (feet): 1.05 | PURGE PUMP TYPE OR BAILER: RFPP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH) 14 feet X STATIC DEPTH TO WATER 1.55 feet X WELL CAPACITY 0.16 gallons/foot 1.99 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (s.u.)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
1113	—	—	23.6	—	5.7	—	192.6	—	1.37	—	16	—	cw	none
1118	2	2	23.1	.5	5.6	.1	184.1	8.5	1.46	.09	42	26	slay	
1121	1	3	23.5	.4	5.5	.1	182.0	2.1	1.12	.34	88	46	cw	
1129	1	4	23.8	.3	5.5	—	183.5	1.5	1.00	.12	19	69	cw	
1135	.5	4.5	23.9	.1	5.5	—	184.9	1.4	1.01	.01	21	2		
1146	.5	5	23.9	—	5.4	.1	184.1	.8	1.02	.01	14	7		
1152	.5	5.5	23.8	.1	5.4	—	183.2	.9	1.01	.01	12	2		
1200	.5	6	23.9	.1	5.4	—	183.0	.2	0.99	.02	13	1		
1220	.5	6.5	24.0	.1	5.4	—	183.6	.6	0.99	—	9.5	3.5		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): TJS | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING DATE: 5·18·16 | SAMPLING TIME: 1220

PUMP OR TUBING DEPTH IN WELL (feet): — | TUBING MATERIAL CODE: — | FIELD FILTERED: Y (Y) | FILTER SIZE: Equipment Type: (Y)

DUPLICATE COLLECTED: Y (Y)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (ml)	FINAL pH			
—	~~2~~ 3	CG	40 ml	HCL	—	—	8260B	B	
—	~~2~~	~~CG~~	~~40 ml~~	~~HCL~~	—	—	~~8011~~		

REMARKS: Two Mw-55's shown on map. This is the Mw-55 to the east (not the one shown on map behind Automotive Shop).

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alite Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA: pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO: MW-56
SAMPLE ID: MW56
DATE: 5.18.16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 20
WELL SCREEN INTERVAL DEPTH: 5 feet to 20 feet
STATIC DEPTH TO WATER (feet): 6.76
PURGE PUMP TYPE OR BAILER: N/A
WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH feet) STATIC DEPTH TO WATER (feet) WELL CAPACITY (gallons/foot) (gallons)

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)		pH (SU)		COND (mS)		DO (mg/L)		TURBIDITY (NTU)		COLOR	ODOR
1250	–	–	23.9	–	4.04	–	90.8	–	3.46	–	21	–	CW	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 1.96

SAMPLING DATA

SAMPLED BY (PRINT): RS
SAMPLER(S) SIGNATURE(S): [signature]
SAMPLING DATE: 5.18.16
SAMPLING TIME: 1250
PUMP OR TUBING DEPTH IN WELL (feet): –
TUBING MATERIAL CODE: –
FIELD METERED Filtration Equipment Type: 0
FILTER SIZE:
DUPLICATE COLLECTED: 0

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH			
	13	CG	40 ml	HCL			8260B	13	
	1	~~SG~~	~~40 ml~~	~~HCL~~			8011		

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO.: MW-58

SAMPLE ID:

DATE:

PURGING DATA

WELL DIAMETER (inches): | Total Well Depth (feet): 19 | WELL SCREEN INTERVAL DEPTH: 4 feet to 19 feet | STATIC DEPTH TO WATER (feet): | PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) / WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)		pH (pH)		COND (µS)		DO (mg/L)		TURB (NTU)		COLOR	ODOR

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02 1" = 0.04 1.25" = 0.06 2" = 0.16 3" = 0.37 4" = 0.65 5" = 1.02 6" = 1.47 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):

SAMPLER(S) SIGNATURE(S):

SAMPLING DATE:

SAMPLING TIME:

PUMP OR TUBING DEPTH IN WELL (feet):

TUBING MATERIAL CODE:

FIELD FILTERED: Y N

FILTER SIZE: Filtration Equipment Type:

DUPLICATE COLLECTED: N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID NO.	# CONTAINERS	MATERIAL TYPE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME PRESERVED (ml)	FINAL pH			
--	2	CG	40 ml	HCL	--	--	8260B		
--	2	CG	40 ml	HCL	--	--	8011		

REMARKS:

Not Shown on map.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL ID: MW-59 | SAMPLE ID: MW59 | DATE: 5-18-16

PURGING DATA

WELL DIAMETER (inches): 2 | TOTAL WELL DEPTH (ft): 17 | WELL SCREEN INTERVAL DEPTH: 2 feet to 17 feet | DEPTH TO WATER (ft): 5.46 | PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) x WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMM VOLUME PURGED (gallons)	TEMP (°C)	pH (std)	COND (mS)	DO (mg/L)	TURB (NTU)	COLOR	ODOR
1240	—	—	21.7	4.33	348	1.21	26	clr	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.80

SAMPLING DATA

SAMPLED BY (PRINT): DS | SAMPLER SIGNATURE: [signature] | SAMPLING DATE: 5-18-16 | SAMPLING TIME: 1240

PURGE OR TUBING DEPTH IN WELL (feet): — | TUBING MATERIAL CODE: — | FIELD FILTERED: Y / N | FILTER SIZE: Filtration Equipment Type: 0

SAMPLE CONTAINER SPECIFICATION: SAMPLE NUMBER(S)	SAMPLE CONTAINER SPECIFICATION: # OF CONTAINERS	SAMPLE CONTAINER SPECIFICATION: MATERIAL CODE	SAMPLE CONTAINER SPECIFICATION: VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	SAMPLE PRESERVATION: TOTAL VOLUME ADDED (ml)	SAMPLE PRESERVATION: FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
—	3	CG	40 ml	HCL	—	—	8260b	B	—
—	1	CG	40 ml	HCL		—	8011		—

REMARKS: No Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Stainless; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH ± 0.2 units; Temperature ± 0.2 °C; Specific Conductance ± 5%; Dissolved Oxygen ± 0.2 mg/L or ± 10%; Turbidity ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: Mw-60

SAMPLE ID:

DATE:

PURGING DATA

WELL DIAM. (in inches): | Total Well Depth (feet): 14 | WELL SCREEN INTERVAL DEPTH: 4 feet to 14 feet | STATIC DEPTH TO WATER (feet): | PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH (feet) - STATIC DEPTH TO WATER (feet) X WELL CAPACITY (gallons/foot) gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Y	pH (pH)		COND (µS)	Y	DO (mg/L)	Y	TURBIDITY (NTU)	Y	COLOR	ODOR

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.15; 3" = 0.37; 4" = 0.65; 5" = 1.0; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):

SAMPLER(S) SIGNATURE(S):

SAMPLING DATE:

SAMPLING TIME:

PUMP OR TUBING DEPTH IN WELL (feet):

TUBING MATERIAL CODE:

FIELD-FILTERED: Y N FILTER SIZE:

Filtration Equipment Type:

DUPLICATE COLLECTED: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (ml)	LIMIT (T)			
—	2	CG	40 ml	HCL	—	—	8260B		—
	2	CG	40 ml	HCL			8011		—

REMARKS: Not Located, Heavy Brush / Grass

MATERIAL CODES: AG - Amber Glass; CG - Clear Glass; PE - Polyethylene; PP - Polypropylene; S - Silicone; T - Teflon; O - Other (Specify)

SAMPLING EQUIPMENT CODES: APP - After Peristaltic Pump; B - Bailer; BP - Bladder Pump; ESP - Electric Submersible Pump; RFPP - Reverse Flow Peristaltic Pump; SM - Straw Method (Tubing Gravity Drain); O - Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 unit; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-62 | SAMPLE ID: | DATE:

PURGING DATA

WELL DIAMETER (inches): | Total Well Depth (feet): 35 | WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet | DEPTH TO WATER (feet): | PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME (CASING VOLUME) | TOTAL WELL DEPTH feet | STATIC DEPTH TO WATER feet | WELL CAPACITY (gallons per foot)

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	%	pH (std)	%	COND (µS)	%	EH (mV)	%	TURBIDITY (NTU)	%	COLOR	ODOR

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: | SAMPLING SAMPLE(S): | SAMPLING DATE: | SAMPLING TIME:

DEPTH OF TUBING INTAKE IN WELL (feet): | TUBING MATERIAL CODE: | FIELD FILTERED: Y / N | FILTER SIZE: (Please Specify Size)

PURGING EQUIPMENT USED: Y / N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
LABEL'S QUANTITY	# CONTAINERS	MATERIAL CODE	VOLUME	TYPE (Acid, Base, Other)	FINAL pH	TIME (hr)			
	2	CG	40 ml	HCL			8260B		
	2	CG	40 ml	HCL			8011		

REMARKS: Trailer Parked above well. Could not sample.

MATERIAL CODES: AG - Amber Glass; CG - Clear Glass; PE - Polyethylene; PP - Polypropylene; S - Silicone; T - Teflon; O - Other (Specify)

SAMPLING EQUIPMENT CODES: APP - After-Peristaltic Pump; B - Bailer; BP - Bladder Pump; ESP - Electric Submersible Pump; RFPP - Reverse Flow Peristaltic Pump; SM - Straw Method (Tubing Gravity Drain); O - Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-63
SAMPLE ID: MW63
DATE: 5·18·16

PURGING DATA

WELL DIAMETER (inches): 2
Total Well Depth (feet): 35
WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet
STATIC DEPTH TO WATER (feet): 21.66
PURGE PUMP TYPE OR BAILER: B

WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL DEPTH (feet) - STATIC DEPTH TO WATER (feet) X WELL CAPACITY (gallons/foot) = (gallons)

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (pH)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURB IDITY (NTU)	Δ	COLOR	ODOR
1602	—	—	21.8	—	4.23	—	181.1	—	4.14	—	26	—	clr	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RS
SAMPLER(S) SIGNATURE(S): [signature]
SAMPLING DATE: 5·18·16
SAMPLING TIME: 1602
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: N
FILTER SIZE: Filtration Equipment Type:
DUPLICATE COLLECTED: Y / (O)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE IDENT	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
—	13	CG	40 ml	HCL	—	—	8260B	B ↓	—
	~~3~~	~~CG~~	~~40 ml~~	~~HCL~~	—	—	~~8011~~		—

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alloy Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Fitting Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 1 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-65

SAMPLE ID:

DATE:

PURGING DATA

WELL DIAMETER (inches):

Total Well Depth (feet): 35

WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet

STATIC DEPTH TO WATER (feet):

PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) x WELL CAPACITY = gallons/feet

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	✓	pH (Units)	✓	COND (µS)	✓	DO (mg/L)	✓	TURBIDITY (NTU)	✓	COLOR	ODOR

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):

SAMPLER'S SIGNATURE:

SAMPLING DATE:

SAMPLING TIME:

PUMP OR TUBING:

DEPTH IN WELL (feet):

TUBING MATERIAL CODE:

FIELD FILTERED: Y / N

FILTER SIZE:

DUPLICATE: Y / N

Filtration Equipment Type:

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE VOLUME (ml)	# CONTAINERS	CONTAINER MATERIAL CODE	CONTAINER VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
--	2	CG	40 ml	HCL	--	--	8260B		
	2	CG	40 ml	HCL			8011		

REMARKS: Not Located. Likely destroyed.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alex Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SS = Stainless Steel Dipper Sampler; O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 Unit; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-67 | SAMPLE ID: MW67 | DATE: 5/18/16

PURGING DATA

WELL DIAMETER (inches): 2 | Total Well Depth (feet): 35 | WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet | STATIC DEPTH TO WATER (feet): 23.73 | PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = TOTAL WELL DEPTH (feet) - STATIC DEPTH TO WATER (feet) x WELL CAPACITY (gallons/foot) (gallons)

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	pH (Sat)	COND (mS)	Eh (mV)	TURBIDITY (NTU)	COLOR	ODOR
1415			22.6	4.92	149.6	3.92	9.2	Clr	nuc

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 1.66

SAMPLING DATA

SAMPLED BY (PRINT): DS | SAMPLER SIGNATURE: [signature] | SAMPLING DATE: 5/18/16 | SAMPLING TIME: 1415

PUMP OR TUBING DEPTH IN WELL (feet): - | TUBING MATERIAL CODE: - | FIELD FILTERED: Y (N) | FILTER SIZE: Filtration Equipment Type:

DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
CONT. TYPE	NO. OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATION TYPE	COOLING AND/OR TEMP.	SIZE			
—	13	CG	40 ml	HCl	—	—	8260B	13	
—	1	CG	40 ml	HCL	—	—	8014		

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Tubing; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alto Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Slow Method (Filling Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-70 | SAMPLE ID: MW70 | DATE: 5·18·16

PURGING DATA

WELL DIAMETER (inches): 2 | Total Well Depth (feet): 35 | WELL SCREEN INTERVAL DEPTH: 20 feet to 35 feet | STATIC DEPTH TO WATER (feet): 23.11 | PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

= (feet feet) X gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	±	pH (Sn)	±	COND (µS)	±	DO (mg/L)	±	TURB (NTU)	±	COLOR	ODOR
1548	–	–	22.9	–	4.06	–	115.4	–	1.36	–	37	–	clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RS | SAMPLER'S SIGNATURE(S): [signature] | SAMPLING DATE: 5·18·16 | SAMPLING TIME: 1548

PUMP OR TUBING DEPTH IN WELL (feet): – | TUBING MATERIAL CODE: – | FIELD FILTERED: Y (N) | FILTER SIZE: Filtration Equipment Type:

DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE IDENTIFICATION	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	TOTAL VOLUME PRESERVATIVE (ml)	FIELD pH			
–	13	CG	40 ml	HCL	–	–	8260B	B	
–	1	CG	40 ml	HCL	–	–	9011	1	

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Stainless; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method Tubing Gravity Drain; O = Other (Specify)

STABILIZATION CRITERIA:

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron
SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-5AR
SAMPLE ID: MW5AR
DATE: 5/15/16

PURGING DATA

WELL DIAM. (IN inches): Total Well Depth (feet): 28
WELL SCREEN INTERVAL DEPTH: 18 feet to 28 feet
STATIC DEPTH TO WATER (feet): 19.59
PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) / 2 WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Y	pH (ph)	Y	COND (mS)	Y	DO (mg/L)	Y	TURBIDITY (NTU)	Y	COLOR	ODOR
1121	—	—	21.7	—	4.24	—	654	—	0.87	—	92	—	cly	Strong

WELL CAPACITY (Gallons Per Foot): 0.75" 0.02; 1" 0.04; 1.25" 0.06; 2" 0.16; 3" 0.37; 4" 0.65; 6" 1.47; 8" 2.6; 12" 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RS
SAMPLER'S SIGNATURE(S): [signature]
SAMPLING DATE: 5/15/16
SAMPLING TIME: 1121
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y / Filtration Equipment Type: O
FILTER SIZE:
DUPLICATE COLLECTED: Y / N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# OF SAMPLE	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH			
—	2	CG	40 ml	HCL	—	—	8260B		
—	2	CG	40 ml	HCL	—	—	8011		

REMARKS: M, P,

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Stainless; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Air Piston Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Stone Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA:
pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 5%; Dissolved Oxygen: ± 0.2 mg/L or ± 10%; Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME:	Clouds Chevron	SITE LOCATION:	Taylor & Two Notch Road, Columbia, South Carolina
WELL NO:	PW-1R	SAMPLE ID:	PW-1R
DATE:	5.18.16		

+DUP

PURGING DATA

WELL DIAMETER (inches): 4 | Total Well Depth (feet): 50 | WELL SCREEN INTERVAL DEPTH: 5 feet to 50 feet | STATIC DEPTH TO WATER (feet): 21.03 | PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

= (50 feet - 21.03 feet) X 0.65 gallons/foot = 18.83 gallons

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (SU)	Δ	COND. (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
1200	--	--	24.1	--	5.92	--	146.7	--	1.21	--	26	--	clr	Strong
1210	5	5	23.9	.2	5.61	.31	192.3	45.6	0.99	.22	842	816	cldy	
1220	5	10	23.6	.3	5.22	.39	179.8	12.5	1.16	.17	304	538	cldy	
1231	4	14	23.5	.1	5.01	.21	166.1	13.7	1.05	.11	193	111	cldy	
1246	3	17	23.5	-	5.03	.02	165.7	.4	1.01	.04	76	117	slcldy	
1252	3	20	23.5	-	5.04	.01	162.1	3.6	1.00	.01	13	63	clr	
1301	3	23	23.5	-	5.02	.02	163.1	1	0.97	.03	10	3		
1312	4	27	23.5	-	5.03	.01	167.1	4	0.96	.01	9.9	.1		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):	DS	SAMPLER'S SIGNATURE(S):		SAMPLING DATE:	5.18.16	SAMPLING TIME:	1312
PUMP OR TUBING DEPTH IN WELL (feet):		TUBING MATERIAL CODE:	—	FIELD-FILTERED: Y	N	FILTER SIZE:	
DUPLICATE COLLECTED:	Y (N)			Filtration Equipment Type:			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
--	2 3	CG	40 ml	HCL	--	--	8260B	B	--
--	2	CG	40 ml	HCL	--	--	8011		--
--									

REMARKS

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron		SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina	
WELL NO: DW-1	SAMPLE ID: DW01		DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 70	WELL SCREEN INTERVAL DEPTH: 5 feet to 70 feet	STATIC DEPTH TO WATER (feet): 42.71	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

= (70 feet - 42.71 feet) X 0.16 gallons/foot = 4.37 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (SU)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
1119	---	---	22.9	---	6.91	---	121.6	---	2.96	---	18	---	Clr	none
1125	4	4	23.6	.3	6.17	.74	59.3	323	3.15	.19	26	8	Clr	
1136	5	9	23.1	.5	6.56	.39	62.1	28.4	3.12	.27	74	53	Slury	
1140	4	13	23.0	.1	7.05	.49	21.7	40.4	3.66	.06	21	58	Clr	
1146	2	15	22.6	.4	7.06	.01	35.6	13.9	3.61	.05	14	7		
1151	2	17	22.7	.1	7.21	.15	42.7	7.1	3.62	.01	32	18		
1159	2	19	22.6	.1	7.25	.04	38.4	4.3	3.60	.02	13	19		
1205	1	20	22.5	.1	7.25	-	34.1	.7	3.61	.01	12	1		
1216	1	21	22.5	-	7.27	.02	39.0	.1	3.64	-	9.0	3	Clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 5/16/16	SAMPLING TIME: 1216
PUMP OR TUBING DEPTH IN WELL (feet): -	TUBING MATERIAL CODE: -	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE:
DUPLICATE COLLECTED: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (mL)	FINAL pH			
---	3	CG	40 ml	HCL	---	---	8260B	B	---
---	~~3~~	~~CG~~	~~40 ml~~	~~HCL~~	---	---	MW		---

REMARKS: missing lock o well tag

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ≤ 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME:	Cloud's Chevron	SITE LOCATION:	Taylor & Two Notch Road, Columbia, South Carolina
WELL NO:	DW-2	SAMPLE ID:	DW02
DATE:	5/16/16		

PURGING DATA

WELL DIAMETER (inches):	2	Total Well Depth (feet):	75	WELL SCREEN INTERVAL DEPTH:	70 feet to 75 feet	STATIC DEPTH TO WATER (feet):	49.99	PURGE PUMP TYPE OR BAILER:	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
= (75 feet - 49.99 feet) X 0.16 gallons/foot = 4.92 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND. (µS)	Δ	DO (mg/L)	Δ	TURB IDITY (NTU)	Δ	COLOR	ODOR
1001	--	--	22.9	--	6.42	--	127.9	--	3.17	--	20	--	Clr	mod
1009	5	5	22.6	.3	6.72	.30	72.6	55.3	3.04	.113	62	42	Slny	
1014	5	10	22.5	.1	6.68	.04	62.1	10.5	3.09	.05	192	130	Cldy	
1020	4	14	22.4	.1	6.79	.11	60.7	1.4	3.08	.01	456	264		
1026	2	16	22.4	-	6.84	.05	59.3	1.4	3.06	.02	33	423	Clr	
1032	1	17	22.4	-	6.92	.08	55.6	3.7	3.01	.05	99	66	Cldy	
1039	1	18	22.3	.1	6.90	.02	55.4	.2	3.00	.01	42	57	Slcl	
1046	1	19	22.3	-	6.90	-	55.1	.3	2.96	.04	12	30	Clr	
1052	1	20	22.3	-	6.89	.01	55.0	.1	2.97	.01	11	1	Clr	
1101	1	21	22.3	-	6.89	-	55.4	.4	2.95	.02	9.9	1.1	Clr	

By

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):		SAMPLER(S) SIGNATURES:		SAMPLING DATE:	5/16/16	SAMPLING TIME:	1101
PUMP OR TUBING DEPTH IN WELL (feet):	—	TUBING MATERIAL CODE:	—	FIELD-FILTERED: Y / N	N	FILTER SIZE:	
DUPLICATE COLLECTED: Y / N	N			Filtration Equipment Type:			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
--	3	CG	40 ml	HCL	--	--	8260B	B	--
--	~~4~~	~~CG~~	~~40 ml~~	~~HCL~~	--	--	~~BTEX~~		--
--									

REMARKS:
Broken well Cap, No Lock

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME:	Clouds Chevron	SITE LOCATION:	Taylor & Two Notch Road, Columbia, South Carolina
WELL NO:	DW-3	SAMPLE ID:	DW-3
DATE:	5.18.16		

PURGING DATA

WELL DIAMETER (inches):	2	Total Well Depth (feet):	52	WELL SCREEN INTERVAL DEPTH:	7 feet to 52 feet	STATIC DEPTH TO WATER (feet):	21.70	PURGE PUMP TYPE OR BAILER:	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
= (52 feet - 21.70 feet) X 0.16 gallons/foot = 4.85 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND. (uS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
1200	—	—	24.1	—	5.67	—	246.1	—	4.26	—	15	—	CW	
1206	5	5	23.9	.2	6.12	.55	209.1	37	1.11	3.15	1000	—	CW	
1214	3	8	23.7	.2	4.99	.13	201.6	7.5	1.04	.102	521	—	CW	
1221	2	10	23.6	.1	4.97	.02	199.3	2.3	0.95	.11	106	215		
1238	2	12	23.5	.1	4.61	.36	199.9	.6	0.40	.03	62	54	Slwy	
1246	2	14	23.5	—	4.25	.36	199.6	.3	0.96	.100	18	34	CW	
1251	1	15	23.6	.1	4.23	.02	199.9	.3	0.82	.14	12	6	CW	
1257	1	16	23.6	—	4.24	.01	198.7	.2	0.81	.01	10	2	CW	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; [illegible]" = 0.10; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):	PS	SAMPLER(S) SIGNATURE(S):		SAMPLING DATE:	5.18.16	SAMPLING TIME:	1257
PUMP OR TUBING DEPTH IN WELL (feet):	—	TUBING MATERIAL CODE:	—	FIELD FILTERED: Y (N) Filtration Equipment Type:		FILTER SIZE:	
DUPLICATE COLLECTED: Y (N)							

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	B	—
—	1	CG	40 ml	HCL	—	—	8011		—
—									

REMARKS

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME:	Clouds Chevron	SITE LOCATION:	Taylor & Two Notch Road, Columbia, South Carolina
WELL NO:	DW-4	SAMPLE ID:	DW4
DATE:	5.18.16		

PURGING DATA

WELL DIAMETER (inches):	2	Total Well Depth (feet):	110	WELL SCREEN INTERVAL DEPTH:	95 feet to 110 feet	STATIC DEPTH TO WATER (feet):	42.31	PURGE PUMP TYPE OR BAILER:	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

= (110 feet - 42.31 feet) X 0.16 gallons/foot = gallons

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND. (mS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
1220	—	—	22.1	—	4.92	—	246	—	1.26	—	25	—	CLR	
1230	4	4	23.6	1.5	4.61	.31	241	25	1.11	.15	84.6	82	cldy	
1240	4	8	23.8	.2	4.05	.56	216	5	1.09	.02	192	65	cldy	
1250	1	9	23.8	—	4.09	.04	209	7	1.04	.05	47	145	sl cldy	
1300	1	10	23.9	.1	4.11	.02	201	8	1.01	.03	32	15	cldy	
1310	1	11	23.9	—	4.10	.01	204	3	1.02	.01	14	18		
1318	1	12	23.9	—	4.07	.03	203	1	1.03	.01	9.8	4.2		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; [illegible]" = 0.15; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):	RS	SAMPLER(S) SIGNATURE(S):		SAMPLING DATE:	5.18.16	SAMPLING TIME:	1318
PUMP OR TUBING DEPTH IN WELL (feet):	—	TUBING MATERIAL CODE:	—	FIELD-FILTERED: Y (N)		FILTER SIZE:	
DUPLICATE COLLECTED: Y (N)				Filtration Equipment Type:			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (ml)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	13	—
—	~~1~~	~~CG~~	~~40 ml~~	~~HCL~~	—	—	~~80~~		—
—									

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron	SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina	
WELL NO: DW-5	SAMPLE ID: DW-5	DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 70	WELL SCREEN INTERVAL DEPTH: 55 feet to 70 feet	STATIC DEPTH TO WATER (feet): 42.12	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
= (70 feet - 42.12 feet) X 0.16 gallons/foot = 4.46 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND. (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
1325	---	---	21.3	---	6.74	---	192.1	---	1.92	---	21	---	CLR	Strong
1310	5	5	22.7	1.4	6.32	.42	161.5	30.6	1.06	.86	846	RS	CLR	
1315	4	9	22.6	.1	6.21	.11	137.3	24.2	1.11	.05	209	637		
1320	2	11	23.5	.1	6.00	.21	131.4	5.9	1.12	.01	133	76		
1325	2	13	22.4	.1	5.47	.03	130.2	1.2	1.15	.03	42	91	CLR	
1330	1	14	23.2	.2	5.96	.01	130.6	.4	1.17	.02	16	26		
1335	1	15	23.1	.1	5.97	.01	131.3	.7	1.16	.01	11	5		
1340	1	16	23.1	—	5.97	—	130.9	.4	1.16	—	13	2		
1345	1	17	23.0	.1	5.96	.01	130.6	.3	1.16	—	12	1		
1359	1	18	23.0	—	5.95	.01	130.2	.4	1.15	.01	10	2		

Dry

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; [illegible]" = 0.10; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): [illegible]	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: ~~1359~~ 5/16/16	SAMPLING TIME: 1359
PUMP OR TUBING DEPTH IN WELL (feet): —	TUBING MATERIAL CODE: —	FIELD FILTERED: Y (N)	FILTER SIZE:
DUPLICATE COLLECTED: Y (N)		Filtration Equipment Type:	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (ml)	FINAL pH			
---	13	CG	40 ml	HCL	---	---	82600	13	---
---	7	CG	40 ml	HCL	---	---	8011		---

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Stainless; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alum Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ≤ 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME:	Clouds Chevron	SITE LOCATION:	Taylor & Two Notch Road, Columbia, South Carolina
WELL NO:	DW-6	SAMPLE ID:	DW-6
DATE:	5·18·16		

PURGING DATA

WELL DIAMETER (inches):	Total Well Depth (feet):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	70	5 feet to 70 feet	44.10	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
= (70 feet - 44.10 feet) X 0.16 gallons/foot = 4.14 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND. (mS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
1345	---	---	22.1	---	6.74	---	146.4	---	2.56	---	19	---	CLR	
1400	5	5	22.7	1.6	5.93	.81	192.1	45.7	2.61	.05	462	443	CLY	
1410	4	9	23.6	1.1	5.66	.27	163.0	29.1	2.31	.30	101	361	CLY	
1421	2	11	23.5	.1	5.42	.24	160.3	2.7	2.22	.09	34	62	CLR	
1436	2	13	23.5	-	5.41	.01	160.2	.1	2.21	.01	25	9		
1442	2	15	23.5	-	5.40	.01	160.1	.1	2.24	.03	13	12		
1454	1	16	23.5	-	5.40	-	160.1	-	2.22	.02	10	3		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE:	SAMPLING TIME:
RS		5·18·16	1454

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N)	FILTER SIZE:
—	—	Filtration Equipment Type:	

DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
---	2 3	CG	40 ml	HCL	---	---	8260B	B	---
---	2	~~CG~~	40 ml	~~HCL~~	---	---	~~8011~~		---

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Penstaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Penstaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ≤ 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME:	Clouds Chevron	SITE LOCATION:	Taylor & Two Notch Road, Columbia, South Carolina
WELL NO:	DW-7	SAMPLE ID:	DW07
DATE:	5/18/16		

PURGING DATA

WELL DIAMETER (inches):	2	Total Well Depth (feet):	55	WELL SCREEN INTERVAL DEPTH:	50 feet to 55 feet	STATIC DEPTH TO WATER (feet):	21.82	PURGE PUMP TYPE OR BAILER:	ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
= (55 feet - 21.82 feet) x 0.16 gallons/foot 5.31 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND. (mS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
1000	---	---	23.4	---	4.92	---	292	---	2.74	---	42	---	CW	none
1010	2	2	23.1	.8	4.16	.76	261	31	2.61	.13	46	4	CW	
1015	3	5	22.6	.5	4.09	.07	243	18	243	.18	381	335	CW	
1020	2	7	22.5	.1	4.00	.09	236	7	2.21	.22	111	270	CW	
1025	3	10	22.4	.1	4.05	.05	231	5	2.15	.06	27	84	CW	
1030	2	12	22.5	.1	4.06	.01	230	1	2.16	.01	14	13		
1035	3	14	22.5	—	4.05	.01	231	1	2.17	.01	10	4		
1040	2	16	22.5	—	4.03	.02	235	4	2.19	.02	15	5		
1045	2	18	22.6	.1	4.05	.02	235	—	2.19	—	12	3		
1057	2	20	22.6	—	4.05	—	235	—	2.19	—	8.33	7	CW	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):	RS	SAMPLER(S) SIGNATURE(S):		SAMPLING DATE:	5/18/16	SAMPLING TIME:	1057
PUMP OR TUBING DEPTH IN WELL (feet):	—	TUBING MATERIAL CODE:	—	FIELD-FILTERED: Y (N)		FILTER SIZE:	
DUPLICATE COLLECTED: Y (N)				Filtration Equipment Type:			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL ML ADDED IN FIELD (ml)	FINAL pH			
---	#3	CG	40 ml	HCL	---	---	8260B	B	---
---	~~4~~	~~CG~~	~~40 ml~~	~~HCL~~	---	---	~~8021~~		---

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron	SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO: DW-8	SAMPLE ID:
DATE: 5-18-16	

PURGING DATA

WELL DIAMETER (inches):	Total Well Depth (feet): 55	WELL SCREEN INTERVAL DEPTH: 50 feet to 55 feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH (feet) – STATIC DEPTH TO WATER (feet)) X WELL CAPACITY (gallons/foot) = (gallons)

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND. (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
	---	---		---		---		---		---		---		

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 5-18-16	SAMPLING TIME: [redacted]
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE:
DUPLICATE COLLECTED: Y N			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (ml)	FINAL pH			
---	2	CG	40 ml	HCL	---	---	8260B		---
---	2	CG	40 ml	HCL	---	---	8011		---

REMARKS: Buried underneath Gravel pile. See Photograph

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron	SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina	
WELL NO: DW-9	SAMPLE ID: DW-9	DATE: 5/18/16

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 65	WELL SCREEN INTERVAL DEPTH: 60 feet to 65 feet	STATIC DEPTH TO WATER (feet): 22.42	PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
= (65 feet - 22.42 feet) X 0.16 gallons/foot = 6.81 gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURB IDITY (NTU)	Δ	COLOR	ODOR
1105	---	---	23.6	---	4.77	--	293.6	--	1.25	--	62	--	Stony	
1126	5	5	23.1	.5	4.62	.15	104.3	189.3	0.96	.29	149	87	Cldy	
1134	4	9	22.5	.6	4.65	.03	77.3	27	6.81	.15	330	181		
1142	3	12	22.6	.1	4.60	.05	79.6	23	0.71	.10	21	309	Clr	
1151	2	14	22.4	.2	4.60	—	85.1	55	0.76	.05	13	8	Clr	
1203	2	16	22.4	—	4.60	—	83.0	21	0.75	.21	12	1	Clr	
1214	2	18	22.1	—	4.61	.01	83.0	—	0.75	—	11	1	Clr	
1218	2	20	22.3	.1	4.61	—	82.1	1.4	0.75	—	10	1	Clr	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): [illegible]	SAMPLER'S SIGNATURES:	SAMPLING DATE: 5/18/16	SAMPLING TIME: 1218
PUMP OR TUBING DEPTH IN WELL (feet): —	TUBING MATERIAL CODE: —	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE:
DUPLICATE COLLECTED: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
---	3	CG	40 ml	HCL	—	---	8260B	B	--
--	~~2~~	~~CG~~	~~40 ml~~	~~HCL~~	---	--	~~8011~~		--

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Stainless; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ± 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron		SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina	
WELL NO: SW01	SAMPLE ID:		DATE

PURGING DATA

WELL DIAMETER (inches):	Total Well Depth (feet)	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet)	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
= (feet - feet) X gallons/foot = gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
	--	--	26.3	--	6.94	--	192.3	--	3.16	--	142	--	Org	Slight

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE:	SAMPLING TIME:
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y / N	FILTER SIZE:
DUPLICATE COLLECTED: Y / N		Filtration Equipment Type:	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
--	3	CG	40 ml	HCL	--	--	8260B		--
--	1	CG	40 ml	HCL	--	--	8011		--
--									

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Stainless; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ≤ 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron	SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO: MW52	SAMPLE ID:
DATE: 5-18-16	

PURGING DATA

WELL DIAMETER (inches):	Total Well Depth (feet):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 18.33	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
(feet - feet) X gallons/foot = gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND. (uS)	Δ	DO (mg/L)	Δ	TURB IDITY (NTU)	Δ	COLOR	ODOR
	---	---		---		---		---		---		---		
1410	—	—	20.5	—	4.06	—	139	—	3.81	—	14	—	CW	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT):	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 5-18-16	SAMPLING TIME: 1410
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE:
DUPLICATE COLLECTED: Y N			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (ml)	FINAL pH			
---	2	CG	40 ml	HCL	---	---	8260B	B	---
---	~~2~~	~~CG~~	~~40 ml~~	~~HCL~~	---	---	~~9071~~		---

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: ≤ 10 NTU or ± 10%

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds Chevron	SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina
WELL NO: MW-41W	SAMPLE ID:	DATE: 5-18-16

PURGING DATA

WELL DIAMETER (inches):	Total Well Depth (feet):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 25.35	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY
= (feet - feet) X gallons/foot = gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND. (µS)	Δ	DO (mg/L)	Δ	TURB IDITY (NTU)	Δ	COLOR	ODOR
1535	--	--	24.1	--	6.23	--	146.3	--	1.19	--	21	--	CLR	

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RS	SAMPLER SIGNATURE(S):	SAMPLING DATE: 5-18-16	SAMPLING TIME: 1535
PUMP OR TUBING DEPTH IN WELL (feet): -	TUBING MATERIAL CODE: S	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE:
DUPLICATE COLLECTED: Y (N)			

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH			
--	3	CG	40 ml	HCL	--	--	8260B	B	--
--	1	CG	40 ml	HCL	--	--	8011		--
--									

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = Alloy Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: ± 0.2 mg/L or ± 10% Turbidity: < 10 NTU or ± 10%

APPENDIX C

Groundwater Laboratory Analytical Report

CRAWFORD
ENVIRONMENTAL
SERVICES

ACCESS
ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT

Crawford Environmental Services
15 Church Ave, SW
Roanoke VA 24011

ATTENTION
West Hubard

PROJECT ID
Clouds Chevron

LABORATORY REPORT NUMBER
1605G81

DATE
May 26, 2016

Primary Data Review By

Chantelle Kanhai
Project Manager, AES

Secondary Data Review By

Ashley Amick

Project Manager, Access Analytical
aamick@axs-inc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Analytical Environmental Services Inc. (AES Inc), 3080 Presidential Drive, Atlanta, GA 30340.**
- **AES is SCDHEC certified laboratory # 98016, NCDENR certified lab # 562, GA certified lab # FL-E87582, NELAP certified laboratory # E87582**
- Local support services for this project are provided by Access Analytical, Inc. Access Analytical is a representative of AES serving client in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll fee at 883.315.4243

LAB USE ONLY

Access Analytical - Chain of Custody Record

Project Work Order # 1405691

Sales Order # _____ PO # _____ Access Quote # _____

Laboratory ID: AES

Company Name: Crawford Env.

Report To: Wes Hubbard

Address: 15 Church Ave

City: Roanoke State: VA Zip: 24011

Phone: 540 343 6256 Fax: 540 343 6259

Email: whubbard@crawfordenvironmental.com

Project ID: Cloud Chevron

Sampled By: tslack.

Preservative (See codes)

Container Type (See codes)

Sample ID/Description	Date Collected	Time Collected	Type (water, soil, etc.)	Matrix (see codes)	Regulatory Agency (see codes)	Number of Containers	+ REQUESTED LAB ANALYSIS + 8260B BTEX + MTBE + Naphthalene	NOTES / COMMENTS
MW51	5/18/16	1405	G	GW		3	X	C2
MW54	5/18	1230					X	
MW55	5/18	1220					X	
MW56	5/18	1250					X	
MW59	5/18	1240					X	
MW63	5/18	1602					X	
MW67	5/18	1415					X	
MW70	5/18	1548					X	
MW5AR	5/15	1121					X	
PW-1R	5/18	1312	↓	↓		↓	X	C1 C2

Turnaround Time:

X Standard

___ RUSH*

*Date Required: _____

(For rush work, results emailed/faxed by end of business day on date required)

Project Location:

X SC

___ NC

___ Other

(specify) _____

Relinquished By:	Received By:	Date (mm/dd/yy)	Time (24:00)	Samples Rec'd on ice	Sample Temp. Upon Receipt (°C)
		5/19/16	1213	Y N	(°C) (N/A)
FEDEX	FEDEX	5/19/16	1900	Y N	(°C) (N/A)
FEDEX	(FedEx)	5/20/16	9:35AM	Y N	4.1 (°C) (N/A)
				Y N	Page 2 of 103 (N/A)

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ACCESS ANALYTICAL, INC.

2475 Cardale Street
Ames, SC 29063

Phone: (803) 701-4241
Fax: 701-9 803

www.accessanalytical.com

*Preservative Codes (place corresponding # in box above preservation field): 0 = None, 1 = HCl, 2 = H2SO4, 3 = HNO3, 4 = NaOH, 5 = Na2S2O3, 6 = Methanol (MEOH) and NaHSO4, 7 = NaOH/ZnAc2, 8 = H3PO4

*Matrix Codes (place corresponding code in matrix column): DW = drinking water, S = soil, SL = sludge, A = air, WI = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewater), SDWA = Safe Drinking Water Act (for drinking water), RCRA = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Access Analytical - Chain of Custody Record

LAB USE ONLY

Sales Order #: _____ PO #: _____ Access Quote #: _____

Project Work Order #: 1605681

Laboratory ID: AES

Company Name: Crawford Env.

Report To:

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Cloudy Chevron

Sampled By: T. Slack

Preservative (Use codes):

Container Type (Use codes):

- REQUESTED LAB ANALYSIS -

TPHG 8260 BTEX

| Sample ID/Description | Date Collected | Time Collected | Type: (Matrix) | Matrix (Use codes) | Preserv. (Use codes) | # of containers | | |

LAB USE ONLY

Access Analytical - Chain of Custody Record

Project Work Order # 1605681

Sales Order # _____ PO # _____ Access Quote # _____

Laboratory ID: ACS

Company Name: Crawford Env.

Report To:

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Chevron

Sampled By:

Preservative (Use codes)

Container Type (Use codes)

- REQUESTED LAB ANALYSIS -

8260B BTEX+MTBE+Oxy

Sample ID/Description	Date Collected	Time Collected	Type: Soil/Air/Water	Matrix Recovered	Preserved Area	Total # of containers	8260B BTEX+MTBE+Oxy	NOTES / COMMENTS
Dw01	5/16/16	1246	G	GW		3	X	C1
Dw02	5/16	1101					X	C1
Dw03	5/18	1257					X	C2
Dw04	5/18	1318					X	C2
Dw05	5/16	1359					X	C1
Dw06	5/18	1454					X	C2
Dw07	5/18	1057					X	
~~Dw08~~	~~5/18~~	~~1510~~						
Dw09	5/18	1218					X	
Sw01	5/18	1245					X	

ACCESS ANALYTICAL, INC.

2478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4803

www.accesslabs.com

*Preservative Codes (Please corresponding # in Lab Use Only section) 0 = None, 1 = HCl, 2 = HNO3, 3 = H2SO4, 4 = NaOH, 5 = Na2S2O3, 6 = Methanol, 7 = NaHSO4, 8 = DI H2O, 9 = H3PO4

*Matrix Codes (please corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, NP = non-potable water, WO = waste oil, OT = other (specify in comments section)

*Disposal Area Codes: CWA = Clean Water Act (for wastewater), SDWA = Safe Drinking Water Act (for drinking water), RCRA = Solid and Hazardous Wastes (for soils, ground water and waste samples)

*Container Type: G = Glass, P = Plastic

Turnaround Time:

X Standard
___ RUSH*
*Date Required _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:
X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm/dd/yy)	Time (hh:mm)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C)	
		5/19/16	1213	Y N	(°C)	(N/A)
	FedEx	5/19/16	1700	Y N	(°C)	(N/A)
FedEx	Manuel Ramirez (FedEx)	5/20/16	9:20AM	Y N	4.1° (°C)	(N/A)
				Y N	Page 46 of 103	(N/A)

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Access Analytical - Chain of Custody Record

LAB USE ONLY

Sales Order #: _____ PO #: _____ Access Quote #: _____

Project Work Order #: 1605481

Laboratory ID: _____

Company Name: Crawford Env

Report To:

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Chevron

Sampled By:

Preservative Code(s)

Container Type Code(s)

REQUESTED LAB ANALYSIS

Sample ID/Description	Date Collected	Time Collected	Type (Soil or Water)	Matrix (Soil or Water)	Program Area (Water)	Total # of containers	BTEX/MTBE +8260	NOTES / COMMENTS
MW11	5/18/16	1350	G	GW		3	X	C2
MW12	5/18	1006					X	C2
~~Duplicate~~ MW13	5/16	1212					X	C1
MW16	5/18	0958					X	C1
MW18	5/15	1231					X	C1
MW19	5/18	1326					X	C2
MW20	5/15	0921					X	C1
MW22	5/15	1020					X	C1
MW23	5/18	1342					X	C2
MW26	5/17	1547	✓	✓		✓	X	C1

Access Analytical, Inc.

2478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4831

www.aai-sc.com

*Preservative Codes (please use corresponding # in blank above) analysis limit: 0 = None, 1 = HCL, 2 = HNO3, 3 = H2SO4, 4 = NaOH, 5 = Na2S2O3, 6 = Method 5035 vials w/ MeOH & DI/H2O, 7 = Ascorbic Acid, 8 = ZnAc

*Matrix Codes (please use corresponding code in matrix column): GW = groundwater, WW = wastewater, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify recommended solution)

*Program Area Codes: CWA = Clean Water Act (for wastewater), SDWA = Safe Drinking Water Act (for drinking water), RCRA = Solid or Hazardous Wastes (for soils, groundwaters and waste samples)

*Container Type: G = Glass, P = Plastic

Turnaround Time:	Project Location:	Relinquished By:	Received By:	Date:	Time:	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C)
X Standard	X SC:			5/19/16	1219	Y N	(°C) (N/A)
___ RUSH*	___ NC:		FEDEX	5/19/16	1700	Y N	(°C) (N/A)
*Date Required: _____ (For rush work, results emailed/faxed by end of business day on date required)	___ Other (specify) _____	FEDEX	Miriam Powell (Fedex)	5/20/16	9:35AM	Y N	4.1 °C (N/A)
						Y N	Page 5 of 109 (N/A)

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LAB USE ONLY

ACCESS ANALYTICAL - CHAIN OF CUSTODY RECORD

Project Work Order # 1605681

Sales Order #

PO #

Access Quote #

Laboratory ID: ACS

Company Name: Crawford Env

Report To:

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Chasm

Sampled By:

Preservative: [Use codes]

Container Type: [Use codes]

* REQUESTED LAB ANALYSIS: *

8260B BTEX/MNP EDB

| Sample ID/Description | Date Collected | Time Collected | Type: [Use codes] | Matrix [Use codes] | Program Area [Use codes] | Total # of containers | | |

LAB USE ONLY

Access Analytical - Chain of Custody Record

Project Work Order # 1005G81

Sales Order # _____ PO # _____ Access Quote # _____ Laboratory ID: AES

Company Name: Crawford Env

Report To:

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Chevron

Sampled By:

Preservative: (Per codes)

Container Type: (Per codes)

ACCESS ANALYTICAL, INC.

2478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4801

*Preservative Codes: (Place corresponding 0-5 Hitch above analysis 0-5) 0 = None, 1 = HCL, 2 = HNO3, 3 = H2SO4, 4 = NaOH, 5 = Na2SO3, 6 = Methyl MTS and of NaHSO4 & CH3OH, 7 = NaOH/ZnOAC, 8 = HNO3.

*Matrix Codes: (place corresponding code in matrix column) GW = ground water, MW = waste water, BW = drinking water, S = soil, SL = sludge, A = air, M = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewater), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste sampling)

*Container Type: G = Glass, P = Plastic

Sample ID/Description	Date Collected	Time Collected	Type: (Per codes)	Matrix: (Per codes)	Program Area: (Per codes)	Total # of containers	REQUESTED LAB ANALYSIS: 8260B BTEX/MTBE Only	NOTES / COMMENTS
MW37	5/16	1725	G	Env		3	X	C1
MW38	5/18	1338					X	C2
MW39	5/18	1510					X	C2
MW41	5/18	1524					X	C2
MW42	5/18	1447					X	C2
MW43	5/18	0859					X	C1
MW44	5/18	0927					X	C1
MW45	5/18	0915					X	C1
MW46	5/16	1137					X	C1
MW48	5/18	0943					X	C1

Turnaround Time:

X Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:

X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (Month/Day)	Time (Hours)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C)	
[signature]	[signature]	5/19/16	1214	✓ Y ___ N	___ (°C)	___ (N/A)
[signature]	FEDEX	5/19/16	1700	✓ Y ___ N	___ (°C)	___ (N/A)
FEDEX	[signature] (FEDEX)	5/20/16	9:35AM	✓ Y ___ N	4.1 (°C)	___ (N/A)
				___ Y ___ N		

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Access Analytical - Chain of Custody Record

LAB USE ONLY

Sales Order # _____ PO # _____ Access Quote # _____

Project Work Order # 1605681

Laboratory ID: AES

Company Name: Crawford Env.

Report To:

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Chevron

Sampled By:

Preservative (*see codes)

Container Type (*see codes)

ACCESS ANALYTICAL, INC.

7478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4301

www.aes-inc.com

*Preservative Codes (place corresponding # in block above analysis field): 0 = None, 1 = HCL, 2 = HNO3, 3 = H2SO4, 4 = NaOH, 5 = Na2SO3, 6 = Method 5035 set at NaHSO4-8 CH3OH, 7 = NaOH/NaCAC, 8 = HNO3

*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, NP = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewater), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Waste (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Sample ID/Description	Date Collected	Time Collected	Type (select required)	Matrix (see codes)	Program Area (see codes)	NOM # of Containers	REQUESTED LAB ANALYSIS	8260B BTEX+MTN+50	NOTES / COMMENTS
MW27	5/17/16	1350	G	GW		3		X	C1
MW28	5/17/16	1356						X	C1
MW29	5/17	1347						X	C1
MW30	5/15	1753						X	C1
MW31	5/17	1701						X	C1
MW32	5/17	1633						X	C1
MW33	5/15	0829						X	C1
MW34	5/15	1651						X	C1
MW35	5/16	1819						X	C1
MW36	5/15	1601						X	C1

Turnaround Time:

X Standard
RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:	Relinquished By:	Received By:	Date (mm/dd/yy)	Time (mm/dd)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C)
X SC	[signature]	[signature]	5/19/16	1219	✓ Y ___ N	___ (°C) ___ (N/A)
___ NC	[signature]	FEDEX	5/19/16	1700	✓ Y ___ N	___ (°C) ___ (N/A)
___ Other (specify)	FEDEX	[signature] (FedEx)	5/20/16	9:25AM	✓ Y ___ N	4.1° (°C) ___ (N/A)
					___ Y ___ N	Page 8 of 8 ___ (N/A)

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LAB USE ONLY

Access Analytical - Chain of Custody Record

Project Work Order # 1606681

Sales Order #

PO #

Access Quote #

Laboratory ID: ACS

Company Name: Crawford Env

Report To:

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Chevron

Sampled By:

Preservative (Pre-coded):

Container Type (Pre-coded):

- REQUESTED LAB ANALYSIS -

8260B + Naphthalene

| Sample ID/Description | Date Collected | Time Collected | Type (Soil, Air, Water, Sludge, Solid, Oil, Other) | Matrix (Preserved) | Program Area (Required) | Total # of containers | | |

Analytical Environmental Services, Inc

Date: 31-May-16

Client: Crawford Environmental Services
Project: Clouds Chevron
Lab ID: 1605G81

Case Narrative

Sample Receiving Nonconformance:

"1,2-Dichloroethane" was not listed on the Chain of Custody, but was listed on the vials. The compound was reported for all of the samples.

One vial for each of the following samples were received with headspace present as signified by >1/4 inch bubble present: "MW-59", "PW-1R", "MW-42" and "MW-45". We proceeded with the analysis using the remaining vial.

One vial for each of the following samples were received broken: "MW-6", "MW-37" and "MW-41". We proceeded with the analysis using the remaining vials.

The collection times for "SW01" and "DUPLICATE (35)" were listed as "11:56AM" and "6:14AM", respectively, on the vial labels. The samples were logged in according to the information provided on the Chain of Custody.

Volatiles Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1605G81-009, -022, -024, -034, -035, -036 & -040 required dilution during preparation and/or analysis resulting in elevated reporting limits.

Toluene value for the QC sample 1605G81-022AMSD is "E" qualified indicating estimated value over linear calibration range due to the level of target analyte present in the unspiked sample.

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW51
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 2:05:00 PM
Lab ID:	1605G81-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/23/2016 15 26	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/23/2016 15 26	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 15 26	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/23/2016 15 26	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/23/2016 15 26	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 15 26	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/23/2016 15 26	NP
Surr: 4-Bromofluorobenzene	92 5		0	70-130	%REC	224399	1	05/23/2016 15 26	NP
Surr: Dibromofluoromethane	99.3		0	70-130	%REC	224399	1	05/23/2016 15 26	NP
Surr: Toluene-d8	97 8		0	70-130	%REC	224399	1	05/23/2016 15 26	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/23/2016 15 26	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/23/2016 15 26	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/23/2016 15 26	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/23/2016 15 26	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/23/2016 15 26	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	224399	1	05/23/2016 15 26	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/23/2016 15 26	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/23/2016 15 26	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW54
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 12:30:00 PM
Lab ID:	1605G81-002	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/23/2016 15 50	NP
Benzene	0 60	J	0 14	1 0	ug/L	224399	1	05/23/2016 15 50	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 15 50	NP
Methyl tert-butyl ether	5 0		0 22	1 0	ug/L	224399	1	05/23/2016 15 50	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/23/2016 15 50	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 15 50	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/23/2016 15 50	NP
Surr: 4-Bromofluorobenzene	90 1		0	70-130	%REC	224399	1	05/23/2016 15 50	NP
Surr: Dibromofluoromethane	97 9		0	70-130	%REC	224399	1	05/23/2016 15 50	NP
Surr: Toluene-d8	97 6		0	70-130	%REC	224399	1	05/23/2016 15 50	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/23/2016 15 50	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/23/2016 15.50	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/23/2016 15 50	NP
Isopropyl ether	14		3 9	10	ug/L	224399	1	05/23/2016 15 50	NP
tert-Amyl alcohol	60	J	43	100	ug/L	224399	1	05/23/2016 15 50	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	224399	1	05/23/2016 15 50	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/23/2016 15 50	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/23/2016 15 50	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW55
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 12:20:00 PM
Lab ID:	1605G81-003	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/24/2016 08 28	NP
Benzene	950		1 4	10	ug/L	224399	10	05/25/2016 07 04	NP
Ethylbenzene	320		2 0	10	ug/L	224399	10	05/25/2016 07 04	NP
Methyl tert-butyl ether	220		2 2	10	ug/L	224399	10	05/25/2016 07 04	NP
Naphthalene	130		0 13	5 0	ug/L	224399	1	05/24/2016 08 28	NP
Toluene	44		0 20	1 0	ug/L	224399	1	05/24/2016 08 28	NP
Xylenes, Total	210		0 30	1 0	ug/L	224399	1	05/24/2016 08 28	NP
Surr: 4-Bromofluorobenzene	99 8		0	70-130	%REC	224399	1	05/24/2016 08 28	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	224399	10	05/25/2016 07 04	NP
Surr: Dibromofluoromethane	93 5		0	70-130	%REC	224399	1	05/24/2016 08 28	NP
Surr: Dibromofluoromethane	94 9		0	70-130	%REC	224399	10	05/25/2016 07 04	NP
Surr: Toluene-d8	96 1		0	70-130	%REC	224399	10	05/25/2016 07 04	NP
Surr: Toluene-d8	103		0	70-130	%REC	224399	1	05/24/2016 08 28	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/24/2016 08 28	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/24/2016 08 28	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/24/2016 08 28	NP
Isopropyl ether	66		3 9	10	ug/L	224399	1	05/24/2016 08 28	NP
tert-Amyl alcohol	2600		43	100	ug/L	224399	1	05/24/2016 08 28	NP
tert-Amyl methyl ether	15		3 5	10	ug/L	224399	1	05/24/2016 08 28	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/24/2016 08 28	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/24/2016 08 28	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW56
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 12:50:00 PM
Lab ID:	1605G81-004	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/23/2016 16 28	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/23/2016 16 28	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 16 28	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/23/2016 16 28	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/23/2016 16 28	NP
Toluene	BRL		0.20	1 0	ug/L	224399	1	05/23/2016 16 28	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/23/2016 16 28	NP
Surr: 4-Bromofluorobenzene	88 6		0	70-130	%REC	224399	1	05/23/2016 16 28	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	224399	1	05/23/2016 16 28	NP
Surr: Toluene-d8	96 6		0	70-130	%REC	224399	1	05/23/2016 16 28	NP
Oxygenates SW8260B					(SW5030B)				
3.3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/23/2016 16 28	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/23/2016 16 28	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/23/2016 16 28	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/23/2016 16 28	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/23/2016 16 28	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/23/2016 16 28	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/23/2016 16 28	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/23/2016 16 28	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW59
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 12:40:00 PM
Lab ID:	1605G81-005	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/24/2016 08 52	NP
Benzene	1900		6 8	50	ug/L	224399	50	05/23/2016 18 48	NP
Ethylbenzene	950		10	50	ug/L	224399	50	05/23/2016 18 48	NP
Methyl tert-butyl ether	96		0 22	1 0	ug/L	224399	1	05/24/2016 08 52	NP
Naphthalene	260		6 4	250	ug/L	224399	50	05/23/2016 18 48	NP
Toluene	51		0 20	1 0	ug/L	224399	1	05/24/2016 08 52	NP
Xylenes, Total	760		15	50	ug/L	224399	50	05/23/2016 18 48	NP
Surr: 4-Bromofluorobenzene	92 5		0	70-130	%REC	224399	50	05/23/2016 18 48	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	224399	1	05/24/2016 08 52	NP
Surr: Dibromofluoromethane	97 1		0	70-130	%REC	224399	50	05/23/2016 18 48	NP
Surr: Dibromofluoromethane	90 2		0	70-130	%REC	224399	1	05/24/2016 08 52	NP
Surr: Toluene-d8	97 6		0	70-130	%REC	224399	50	05/23/2016 18 48	NP
Surr: Toluene-d8	98 7		0	70-130	%REC	224399	1	05/24/2016 08 52	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/24/2016 08 52	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/24/2016 08 52	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/24/2016 08 52	NP
Isopropyl ether	220		3 9	10	ug/L	224399	1	05/24/2016 08 52	NP
tert-Amyl alcohol	4300		43	100	ug/L	224399	1	05/24/2016 08 52	NP
tert-Amyl methyl ether	28		3 5	10	ug/L	224399	1	05/24/2016 08 52	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/24/2016 08 52	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/24/2016 08 52	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW63
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 4:02:00 PM
Lab ID:	1605G81-006	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/23/2016 16 51	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/23/2016 16 51	NP
Ethylbenzene	BRL		0.20	1 0	ug/L	224399	1	05/23/2016 16 51	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/23/2016 16 51	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/23/2016 16 51	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 16 51	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/23/2016 16 51	NP
Surr: 4-Bromofluorobenzene	89 6		0	70-130	%REC	224399	1	05/23/2016 16 51	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	224399	1	05/23/2016 16 51	NP
Surr: Toluene-d8	98 1		0	70-130	%REC	224399	1	05/23/2016 16 51	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/23/2016 16 51	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/23/2016 16 51	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/23/2016 16 51	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/23/2016 16 51	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/23/2016 16 51	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/23/2016 16 51	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/23/2016 16 51	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/23/2016 16 51	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW67
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 2:15:00 PM
Lab ID:	1605G81-007	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/23/2016 17 15	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/23/2016 17 15	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 17 15	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/23/2016 17 15	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/23/2016 17 15	NP
Toluene	BRL		0.20	1 0	ug/L	224399	1	05/23/2016 17 15	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/23/2016 17 15	NP
Surr: 4-Bromofluorobenzene	88 2		0	70-130	%REC	224399	1	05/23/2016 17 15	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	224399	1	05/23/2016 17 15	NP
Surr: Toluene-d8	99 1		0	70-130	%REC	224399	1	05/23/2016 17 15	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/23/2016 17 15	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/23/2016 17 15	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/23/2016 17 15	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/23/2016 17 15	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/23/2016 17 15	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/23/2016 17 15	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/23/2016 17 15	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/23/2016 17 15	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW70
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 3:48:00 PM
Lab ID:	1605G81-008	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0.24	1 0	ug/L	224399	1	05/24/2016 02 37	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/24/2016 02 37	NP
Ethylbenzene	BRL		0.20	1 0	ug/L	224399	1	05/24/2016 02 37	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/24/2016 02 37	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/24/2016 02 37	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/24/2016 02 37	NP
Xylenes, Total	0 44	J	0.30	1 0	ug/L	224399	1	05/24/2016 02 37	NP
Surr: 4-Bromofluorobenzene	95 6		0	70-130	%REC	224399	1	05/24/2016 02 37	NP
Surr: Dibromofluoromethane	95 8		0	70-130	%REC	224399	1	05/24/2016 02 37	NP
Surr: Toluene-d8	95 1		0	70-130	%REC	224399	1	05/24/2016 02 37	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/24/2016 02 37	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/24/2016 02 37	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/24/2016 02 37	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/24/2016 02 37	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/24/2016 02 37	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/24/2016 02 37	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/24/2016 02 37	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/24/2016 02 37	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW5AR
Project Name:	Clouds Chevron	**Collection Date:**	5/15/2016 11:21:00 AM
Lab ID:	1605G81-009	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		24	100	ug/L	224399	100	05/23/2016 18 01	NP
Benzene	7000		14	100	ug/L	224399	100	05/23/2016 18 01	NP
Ethylbenzene	1200		20	100	ug/L	224399	100	05/23/2016 18 01	NP
Methyl tert-butyl ether	BRL		22	100	ug/L	224399	100	05/23/2016 18 01	NP
Naphthalene	890		13	500	ug/L	224399	100	05/23/2016 18 01	NP
Toluene	6400		20	100	ug/L	224399	100	05/23/2016 18 01	NP
Xylenes, Total	8000		30	100	ug/L	224399	100	05/23/2016 18 01	NP
Surr: 4-Bromofluorobenzene	98 7		0	70-130	%REC	224399	100	05/23/2016 18 01	NP
Surr: Dibromofluoromethane	97 4		0	70-130	%REC	224399	100	05/23/2016 18 01	NP
Surr: Toluene-d8	97 3		0	70-130	%REC	224399	100	05/23/2016 18 01	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		4400	10000	ug/L	224399	100	05/23/2016 18 01	NP
Ethanol	BRL		2500	10000	ug/L	224399	100	05/23/2016 18 01	NP
Ethyl tert-butyl ether	BRL		350	10000	ug/L	224399	100	05/23/2016 18 01	NP
Isopropyl ether	BRL		390	1000	ug/L	224399	100	05/23/2016 18 01	NP
tert-Amyl alcohol	BRL		4300	10000	ug/L	224399	100	05/23/2016 18 01	NP
tert-Amyl methyl ether	BRL		350	1000	ug/L	224399	100	05/23/2016 18 01	NP
tert-Butyl Alcohol	BRL		4600	10000	ug/L	224399	100	05/23/2016 18 01	NP
tert-Butyl formate	BRL		3100	10000	ug/L	224399	100	05/23/2016 18 01	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	PW-1R
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 1:12:00 PM
Lab ID:	1605G81-010	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/25/2016 07 28	NP
Benzene	210		6 8	50	ug/L	224399	50	05/23/2016 19 11	NP
Ethylbenzene	170		0 20	1 0	ug/L	224399	1	05/25/2016 07 28	NP
Methyl tert-butyl ether	6 8		0 22	1 0	ug/L	224399	1	05/25/2016 07 28	NP
Naphthalene	200		0 13	5 0	ug/L	224399	1	05/25/2016 07 28	NP
Toluene	1200		10	50	ug/L	224399	50	05/23/2016 19 11	NP
Xylenes, Total	3200		15	50	ug/L	224399	50	05/23/2016 19 11	NP
Surr: 4-Bromofluorobenzene	96 2		0	70-130	%REC	224399	50	05/23/2016 19 11	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	224399	1	05/25/2016 07 28	NP
Surr: Dibromofluoromethane	98 1		0	70-130	%REC	224399	50	05/23/2016 19 11	NP
Surr: Dibromofluoromethane	88 5		0	70-130	%REC	224399	1	05/25/2016 07 28	NP
Surr: Toluene-d8	96 6		0	70-130	%REC	224399	50	05/23/2016 19 11	NP
Surr: Toluene-d8	95 2		0	70-130	%REC	224399	1	05/25/2016 07 28	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/25/2016 07 28	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/25/2016 07 28	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/25/2016 07 28	NP
Isopropyl ether	4 5	J	3 9	10	ug/L	224399	1	05/25/2016 07 28	NP
tert-Amyl alcohol	380		43	100	ug/L	224399	1	05/25/2016 07 28	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/25/2016 07 28	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/25/2016 07 28	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/25/2016 07 28	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-52
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 2:10:00 PM
Lab ID:	1605G81-011	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/24/2016 03 00	NP
Benzene	BRL		0.14	1 0	ug/L	224399	1	05/24/2016 03 00	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/24/2016 03 00	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/24/2016 03 00	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/24/2016 03 00	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/24/2016 03 00	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/24/2016 03 00	NP
Surr: 4-Bromofluorobenzene	92 6		0	70-130	%REC	224399	1	05/24/2016 03 00	NP
Surr: Dibromofluoromethane	95 5		0	70-130	%REC	224399	1	05/24/2016 03 00	NP
Surr: Toluene-d8	93 9		0	70-130	%REC	224399	1	05/24/2016 03 00	NP
Oxygenates SW8260B					(SW5030B)				
3.3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/24/2016 03 00	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/24/2016 03 00	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/24/2016 03 00	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/24/2016 03 00	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/24/2016 03 00	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/24/2016 03 00	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/24/2016 03 00	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/24/2016 03 00	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-41W
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 3:35:00 PM
Lab ID:	1605G81-012	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/24/2016 03 24	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/24/2016 03 24	NP
Ethylbenzene	1 4		0 20	1 0	ug/L	224399	1	05/24/2016 03 24	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/24/2016 03 24	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/24/2016 03 24	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/24/2016 03 24	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/24/2016 03 24	NP
Surr: 4-Bromofluorobenzene	95 4		0	70-130	%REC	224399	1	05/24/2016 03 24	NP
Surr: Dibromofluoromethane	94 9		0	70-130	%REC	224399	1	05/24/2016 03 24	NP
Surr: Toluene-d8	95 4		0	70-130	%REC	224399	1	05/24/2016 03 24	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/24/2016 03 24	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/24/2016 03 24	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/24/2016 03 24	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/24/2016 03 24	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/24/2016 03 24	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/24/2016 03 24	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/24/2016 03 24	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/24/2016 03 24	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	FB1
Project Name:	Clouds Chevron	**Collection Date:**	5/15/2016
Lab ID:	1605G81-013	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/23/2016 13 27	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/23/2016 13 27	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 13 27	NP
Methyl tert-butyl ether	BRL		0.22	1 0	ug/L	224399	1	05/23/2016 13 27	NP
Naphthalene	BRL		0.13	5 0	ug/L	224399	1	05/23/2016 13 27	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 13 27	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/23/2016 13 27	NP
Surr: 4-Bromofluorobenzene	90		0	70-130	%REC	224399	1	05/23/2016 13 27	NP
Surr: Dibromofluoromethane	99 9		0	70-130	%REC	224399	1	05/23/2016 13 27	NP
Surr: Toluene-d8	97 5		0	70-130	%REC	224399	1	05/23/2016 13 27	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/23/2016 13 27	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/23/2016 13 27	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/23/2016 13 27	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/23/2016 13 27	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/23/2016 13 27	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/23/2016 13 27	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/23/2016 13 27	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/23/2016 13 27	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	FB2
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016
Lab ID:	1605G81-014	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/23/2016 13 51	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/23/2016 13 51	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 13 51	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/23/2016 13 51	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/23/2016 13 51	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 13 51	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/23/2016 13 51	NP
Surr: 4-Bromofluorobenzene	90		0	70-130	%REC	224399	1	05/23/2016 13 51	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	224399	1	05/23/2016 13 51	NP
Surr: Toluene-d8	99 8		0	70-130	%REC	224399	1	05/23/2016 13 51	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/23/2016 13 51	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/23/2016 13 51	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/23/2016 13 51	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/23/2016 13 51	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/23/2016 13 51	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/23/2016 13 51	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/23/2016 13 51	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/23/2016 13 51	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	FB3
Project Name:	Clouds Chevron	**Collection Date:**	5/17/2016
Lab ID:	1605G81-015	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/23/2016 14 15	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/23/2016 14 15	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 14 15	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/23/2016 14 15	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/23/2016 14 15	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 14 15	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/23/2016 14 15	NP
Surr: 4-Bromofluorobenzene	89 6		0	70-130	%REC	224399	1	05/23/2016 14 15	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	224399	1	05/23/2016 14.15	NP
Surr: Toluene-d8	96 9		0	70-130	%REC	224399	1	05/23/2016 14:15	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/23/2016 14 15	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/23/2016 14 15	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/23/2016 14 15	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/23/2016 14 15	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/23/2016 14 15	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/23/2016 14 15	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/23/2016 14 15	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/23/2016 14 15	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	FB4
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016
Lab ID:	1605G81-016	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/23/2016 14 38	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/23/2016 14 38	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 14 38	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/23/2016 14 38	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/23/2016 14 38	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 14 38	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/23/2016 14 38	NP
Surr: 4-Bromofluorobenzene	90 4		0	70-130	%REC	224399	1	05/23/2016 14 38	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	224399	1	05/23/2016 14 38	NP
Surr: Toluene-d8	97 5		0	70-130	%REC	224399	1	05/23/2016 14 38	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/23/2016 14 38	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/23/2016 14 38	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/23/2016 14 38	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/23/2016 14 38	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/23/2016 14 38	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/23/2016 14 38	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/23/2016 14 38	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/23/2016 14 38	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	TB1
Project Name:	Clouds Chevron	**Collection Date:**	5/20/2016
Lab ID:	1605G81-017	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/23/2016 12 40	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/23/2016 12 40	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 12 40	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/23/2016 12 40	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/23/2016 12 40	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 12 40	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/23/2016 12 40	NP
Surr: 4-Bromofluorobenzene	92 1		0	70-130	%REC	224399	1	05/23/2016 12 40	NP
Surr: Dibromofluoromethane	98 3		0	70-130	%REC	224399	1	05/23/2016 12 40	NP
Surr: Toluene-d8	97 2		0	70-130	%REC	224399	1	05/23/2016 12 40	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/23/2016 12 40	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/23/2016 12 40	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/23/2016 12 40	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/23/2016 12 40	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/23/2016 12 40	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/23/2016 12 40	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/23/2016 12 40	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/23/2016 12 40	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	TB2
Project Name:	Clouds Chevron	**Collection Date:**	5/20/2016
Lab ID:	1605G81-018	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/23/2016 13 04	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/23/2016 13 04	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 13 04	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/23/2016 13 04	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/23/2016 13 04	NP
Toluene	BRL		0 20	1 0	ug/L	224399	1	05/23/2016 13 04	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/23/2016 13 04	NP
Surr: 4-Bromofluorobenzene	91 1		0	70-130	%REC	224399	1	05/23/2016 13 04	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	224399	1	05/23/2016 13 04	NP
Surr: Toluene-d8	97 5		0	70-130	%REC	224399	1	05/23/2016 13 04	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/23/2016 13 04	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/23/2016 13.04	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/23/2016 13 04	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/23/2016 13 04	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/23/2016 13 04	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/23/2016 13.04	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/23/2016 13.04	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/23/2016 13.04	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DUPLICATE (MW9)
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 12:38:00 PM
Lab ID:	1605G81-019	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/25/2016 05 07	NP
Benzene	86		0 14	1 0	ug/L	224399	1	05/25/2016 05 07	NP
Ethylbenzene	1200		2 0	10	ug/L	224399	10	05/25/2016 05 30	NP
Methyl tert-butyl ether	BRL		0.22	1 0	ug/L	224399	1	05/25/2016 05 07	NP
Naphthalene	500		1 3	50	ug/L	224399	10	05/25/2016 05 30	NP
Toluene	2000		20	100	ug/L	224399	100	05/23/2016 18 24	NP
Xylenes, Total	5000		3 0	10	ug/L	224399	10	05/25/2016 05 30	NP
Surr: 4-Bromofluorobenzene	97 2		0	70-130	%REC	224399	100	05/23/2016 18 24	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	224399	10	05/25/2016 05 30	NP
Surr: 4-Bromofluorobenzene	110		0	70-130	%REC	224399	1	05/25/2016 05 07	NP
Surr: Dibromofluoromethane	87 9		0	70-130	%REC	224399	1	05/25/2016 05 07	NP
Surr: Dibromofluoromethane	92 8		0	70-130	%REC	224399	10	05/25/2016 05 30	NP
Surr: Dibromofluoromethane	99 3		0	70-130	%REC	224399	100	05/23/2016 18 24	NP
Surr: Toluene-d8	95 8		0	70-130	%REC	224399	10	05/25/2016 05 30	NP
Surr: Toluene-d8	97 1		0	70-130	%REC	224399	1	05/25/2016 05 07	NP
Surr: Toluene-d8	99 4		0	70-130	%REC	224399	100	05/23/2016 18 24	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/25/2016 05 07	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/25/2016 05 07	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/25/2016 05 07	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/25/2016 05 07	NP
tert-Amyl alcohol	320		43	100	ug/L	224399	1	05/25/2016 05 07	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/25/2016 05 07	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/25/2016 05 07	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/25/2016 05 07	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW01
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 12:16:00 PM
Lab ID:	1605G81-020	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224399	1	05/24/2016 03 47	NP
Benzene	BRL		0 14	1 0	ug/L	224399	1	05/24/2016 03 47	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224399	1	05/24/2016 03 47	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224399	1	05/24/2016 03 47	NP
Naphthalene	BRL		0 13	5 0	ug/L	224399	1	05/24/2016 03 47	NP
Toluene	BRL		0.20	1 0	ug/L	224399	1	05/24/2016 03 47	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224399	1	05/24/2016 03 47	NP
Surr: 4-Bromofluorobenzene	93 6		0	70-130	%REC	224399	1	05/24/2016 03 47	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	224399	1	05/24/2016 03 47	NP
Surr: Toluene-d8	98 2		0	70-130	%REC	224399	1	05/24/2016 03 47	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224399	1	05/24/2016 03 47	NP
Ethanol	BRL		25	100	ug/L	224399	1	05/24/2016 03 47	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224399	1	05/24/2016 03 47	NP
Isopropyl ether	BRL		3 9	10	ug/L	224399	1	05/24/2016 03 47	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224399	1	05/24/2016 03 47	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224399	1	05/24/2016 03 47	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224399	1	05/24/2016 03 47	NP
tert-Butyl formate	BRL		31	100	ug/L	224399	1	05/24/2016 03 47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW02
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 11:01:00 AM
Lab ID:	1605G81-021	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 04 10	NP
Benzene	BRL		0 14	1 0	ug/L	224400	1	05/24/2016 04 10	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 04 10	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224400	1	05/24/2016 04 10	NP
Naphthalene	BRL		0 13	5 0	ug/L	224400	1	05/24/2016 04 10	NP
Toluene	BRL		0 20	1.0	ug/L	224400	1	05/24/2016 04 10	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224400	1	05/24/2016 04 10	NP
Surr: 4-Bromofluorobenzene	92 9		0	70-130	%REC	224400	1	05/24/2016 04 10	NP
Surr: Dibromofluoromethane	97 6		0	70-130	%REC	224400	1	05/24/2016 04 10	NP
Surr: Toluene-d8	96 3		0	70-130	%REC	224400	1	05/24/2016 04 10	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 04 10	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 04 10	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 04 10	NP
Isopropyl ether	BRL		3 9	10	ug/L	224400	1	05/24/2016 04 10	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224400	1	05/24/2016 04 10	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 04 10	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 04 10	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 04 10	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW03
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 12:57:00 PM
Lab ID:	1605G81-022	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		12	50	ug/L	224400	50	05/23/2016 19 34	NP
Benzene	2600		6 8	50	ug/L	224400	50	05/23/2016 19 34	NP
Ethylbenzene	1400		10	50	ug/L	224400	50	05/23/2016 19 34	NP
Methyl tert-butyl ether	160		11	50	ug/L	224400	50	05/23/2016 19.34	NP
Naphthalene	410		6 4	250	ug/L	224400	50	05/23/2016 19 34	NP
Toluene	10000		20	100	ug/L	224400	100	05/25/2016 09 01	NP
Xylenes, Total	8200		15	50	ug/L	224400	50	05/23/2016 19.34	NP
Surr: 4-Bromofluorobenzene	98 3		0	70-130	%REC	224400	50	05/23/2016 19 34	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	224400	100	05/25/2016 09 01	NP
Surr: Dibromofluoromethane	96 7		0	70-130	%REC	224400	50	05/23/2016 19 34	NP
Surr: Dibromofluoromethane	91 8		0	70-130	%REC	224400	100	05/25/2016 09 01	NP
Surr: Toluene-d8	96 5		0	70-130	%REC	224400	50	05/23/2016 19 34	NP
Surr: Toluene-d8	94		0	70-130	%REC	224400	100	05/25/2016 09 01	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		2200	5000	ug/L	224400	50	05/23/2016 19 34	NP
Ethanol	BRL		1300	5000	ug/L	224400	50	05/23/2016 19 34	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	224400	50	05/23/2016 19 34	NP
Isopropyl ether	BRL		190	500	ug/L	224400	50	05/23/2016 19 34	NP
tert-Amyl alcohol	BRL		2100	5000	ug/L	224400	50	05/23/2016 19 34	NP
tert-Amyl methyl ether	BRL		180	500	ug/L	224400	50	05/23/2016 19 34	NP
tert-Butyl Alcohol	BRL		2300	5000	ug/L	224400	50	05/23/2016 19 34	NP
tert-Butyl formate	BRL		1600	5000	ug/L	224400	50	05/23/2016 19 34	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW04
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 1:18:00 PM
Lab ID:	1605G81-023	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 04 34	NP
Benzene	BRL		0 14	1 0	ug/L	224400	1	05/24/2016 04 34	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 04 34	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224400	1	05/24/2016 04 34	NP
Naphthalene	BRL		0 13	5 0	ug/L	224400	1	05/24/2016 04 34	NP
Toluene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 04 34	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224400	1	05/24/2016 04 34	NP
Surr: 4-Bromofluorobenzene	91 9		0	70-130	%REC	224400	1	05/24/2016 04 34	NP
Surr: Dibromofluoromethane	99 2		0	70-130	%REC	224400	1	05/24/2016 04 34	NP
Surr: Toluene-d8	97 3		0	70-130	%REC	224400	1	05/24/2016 04 34	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 04 34	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 04 34	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 04 34	NP
Isopropyl ether	BRL		3 9	10	ug/L	224400	1	05/24/2016 04 34	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224400	1	05/24/2016 04 34	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 04 34	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 04 34	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 04 34	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW05
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 1:59:00 PM
Lab ID:	1605G81-024	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		2 4	10	ug/L	224400	10	05/24/2016 01 03	NP
Benzene	9200		6 8	50	ug/L	224400	50	05/25/2016 13 55	NP
Ethylbenzene	750		2 0	10	ug/L	224400	10	05/24/2016 01 03	NP
Methyl tert-butyl ether	1400		2 2	10	ug/L	224400	10	05/24/2016 01 03	NP
Naphthalene	470		1 3	50	ug/L	224400	10	05/24/2016 01 03	NP
Toluene	1600		2 0	10	ug/L	224400	10	05/24/2016 01 03	NP
Xylenes, Total	5300		3 0	10	ug/L	224400	10	05/24/2016 01 03	NP
Surr: 4-Bromofluorobenzene	99 8		0	70-130	%REC	224400	50	05/25/2016 13 55	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	224400	10	05/24/2016 01 03	NP
Surr: Dibromofluoromethane	92		0	70-130	%REC	224400	50	05/25/2016 13 55	NP
Surr: Dibromofluoromethane	93		0	70-130	%REC	224400	10	05/24/2016 01 03	NP
Surr: Toluene-d8	93 8		0	70-130	%REC	224400	50	05/25/2016 13 55	NP
Surr: Toluene-d8	97 5		0	70-130	%REC	224400	10	05/24/2016 01 03	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		440	1000	ug/L	224400	10	05/24/2016 01 03	NP
Ethanol	BRL		250	1000	ug/L	224400	10	05/24/2016 01 03	NP
Ethyl tert-butyl ether	BRL		35	1000	ug/L	224400	10	05/24/2016 01 03	NP
Isopropyl ether	820		39	100	ug/L	224400	10	05/24/2016 01 03	NP
tert-Amyl alcohol	4300		430	1000	ug/L	224400	10	05/24/2016 01 03	NP
tert-Amyl methyl ether	95	J	35	100	ug/L	224400	10	05/24/2016 01 03	NP
tert-Butyl Alcohol	BRL		460	1000	ug/L	224400	10	05/24/2016 01 03	NP
tert-Butyl formate	BRL		310	1000	ug/L	224400	10	05/24/2016 01 03	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW06
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 2:54:00 PM
Lab ID:	1605G81-025	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 04 57	NP
Benzene	BRL		0 14	1 0	ug/L	224400	1	05/24/2016 04 57	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 04 57	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224400	1	05/24/2016 04 57	NP
Naphthalene	BRL		0 13	5 0	ug/L	224400	1	05/24/2016 04 57	NP
Toluene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 04 57	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224400	1	05/24/2016 04 57	NP
Surr: 4-Bromofluorobenzene	91.7		0	70-130	%REC	224400	1	05/24/2016 04 57	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	224400	1	05/24/2016 04 57	NP
Surr: Toluene-d8	99 3		0	70-130	%REC	224400	1	05/24/2016 04 57	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 04 57	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 04 57	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 04 57	NP
Isopropyl ether	BRL		3 9	10	ug/L	224400	1	05/24/2016 04 57	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224400	1	05/24/2016 04 57	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 04 57	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 04 57	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 04 57	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW07
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 10:57:00 AM
Lab ID:	1605G81-026	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 05.21	NP
Benzene	BRL		0 14	1 0	ug/L	224400	1	05/24/2016 05 21	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 05 21	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224400	1	05/24/2016 05 21	NP
Naphthalene	BRL		0 13	5 0	ug/L	224400	1	05/24/2016 05 21	NP
Toluene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 05 21	NP
Xylenes, Total	BRL		0.30	1 0	ug/L	224400	1	05/24/2016 05 21	NP
Surr: 4-Bromofluorobenzene	93 3		0	70-130	%REC	224400	1	05/24/2016 05 21	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	224400	1	05/24/2016 05 21	NP
Surr: Toluene-d8	97 2		0	70-130	%REC	224400	1	05/24/2016 05 21	NP
Oxygenates SW8260B					(SW5030B)				
3.3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 05 21	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 05 21	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 05 21	NP
Isopropyl ether	BRL		3 9	10	ug/L	224400	1	05/24/2016 05.21	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224400	1	05/24/2016 05.21	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 05 21	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 05 21	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 05:21	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW09
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 12:18:00 PM
Lab ID:	1605G81-027	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 05 44	NP
Benzene	BRL		0 14	1 0	ug/L	224400	1	05/24/2016 05 44	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 05 44	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224400	1	05/24/2016 05 44	NP
Naphthalene	BRL		0 13	5 0	ug/L	224400	1	05/24/2016 05 44	NP
Toluene	42		0 20	1 0	ug/L	224400	1	05/24/2016 05 44	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224400	1	05/24/2016 05 44	NP
Surr: 4-Bromofluorobenzene	89.3		0	70-130	%REC	224400	1	05/24/2016 05 44	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	224400	1	05/24/2016 05 44	NP
Surr: Toluene-d8	96 6		0	70-130	%REC	224400	1	05/24/2016 05 44	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 05 44	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 05 44	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 05 44	NP
Isopropyl ether	BRL		3 9	10	ug/L	224400	1	05/24/2016 05 44	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224400	1	05/24/2016 05 44	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 05 44	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 05 44	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 05 44	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	SW01
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 12:45:00 PM
Lab ID:	1605G81-028	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 06 07	NP
Benzene	130		0 14	1 0	ug/L	224400	1	05/24/2016 06 07	NP
Ethylbenzene	53		0 20	1 0	ug/L	224400	1	05/24/2016 06 07	NP
Methyl tert-butyl ether	12		0 22	1 0	ug/L	224400	1	05/24/2016 06 07	NP
Naphthalene	16		0 13	5 0	ug/L	224400	1	05/24/2016 06 07	NP
Toluene	18		0 20	1 0	ug/L	224400	1	05/24/2016 06 07	NP
Xylenes, Total	92		0 30	1 0	ug/L	224400	1	05/24/2016 06 07	NP
Surr: 4-Bromofluorobenzene	96 7		0	70-130	%REC	224400	1	05/24/2016 06 07	NP
Surr: Dibromofluoromethane	95 8		0	70-130	%REC	224400	1	05/24/2016 06 07	NP
Surr: Toluene-d8	97 8		0	70-130	%REC	224400	1	05/24/2016 06 07	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 06 07	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 06:07	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 06 07	NP
Isopropyl ether	16		3 9	10	ug/L	224400	1	05/24/2016 06 07	NP
tert-Amyl alcohol	430		43	100	ug/L	224400	1	05/24/2016 06 07	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 06 07	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 06 07	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 06 07	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW11
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 1:50:00 PM
Lab ID:	1605G81-029	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 06 30	NP
Benzene	BRL		0 14	1 0	ug/L	224400	1	05/24/2016 06 30	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 06 30	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224400	1	05/24/2016 06 30	NP
Naphthalene	BRL		0 13	5 0	ug/L	224400	1	05/24/2016 06 30	NP
Toluene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 06 30	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224400	1	05/24/2016 06 30	NP
Surr: 4-Bromofluorobenzene	92 4		0	70-130	%REC	224400	1	05/24/2016 06 30	NP
Surr: Dibromofluoromethane	98 9		0	70-130	%REC	224400	1	05/24/2016 06.30	NP
Surr: Toluene-d8	96 5		0	70-130	%REC	224400	1	05/24/2016 06 30	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 06 30	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 06 30	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 06 30	NP
Isopropyl ether	BRL		3 9	10	ug/L	224400	1	05/24/2016 06 30	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224400	1	05/24/2016 06 30	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 06 30	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 06 30	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 06 30	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW12
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 10:06:00 AM
Lab ID:	1605G81-030	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/25/2016 06 41	NP
Benzene	260		1 4	10	ug/L	224400	10	05/24/2016 01 27	NP
Ethylbenzene	710		2 0	10	ug/L	224400	10	05/24/2016 01 27	NP
Methyl tert-butyl ether	17		0 22	1 0	ug/L	224400	1	05/25/2016 06 41	NP
Naphthalene	190		1 3	50	ug/L	224400	10	05/24/2016 01 27	NP
Toluene	83		0 20	1 0	ug/L	224400	1	05/25/2016 06 41	NP
Xylenes, Total	330		3 0	10	ug/L	224400	10	05/24/2016 01 27	NP
Surr: 4-Bromofluorobenzene	99 4		0	70-130	%REC	224400	10	05/24/2016 01 27	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	224400	1	05/25/2016 06 41	NP
Surr: Dibromofluoromethane	90 6		0	70-130	%REC	224400	1	05/25/2016 06 41	NP
Surr: Dibromofluoromethane	93 1		0	70-130	%REC	224400	10	05/24/2016 01 27	NP
Surr: Toluene-d8	94 7		0	70-130	%REC	224400	1	05/25/2016 06 41	NP
Surr: Toluene-d8	94 7		0	70-130	%REC	224400	10	05/24/2016 01 27	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/25/2016 06 41	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/25/2016 06 41	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/25/2016 06 41	NP
Isopropyl ether	37		3 9	10	ug/L	224400	1	05/25/2016 06 41	NP
tert-Amyl alcohol	1300		43	100	ug/L	224400	1	05/25/2016 06 41	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/25/2016 06 41	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/25/2016 06 41	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/25/2016 06 41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW13
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 12:12:00 PM
Lab ID:	1605G81-031	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 06 54	NP
Benzene	BRL		0 14	1 0	ug/L	224400	1	05/24/2016 06 54	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 06 54	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224400	1	05/24/2016 06 54	NP
Naphthalene	BRL		0 13	5 0	ug/L	224400	1	05/24/2016 06 54	NP
Toluene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 06 54	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224400	1	05/24/2016 06 54	NP
Surr: 4-Bromofluorobenzene	88 8		0	70-130	%REC	224400	1	05/24/2016 06 54	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	224400	1	05/24/2016 06 54	NP
Surr: Toluene-d8	97 7		0	70-130	%REC	224400	1	05/24/2016 06 54	NP
Oxygenates SW8260B					(SW5030B)				
3.3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 06 54	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 06 54	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 06 54	NP
Isopropyl ether	BRL		3 9	10	ug/L	224400	1	05/24/2016 06 54	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224400	1	05/24/2016 06 54	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 06 54	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 06 54	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 06 54	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW16
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 9:58:00 AM
Lab ID:	1605G81-032	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 07 18	NP
Benzene	BRL		0 14	1 0	ug/L	224400	1	05/24/2016 07 18	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 07 18	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224400	1	05/24/2016 07 18	NP
Naphthalene	BRL		0 13	5 0	ug/L	224400	1	05/24/2016 07 18	NP
Toluene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 07 18	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224400	1	05/24/2016 07 18	NP
Surr: 4-Bromofluorobenzene	90 4		0	70-130	%REC	224400	1	05/24/2016 07 18	NP
Surr: Dibromofluoromethane	98 3		0	70-130	%REC	224400	1	05/24/2016 07 18	NP
Surr: Toluene-d8	98 9		0	70-130	%REC	224400	1	05/24/2016 07 18	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 07 18	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 07 18	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 07 18	NP
Isopropyl ether	BRL		3 9	10	ug/L	224400	1	05/24/2016 07 18	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224400	1	05/24/2016 07 18	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 07 18	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 07 18	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 07 18	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW18
Project Name:	Clouds Chevron	**Collection Date:**	5/15/2016 12:31:00 PM
Lab ID:	1605G81-033	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 19 14	NP
Benzene	260		1 4	10	ug/L	224400	10	05/24/2016 01 50	NP
Ethylbenzene	220		2 0	10	ug/L	224400	10	05/24/2016 01 50	NP
Methyl tert-butyl ether	20		0 22	1 0	ug/L	224400	1	05/24/2016 19 14	NP
Naphthalene	220		1 3	50	ug/L	224400	10	05/24/2016 01 50	NP
Toluene	1900		2 0	10	ug/L	224400	10	05/24/2016 01 50	NP
Xylenes, Total	4900		6 0	20	ug/L	224400	20	05/24/2016 20 02	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	224400	20	05/24/2016 20 02	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	224400	10	05/24/2016 01 50	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	224400	1	05/24/2016 19 14	NP
Surr: Dibromofluoromethane	89 4		0	70-130	%REC	224400	1	05/24/2016 19 14	NP
Surr: Dibromofluoromethane	93 9		0	70-130	%REC	224400	10	05/24/2016 01 50	NP
Surr: Dibromofluoromethane	94		0	70-130	%REC	224400	20	05/24/2016 20 02	NP
Surr: Toluene-d8	97 1		0	70-130	%REC	224400	10	05/24/2016 01 50	NP
Surr: Toluene-d8	100		0	70-130	%REC	224400	1	05/24/2016 19 14	NP
Surr: Toluene-d8	94 6		0	70-130	%REC	224400	20	05/24/2016 20 02	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 19 14	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 19 14	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 19 14	NP
Isopropyl ether	16		3 9	10	ug/L	224400	1	05/24/2016 19 14	NP
tert-Amyl alcohol	690		43	100	ug/L	224400	1	05/24/2016 19 14	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 19 14	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 19 14	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 19 14	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW19
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 1:26:00 PM
Lab ID:	1605G81-034	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		12	50	ug/L	224400	50	05/23/2016 23 31	NP
Benzene	2900		6 8	50	ug/L	224400	50	05/23/2016 23 31	NP
Ethylbenzene	1100		10	50	ug/L	224400	50	05/23/2016 23 31	NP
Methyl tert-butyl ether	200		11	50	ug/L	224400	50	05/23/2016 23 31	NP
Naphthalene	1400		6 4	250	ug/L	224400	50	05/23/2016 23 31	NP
Toluene	19000		100	500	ug/L	224400	500	05/25/2016 07 51	NP
Xylenes, Total	22000		15	50	ug/L	224400	50	05/23/2016 23 31	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	224400	50	05/23/2016 23 31	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	224400	500	05/25/2016 07 51	NP
Surr: Dibromofluoromethane	93 5		0	70-130	%REC	224400	500	05/25/2016 07 51	NP
Surr: Dibromofluoromethane	95 1		0	70-130	%REC	224400	50	05/23/2016 23 31	NP
Surr: Toluene-d8	94 9		0	70-130	%REC	224400	500	05/25/2016 07 51	NP
Surr: Toluene-d8	97 8		0	70-130	%REC	224400	50	05/23/2016 23 31	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		2200	5000	ug/L	224400	50	05/23/2016 23 31	NP
Ethanol	BRL		1300	5000	ug/L	224400	50	05/23/2016 23 31	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	224400	50	05/23/2016 23.31	NP
Isopropyl ether	BRL		190	500	ug/L	224400	50	05/23/2016 23 31	NP
tert-Amyl alcohol	4300	J	2100	5000	ug/L	224400	50	05/23/2016 23.31	NP
tert-Amyl methyl ether	BRL		180	500	ug/L	224400	50	05/23/2016 23 31	NP
tert-Butyl Alcohol	BRL		2300	5000	ug/L	224400	50	05/23/2016 23 31	NP
tert-Butyl formate	BRL		1600	5000	ug/L	224400	50	05/23/2016 23 31	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW20
Project Name:	Clouds Chevron	**Collection Date:**	5/15/2016 9:21:00 AM
Lab ID:	1605G81-035	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		12	50	ug/L	224400	50	05/23/2016 23 54	NP
Benzene	690		6 8	50	ug/L	224400	50	05/23/2016 23 54	NP
Ethylbenzene	2100		10	50	ug/L	224400	50	05/23/2016 23 54	NP
Methyl tert-butyl ether	BRL		11	50	ug/L	224400	50	05/23/2016 23 54	NP
Naphthalene	1600		6 4	250	ug/L	224400	50	05/23/2016 23.54	NP
Toluene	10000		20	100	ug/L	224400	100	05/25/2016 09 25	NP
Xylenes, Total	23000		30	100	ug/L	224400	100	05/25/2016 09 25	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	224400	50	05/23/2016 23 54	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	224400	100	05/25/2016 09 25	NP
Surr: Dibromofluoromethane	97 2		0	70-130	%REC	224400	50	05/23/2016 23 54	NP
Surr: Dibromofluoromethane	94 1		0	70-130	%REC	224400	100	05/25/2016 09 25	NP
Surr: Toluene-d8	96 4		0	70-130	%REC	224400	50	05/23/2016 23 54	NP
Surr: Toluene-d8	94		0	70-130	%REC	224400	100	05/25/2016 09 25	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		2200	5000	ug/L	224400	50	05/23/2016 23 54	NP
Ethanol	BRL		1300	5000	ug/L	224400	50	05/23/2016 23 54	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	224400	50	05/23/2016 23 54	NP
Isopropyl ether	BRL		190	500	ug/L	224400	50	05/23/2016 23 54	NP
tert-Amyl alcohol	BRL		2100	5000	ug/L	224400	50	05/23/2016 23 54	NP
tert-Amyl methyl ether	BRL		180	500	ug/L	224400	50	05/23/2016 23 54	NP
tert-Butyl Alcohol	BRL		2300	5000	ug/L	224400	50	05/23/2016 23 54	NP
tert-Butyl formate	BRL		1600	5000	ug/L	224400	50	05/23/2016 23 54	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW22
Project Name:	Clouds Chevron	**Collection Date:**	5/15/2016 10:20:00 AM
Lab ID:	1605G81-036	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		12	50	ug/L	224400	50	05/24/2016 00 17	NP
Benzene	1900		6 8	50	ug/L	224400	50	05/24/2016 00 17	NP
Ethylbenzene	1500		10	50	ug/L	224400	50	05/24/2016 00 17	NP
Methyl tert-butyl ether	BRL		11	50	ug/L	224400	50	05/24/2016 00 17	NP
Naphthalene	1400		6 4	250	ug/L	224400	50	05/24/2016 00 17	NP
Toluene	11000		20	100	ug/L	224400	100	05/25/2016 09 48	NP
Xylenes, Total	28000		30	100	ug/L	224400	100	05/25/2016 09 48	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	224400	50	05/24/2016 00.17	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	224400	100	05/25/2016 09 48	NP
Surr: Dibromofluoromethane	95		0	70-130	%REC	224400	50	05/24/2016 00 17	NP
Surr: Dibromofluoromethane	93 2		0	70-130	%REC	224400	100	05/25/2016 09 48	NP
Surr: Toluene-d8	95 7		0	70-130	%REC	224400	50	05/24/2016 00 17	NP
Surr: Toluene-d8	94		0	70-130	%REC	224400	100	05/25/2016 09 48	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		2200	5000	ug/L	224400	50	05/24/2016 00 17	NP
Ethanol	BRL		1300	5000	ug/L	224400	50	05/24/2016 00 17	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	224400	50	05/24/2016 00 17	NP
Isopropyl ether	BRL		190	500	ug/L	224400	50	05/24/2016 00 17	NP
tert-Amyl alcohol	BRL		2100	5000	ug/L	224400	50	05/24/2016 00 17	NP
tert-Amyl methyl ether	BRL		180	500	ug/L	224400	50	05/24/2016 00 17	NP
tert-Butyl Alcohol	BRL		2300	5000	ug/L	224400	50	05/24/2016 00 17	NP
tert-Butyl formate	BRL		1600	5000	ug/L	224400	50	05/24/2016 00 17	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW23
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 1:42:00 PM
Lab ID:	1605G81-037	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 19 38	NP
Benzene	280		1 4	10	ug/L	224400	10	05/24/2016 02 13	NP
Ethylbenzene	110		0 20	1 0	ug/L	224400	1	05/24/2016 19 38	NP
Methyl tert-butyl ether	7 3		0 22	1 0	ug/L	224400	1	05/24/2016 19 38	NP
Naphthalene	470		1 3	50	ug/L	224400	10	05/24/2016 02 13	NP
Toluene	990		2 0	10	ug/L	224400	10	05/24/2016 02 13	NP
Xylenes, Total	4200		3 0	10	ug/L	224400	10	05/24/2016 02 13	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	224400	10	05/24/2016 02 13	NP
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	224400	1	05/24/2016 19 38	NP
Surr: Dibromofluoromethane	88 4		0	70-130	%REC	224400	1	05/24/2016 19 38	NP
Surr: Dibromofluoromethane	92		0	70-130	%REC	224400	10	05/24/2016 02 13	NP
Surr: Toluene-d8	95 6		0	70-130	%REC	224400	10	05/24/2016 02 13	NP
Surr: Toluene-d8	97 2		0	70-130	%REC	224400	1	05/24/2016 19 38	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 19 38	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 19 38	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 19 38	NP
Isopropyl ether	13		3 9	10	ug/L	224400	1	05/24/2016 19 38	NP
tert-Amyl alcohol	520		43	100	ug/L	224400	1	05/24/2016 19 38	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 19 38	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 19 38	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 19 38	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW26
Project Name:	Clouds Chevron	**Collection Date:**	5/17/2016 3:47:00 PM
Lab ID:	1605G81-038	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 07 41	NP
Benzene	BRL		0 14	1 0	ug/L	224400	1	05/24/2016 07 41	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224400	1	05/24/2016 07 41	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224400	1	05/24/2016 07 41	NP
Naphthalene	BRL		0 13	5 0	ug/L	224400	1	05/24/2016 07 41	NP
Toluene	BRL		0.20	1 0	ug/L	224400	1	05/24/2016 07 41	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224400	1	05/24/2016 07 41	NP
Surr: 4-Bromofluorobenzene	88 9		0	70-130	%REC	224400	1	05/24/2016 07 41	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	224400	1	05/24/2016 07 41	NP
Surr: Toluene-d8	98 4		0	70-130	%REC	224400	1	05/24/2016 07 41	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 07 41	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 07 41	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 07 41	NP
Isopropyl ether	BRL		3 9	10	ug/L	224400	1	05/24/2016 07 41	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224400	1	05/24/2016 07 41	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 07 41	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 07 41	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 07 41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-2
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 12:52:00 PM
Lab ID:	1605G81-039	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224400	1	05/24/2016 08 05	NP
Benzene	11		0 14	1 0	ug/L	224400	1	05/24/2016 08 05	NP
Ethylbenzene	0 98	J	0 20	1 0	ug/L	224400	1	05/24/2016 08 05	NP
Methyl tert-butyl ether	18		0 22	1 0	ug/L	224400	1	05/24/2016 08 05	NP
Naphthalene	12		0 13	5 0	ug/L	224400	1	05/24/2016 08 05	NP
Toluene	0 83	J	0 20	1 0	ug/L	224400	1	05/24/2016 08 05	NP
Xylenes, Total	49		0 30	1 0	ug/L	224400	1	05/24/2016 08 05	NP
Surr: 4-Bromofluorobenzene	96 9		0	70-130	%REC	224400	1	05/24/2016 08 05	NP
Surr: Dibromofluoromethane	98 9		0	70-130	%REC	224400	1	05/24/2016 08 05	NP
Surr: Toluene-d8	97 3		0	70-130	%REC	224400	1	05/24/2016 08 05	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224400	1	05/24/2016 08 05	NP
Ethanol	BRL		25	100	ug/L	224400	1	05/24/2016 08 05	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224400	1	05/24/2016 08 05	NP
Isopropyl ether	BRL		3 9	10	ug/L	224400	1	05/24/2016 08 05	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224400	1	05/24/2016 08 05	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224400	1	05/24/2016 08 05	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224400	1	05/24/2016 08 05	NP
tert-Butyl formate	BRL		31	100	ug/L	224400	1	05/24/2016 08 05	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-3
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 9:50:00 AM
Lab ID:	1605G81-040	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	35	J	12	50	ug/L	224400	50	05/24/2016 00 41	NP
Benzene	7800		6 8	50	ug/L	224400	50	05/24/2016 00 41	NP
Ethylbenzene	1800		10	50	ug/L	224400	50	05/24/2016 00 41	NP
Methyl tert-butyl ether	2500		11	50	ug/L	224400	50	05/24/2016 00 41	NP
Naphthalene	870		6 4	250	ug/L	224400	50	05/24/2016 00 41	NP
Toluene	22000		100	500	ug/L	224400	500	05/25/2016 08 14	NP
Xylenes, Total	21000		15	50	ug/L	224400	50	05/24/2016 00 41	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	224400	500	05/25/2016 08 14	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	224400	50	05/24/2016 00 41	NP
Surr: Dibromofluoromethane	95 5		0	70-130	%REC	224400	50	05/24/2016 00 41	NP
Surr: Dibromofluoromethane	96 6		0	70-130	%REC	224400	500	05/25/2016 08 14	NP
Surr: Toluene-d8	94 7		0	70-130	%REC	224400	50	05/24/2016 00 41	NP
Surr: Toluene-d8	95 5		0	70-130	%REC	224400	500	05/25/2016 08 14	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		2200	5000	ug/L	224400	50	05/24/2016 00 41	NP
Ethanol	BRL		1300	5000	ug/L	224400	50	05/24/2016 00 41	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	224400	50	05/24/2016 00 41	NP
Isopropyl ether	BRL		190	500	ug/L	224400	50	05/24/2016 00 41	NP
tert-Amyl alcohol	BRL		2100	5000	ug/L	224400	50	05/24/2016 00 41	NP
tert-Amyl methyl ether	410	J	180	500	ug/L	224400	50	05/24/2016 00 41	NP
tert-Butyl Alcohol	BRL		2300	5000	ug/L	224400	50	05/24/2016 00 41	NP
tert-Butyl formate	BRL		1600	5000	ug/L	224400	50	05/24/2016 00 41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-4
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 10:01:00 AM
Lab ID:	1605G81-041	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 13 23	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/24/2016 13 23	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 13 23	NP
Methyl tert-butyl ether	0 87	J	0 22	1 0	ug/L	224447	1	05/24/2016 13 23	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 13 23	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 13 23	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 13 23	NP
Surr: 4-Bromofluorobenzene	91 4		0	70-130	%REC	224447	1	05/24/2016 13 23	NP
Surr: Dibromofluoromethane	97 8		0	70-130	%REC	224447	1	05/24/2016 13 23	NP
Surr: Toluene-d8	96 7		0	70-130	%REC	224447	1	05/24/2016 13 23	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 13 23	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 13 23	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 13 23	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 13 23	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 13 23	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 13 23	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 13 23	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 13 23	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-5
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 1:50:00 PM
Lab ID:	1605G81-042	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 13 47	NP
Benzene	0 29	J	0 14	1 0	ug/L	224447	1	05/24/2016 13 47	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 13 47	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/24/2016 13 47	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 13 47	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 13 47	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 13 47	NP
Surr: 4-Bromofluorobenzene	91 1		0	70-130	%REC	224447	1	05/24/2016 13 47	NP
Surr: Dibromofluoromethane	98 4		0	70-130	%REC	224447	1	05/24/2016 13 47	NP
Surr: Toluene-d8	97 1		0	70-130	%REC	224447	1	05/24/2016 13 47	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 13 47	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 13 47	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 13 47	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 13 47	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 13 47	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 13 47	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 13 47	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 13 47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-6
Project Name:	Clouds Chevron	**Collection Date:**	5/17/2016 3:36:00 PM
Lab ID:	1605G81-043	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 14 10	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/24/2016 14 10	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 14 10	NP
Methyl tert-butyl ether	1 7		0 22	1 0	ug/L	224447	1	05/24/2016 14 10	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 14 10	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 14 10	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 14 10	NP
Surr: 4-Bromofluorobenzene	91 1		0	70-130	%REC	224447	1	05/24/2016 14 10	NP
Surr: Dibromofluoromethane	97 5		0	70-130	%REC	224447	1	05/24/2016 14 10	NP
Surr: Toluene-d8	98 1		0	70-130	%REC	224447	1	05/24/2016 14 10	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 14 10	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 14 10	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 14 10	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 14 10	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 14 10	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 14 10	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 14 10	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 14 10	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-7
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 2:15:00 PM
Lab ID:	1605G81-044	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 14 33	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/24/2016 14 33	NP
Ethylbenzene	BRL		0.20	1 0	ug/L	224447	1	05/24/2016 14 33	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/24/2016 14 33	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 14 33	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 14 33	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 14 33	NP
Surr: 4-Bromofluorobenzene	90 4		0	70-130	%REC	224447	1	05/24/2016 14 33	NP
Surr: Dibromofluoromethane	99 6		0	70-130	%REC	224447	1	05/24/2016 14 33	NP
Surr: Toluene-d8	96 4		0	70-130	%REC	224447	1	05/24/2016 14 33	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 14 33	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 14 33	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 14 33	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 14 33	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 14 33	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 14 33	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 14 33	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 14 33	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-8
Project Name:	Clouds Chevron	**Collection Date:**	5/17/2016 4:18:00 PM
Lab ID:	1605G81-045	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1.0	ug/L	224447	1	05/24/2016 14 57	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/24/2016 14 57	NP
Ethylbenzene	BRL		0 20	1.0	ug/L	224447	1	05/24/2016 14 57	NP
Methyl tert-butyl ether	BRL		0.22	1 0	ug/L	224447	1	05/24/2016 14 57	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 14 57	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 14 57	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 14 57	NP
Surr: 4-Bromofluorobenzene	91 2		0	70-130	%REC	224447	1	05/24/2016 14 57	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	224447	1	05/24/2016 14 57	NP
Surr: Toluene-d8	98 5		0	70-130	%REC	224447	1	05/24/2016 14 57	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 14 57	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 14 57	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 14 57	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 14 57	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 14 57	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 14 57	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 14 57	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 14 57	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-9
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 12:38:00 PM
Lab ID:	1605G81-046	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/25/2016 05 53	NP
Benzene	78		0 14	1.0	ug/L	224447	1	05/25/2016 05 53	NP
Ethylbenzene	1000		2 0	10	ug/L	224447	10	05/25/2016 06 17	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/25/2016 05 53	NP
Naphthalene	440		1.3	50	ug/L	224447	10	05/25/2016 06 17	NP
Toluene	1900		2.0	10	ug/L	224447	10	05/25/2016 06 17	NP
Xylenes, Total	4300		3 0	10	ug/L	224447	10	05/25/2016 06 17	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	224447	10	05/25/2016 06 17	NP
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	224447	1	05/25/2016 05 53	NP
Surr: Dibromofluoromethane	87 4		0	70-130	%REC	224447	1	05/25/2016 05 53	NP
Surr: Dibromofluoromethane	93 1		0	70-130	%REC	224447	10	05/25/2016 06 17	NP
Surr: Toluene-d8	95		0	70-130	%REC	224447	1	05/25/2016 05 53	NP
Surr: Toluene-d8	96 2		0	70-130	%REC	224447	10	05/25/2016 06 17	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/25/2016 05 53	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/25/2016 05 53	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/25/2016 05 53	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/25/2016 05 53	NP
tert-Amyl alcohol	200		43	100	ug/L	224447	1	05/25/2016 05 53	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/25/2016 05 53	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/25/2016 05 53	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/25/2016 05 53	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-10
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 10:28:00 AM
Lab ID:	1605G81-047	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 15 20	NP
Benzene	88		0 14	1 0	ug/L	224447	1	05/24/2016 15 20	NP
Ethylbenzene	22		0 20	1 0	ug/L	224447	1	05/24/2016 15 20	NP
Methyl tert-butyl ether	BRL		0 22	1.0	ug/L	224447	1	05/24/2016 15 20	NP
Naphthalene	170		0 13	5.0	ug/L	224447	1	05/24/2016 15 20	NP
Toluene	11		0 20	1 0	ug/L	224447	1	05/24/2016 15 20	NP
Xylenes, Total	97		0 30	1 0	ug/L	224447	1	05/24/2016 15 20	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	224447	1	05/24/2016 15 20	NP
Surr: Dibromofluoromethane	96 3		0	70-130	%REC	224447	1	05/24/2016 15 20	NP
Surr: Toluene-d8	104		0	70-130	%REC	224447	1	05/24/2016 15 20	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 15 20	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 15 20	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 15 20	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 15 20	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 15 20	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 15 20	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 15 20	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 15 20	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DUPLICATE A
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 10:30:00 AM
Lab ID:	1605G81-048	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 15 44	NP
Benzene	80		0 14	1 0	ug/L	224447	1	05/24/2016 15 44	NP
Ethylbenzene	21		0 20	1 0	ug/L	224447	1	05/24/2016 15 44	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/24/2016 15 44	NP
Naphthalene	150		0 13	5 0	ug/L	224447	1	05/24/2016 15 44	NP
Toluene	9 3		0 20	1 0	ug/L	224447	1	05/24/2016 15 44	NP
Xylenes, Total	77		0 30	1 0	ug/L	224447	1	05/24/2016 15 44	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	224447	1	05/24/2016 15 44	NP
Surr: Dibromofluoromethane	93 8		0	70-130	%REC	224447	1	05/24/2016 15 44	NP
Surr: Toluene-d8	99 1		0	70-130	%REC	224447	1	05/24/2016 15 44	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 15 44	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 15 44	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 15 44	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 15 44	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 15 44	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 15 44	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 15 44	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 15 44	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW37
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 5:25:00 PM
Lab ID:	1605G81-049	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 16 07	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/24/2016 16 07	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 16 07	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/24/2016 16 07	NP
Naphthalene	0 95	J	0 13	5 0	ug/L	224447	1	05/24/2016 16 07	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 16 07	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 16 07	NP
Surr: 4-Bromofluorobenzene	95 3		0	70-130	%REC	224447	1	05/24/2016 16 07	NP
Surr: Dibromofluoromethane	93 6		0	70-130	%REC	224447	1	05/24/2016 16 07	NP
Surr: Toluene-d8	94 1		0	70-130	%REC	224447	1	05/24/2016 16 07	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 16 07	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 16 07	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 16 07	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 16 07	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 16 07	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 16 07	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 16 07	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 16 07	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW38
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 1:38:00 PM
Lab ID:	1605G81-050	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 16 31	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/24/2016 16 31	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 16 31	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/24/2016 16 31	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 16 31	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 16 31	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 16 31	NP
Surr: 4-Bromofluorobenzene	93 5		0	70-130	%REC	224447	1	05/24/2016 16 31	NP
Surr: Dibromofluoromethane	98 2		0	70-130	%REC	224447	1	05/24/2016 16 31	NP
Surr: Toluene-d8	96 8		0	70-130	%REC	224447	1	05/24/2016 16 31	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 16 31	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 16 31	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 16 31	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 16 31	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 16 31	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 16 31	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 16 31	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 16 31	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW39
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 3:10:00 PM
Lab ID:	1605G81-051	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 16 54	NP
Benzene	BRL		0.14	1 0	ug/L	224447	1	05/24/2016 16 54	NP
Ethylbenzene	1 9		0 20	1 0	ug/L	224447	1	05/24/2016 16 54	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/24/2016 16 54	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 16 54	NP
Toluene	1 2		0 20	1 0	ug/L	224447	1	05/24/2016 16 54	NP
Xylenes, Total	4 9		0 30	1 0	ug/L	224447	1	05/24/2016 16 54	NP
Surr: 4-Bromofluorobenzene	94 8		0	70-130	%REC	224447	1	05/24/2016 16 54	NP
Surr: Dibromofluoromethane	97 8		0	70-130	%REC	224447	1	05/24/2016 16 54	NP
Surr: Toluene-d8	97 6		0	70-130	%REC	224447	1	05/24/2016 16 54	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 16 54	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 16 54	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 16 54	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 16 54	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 16 54	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 16 54	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 16 54	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 16 54	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW41
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 3:24:00 PM
Lab ID:	1605G81-052	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 17 17	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/24/2016 17 17	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 17 17	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/24/2016 17 17	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 17 17	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 17 17	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 17 17	NP
Surr: 4-Bromofluorobenzene	91 2		0	70-130	%REC	224447	1	05/24/2016 17 17	NP
Surr: Dibromofluoromethane	99 8		0	70-130	%REC	224447	1	05/24/2016 17 17	NP
Surr: Toluene-d8	97 7		0	70-130	%REC	224447	1	05/24/2016 17 17	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 17 17	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 17 17	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 17 17	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 17 17	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 17 17	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 17 17	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 17 17	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 17 17	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW42
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 2:47:00 PM
Lab ID:	1605G81-053	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 17 40	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/24/2016 17 40	NP
Ethylbenzene	0 31	J	0.20	1 0	ug/L	224447	1	05/24/2016 17 40	NP
Methyl tert-butyl ether	BRL		0.22	1 0	ug/L	224447	1	05/24/2016 17 40	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 17 40	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 17 40	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 17 40	NP
Surr: 4-Bromofluorobenzene	92		0	70-130	%REC	224447	1	05/24/2016 17 40	NP
Surr: Dibromofluoromethane	99 6		0	70-130	%REC	224447	1	05/24/2016 17 40	NP
Surr: Toluene-d8	98 4		0	70-130	%REC	224447	1	05/24/2016 17 40	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 17 40	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 17 40	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 17 40	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 17 40	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 17 40	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 17 40	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 17 40	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 17 40	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW43
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 8:59:00 AM
Lab ID:	1605G81-054	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 18 03	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/24/2016 18 03	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 18 03	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/24/2016 18 03	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 18 03	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 18 03	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 18 03	NP
Surr: 4-Bromofluorobenzene	90 8		0	70-130	%REC	224447	1	05/24/2016 18 03	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	224447	1	05/24/2016 18 03	NP
Surr: Toluene-d8	98		0	70-130	%REC	224447	1	05/24/2016 18 03	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 18 03	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 18 03	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	224447	1	05/24/2016 18 03	NP
Isopropyl ether	BRL		3.9	10	ug/L	224447	1	05/24/2016 18 03	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 18 03	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 18 03	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 18 03	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 18 03	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW44
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 9:27:00 AM
Lab ID:	1605G81-055	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1.0	ug/L	224447	1	05/24/2016 18 27	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/24/2016 18 27	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 18 27	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/24/2016 18 27	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 18 27	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 18 27	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 18 27	NP
Surr: 4-Bromofluorobenzene	89 4		0	70-130	%REC	224447	1	05/24/2016 18 27	NP
Surr: Dibromofluoromethane	98 5		0	70-130	%REC	224447	1	05/24/2016 18 27	NP
Surr: Toluene-d8	97 3		0	70-130	%REC	224447	1	05/24/2016 18 27	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 18 27	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 18 27	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 18 27	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 18 27	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 18 27	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 18 27	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 18 27	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 18 27	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW45
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 9:15:00 AM
Lab ID:	1605G81-056	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/24/2016 18 51	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/24/2016 18 51	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 18 51	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/24/2016 18 51	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/24/2016 18.51	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/24/2016 18 51	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/24/2016 18 51	NP
Surr: 4-Bromofluorobenzene	88 7		0	70-130	%REC	224447	1	05/24/2016 18 51	NP
Surr: Dibromofluoromethane	99 4		0	70-130	%REC	224447	1	05/24/2016 18 51	NP
Surr: Toluene-d8	99 1		0	70-130	%REC	224447	1	05/24/2016 18 51	NP
Oxygenates SW8260B					(SW5030B)				
3.3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/24/2016 18 51	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/24/2016 18 51	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/24/2016 18 51	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/24/2016 18 51	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/24/2016 18 51	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/24/2016 18 51	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/24/2016 18.51	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/24/2016 18 51	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW46
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 11:37:00 AM
Lab ID:	1605G81-057	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/25/2016 00 01	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/25/2016 00 01	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/25/2016 00 01	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/25/2016 00 01	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/25/2016 00 01	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/25/2016 00 01	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/25/2016 00 01	NP
Surr: 4-Bromofluorobenzene	93 6		0	70-130	%REC	224447	1	05/25/2016 00 01	NP
Surr: Dibromofluoromethane	97 1		0	70-130	%REC	224447	1	05/25/2016 00 01	NP
Surr: Toluene-d8	96 5		0	70-130	%REC	224447	1	05/25/2016 00 01	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/25/2016 00 01	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/25/2016 00 01	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/25/2016 00 01	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/25/2016 00 01	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/25/2016 00 01	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/25/2016 00 01	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/25/2016 00 01	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/25/2016 00 01	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW48
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 9:43:00 AM
Lab ID:	1605G81-058	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/25/2016 00 24	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/25/2016 00 24	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/25/2016 00 24	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/25/2016 00 24	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/25/2016 00 24	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/25/2016 00 24	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/25/2016 00 24	NP
Surr: 4-Bromofluorobenzene	93 6		0	70-130	%REC	224447	1	05/25/2016 00 24	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	224447	1	05/25/2016 00 24	NP
Surr: Toluene-d8	98 5		0	70-130	%REC	224447	1	05/25/2016 00 24	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/25/2016 00 24	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/25/2016 00 24	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/25/2016 00 24	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/25/2016 00 24	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/25/2016 00 24	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/25/2016 00 24	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/25/2016 00 24	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/25/2016 00 24	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW27
Project Name:	Clouds Chevron	**Collection Date:**	5/17/2016 1:50:00 PM
Lab ID:	1605G81-059	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224447	1	05/25/2016 00 47	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/25/2016 00 47	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/25/2016 00 47	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/25/2016 00 47	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/25/2016 00 47	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/25/2016 00 47	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/25/2016 00 47	NP
Surr: 4-Bromofluorobenzene	90 9		0	70-130	%REC	224447	1	05/25/2016 00 47	NP
Surr: Dibromofluoromethane	97 3		0	70-130	%REC	224447	1	05/25/2016 00 47	NP
Surr: Toluene-d8	96 1		0	70-130	%REC	224447	1	05/25/2016 00 47	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/25/2016 00 47	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/25/2016 00 47	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/25/2016 00 47	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/25/2016 00 47	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/25/2016 00 47	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/25/2016 00 47	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/25/2016 00 47	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/25/2016 00 47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW28
Project Name:	Clouds Chevron	**Collection Date:**	5/17/2016 1:56:00 PM
Lab ID:	1605G81-060	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1.2-Dichloroethane	BRL		0 24	1.0	ug/L	224447	1	05/25/2016 01 11	NP
Benzene	BRL		0 14	1 0	ug/L	224447	1	05/25/2016 01 11	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224447	1	05/25/2016 01 11	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224447	1	05/25/2016 01 11	NP
Naphthalene	BRL		0 13	5 0	ug/L	224447	1	05/25/2016 01 11	NP
Toluene	BRL		0 20	1 0	ug/L	224447	1	05/25/2016 01 11	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224447	1	05/25/2016 01 11	NP
Surr: 4-Bromofluorobenzene	92 7		0	70-130	%REC	224447	1	05/25/2016 01 11	NP
Surr: Dibromofluoromethane	97 5		0	70-130	%REC	224447	1	05/25/2016 01 11	NP
Surr: Toluene-d8	96 2		0	70-130	%REC	224447	1	05/25/2016 01 11	NP
Oxygenates SW8260B					(SW5030B)				
3.3-Dimethyl-1-butanol	BRL		44	100	ug/L	224447	1	05/25/2016 01 11	NP
Ethanol	BRL		25	100	ug/L	224447	1	05/25/2016 01 11	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224447	1	05/25/2016 01 11	NP
Isopropyl ether	BRL		3 9	10	ug/L	224447	1	05/25/2016 01 11	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224447	1	05/25/2016 01 11	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224447	1	05/25/2016 01 11	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224447	1	05/25/2016 01 11	NP
tert-Butyl formate	BRL		31	100	ug/L	224447	1	05/25/2016 01 11	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW29
Project Name:	Clouds Chevron	**Collection Date:**	5/17/2016 1:47:00 PM
Lab ID:	1605G81-061	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224448	1	05/25/2016 01 34	NP
Benzene	BRL		0 14	1 0	ug/L	224448	1	05/25/2016 01 34	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224448	1	05/25/2016 01 34	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224448	1	05/25/2016 01 34	NP
Naphthalene	BRL		0 13	5 0	ug/L	224448	1	05/25/2016 01 34	NP
Toluene	BRL		0 20	1 0	ug/L	224448	1	05/25/2016 01 34	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224448	1	05/25/2016 01 34	NP
Surr: 4-Bromofluorobenzene	92 5		0	70-130	%REC	224448	1	05/25/2016 01 34	NP
Surr: Dibromofluoromethane	97 1		0	70-130	%REC	224448	1	05/25/2016 01 34	NP
Surr: Toluene-d8	96 4		0	70-130	%REC	224448	1	05/25/2016 01 34	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224448	1	05/25/2016 01 34	NP
Ethanol	BRL		25	100	ug/L	224448	1	05/25/2016 01 34	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224448	1	05/25/2016 01 34	NP
Isopropyl ether	BRL		3 9	10	ug/L	224448	1	05/25/2016 01 34	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224448	1	05/25/2016 01 34	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224448	1	05/25/2016 01 34	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224448	1	05/25/2016 01 34	NP
tert-Butyl formate	BRL		31	100	ug/L	224448	1	05/25/2016 01 34	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW30
Project Name:	Clouds Chevron	**Collection Date:**	5/15/2016 5:53:00 PM
Lab ID:	1605G81-062	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224448	1	05/25/2016 01 58	NP
Benzene	BRL		0 14	1 0	ug/L	224448	1	05/25/2016 01 58	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224448	1	05/25/2016 01 58	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224448	1	05/25/2016 01 58	NP
Naphthalene	BRL		0 13	5 0	ug/L	224448	1	05/25/2016 01 58	NP
Toluene	BRL		0 20	1 0	ug/L	224448	1	05/25/2016 01 58	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224448	1	05/25/2016 01 58	NP
Surr: 4-Bromofluorobenzene	91.8		0	70-130	%REC	224448	1	05/25/2016 01 58	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	224448	1	05/25/2016 01 58	NP
Surr: Toluene-d8	97 8		0	70-130	%REC	224448	1	05/25/2016 01 58	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224448	1	05/25/2016 01 58	NP
Ethanol	BRL		25	100	ug/L	224448	1	05/25/2016 01 58	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224448	1	05/25/2016 01 58	NP
Isopropyl ether	BRL		3 9	10	ug/L	224448	1	05/25/2016 01 58	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224448	1	05/25/2016 01 58	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224448	1	05/25/2016 01 58	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224448	1	05/25/2016 01 58	NP
tert-Butyl formate	BRL		31	100	ug/L	224448	1	05/25/2016 01 58	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW31
Project Name:	Clouds Chevron	**Collection Date:**	5/17/2016 5:01:00 PM
Lab ID:	1605G81-063	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224448	1	05/25/2016 02 22	NP
Benzene	BRL		0 14	1 0	ug/L	224448	1	05/25/2016 02 22	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224448	1	05/25/2016 02 22	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224448	1	05/25/2016 02 22	NP
Naphthalene	BRL		0 13	5 0	ug/L	224448	1	05/25/2016 02 22	NP
Toluene	BRL		0 20	1 0	ug/L	224448	1	05/25/2016 02 22	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224448	1	05/25/2016 02 22	NP
Surr: 4-Bromofluorobenzene	88 7		0	70-130	%REC	224448	1	05/25/2016 02 22	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	224448	1	05/25/2016 02 22	NP
Surr: Toluene-d8	97 4		0	70-130	%REC	224448	1	05/25/2016 02 22	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224448	1	05/25/2016 02 22	NP
Ethanol	BRL		25	100	ug/L	224448	1	05/25/2016 02 22	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224448	1	05/25/2016 02 22	NP
Isopropyl ether	BRL		3 9	10	ug/L	224448	1	05/25/2016 02 22	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224448	1	05/25/2016 02 22	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224448	1	05/25/2016 02 22	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224448	1	05/25/2016 02 22	NP
tert-Butyl formate	BRL		31	100	ug/L	224448	1	05/25/2016 02 22	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW32
Project Name:	Clouds Chevron	**Collection Date:**	5/17/2016 4:33:00 PM
Lab ID:	1605G81-064	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224448	1	05/25/2016 02 45	NP
Benzene	BRL		0 14	1 0	ug/L	224448	1	05/25/2016 02 45	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224448	1	05/25/2016 02 45	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224448	1	05/25/2016 02 45	NP
Naphthalene	2 8	J	0 13	5 0	ug/L	224448	1	05/25/2016 02 45	NP
Toluene	BRL		0.20	1 0	ug/L	224448	1	05/25/2016 02 45	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224448	1	05/25/2016 02 45	NP
Surr: 4-Bromofluorobenzene	93		0	70-130	%REC	224448	1	05/25/2016 02 45	NP
Surr: Dibromofluoromethane	98 6		0	70-130	%REC	224448	1	05/25/2016 02 45	NP
Surr: Toluene-d8	98 6		0	70-130	%REC	224448	1	05/25/2016 02 45	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224448	1	05/25/2016 02 45	NP
Ethanol	BRL		25	100	ug/L	224448	1	05/25/2016 02 45	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224448	1	05/25/2016 02 45	NP
Isopropyl ether	BRL		3 9	10	ug/L	224448	1	05/25/2016 02 45	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224448	1	05/25/2016 02 45	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224448	1	05/25/2016 02 45	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224448	1	05/25/2016 02 45	NP
tert-Butyl formate	BRL		31	100	ug/L	224448	1	05/25/2016 02 45	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW33
Project Name:	Clouds Chevron	**Collection Date:**	5/15/2016 8:29:00 AM
Lab ID:	1605G81-065	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224448	1	05/25/2016 08 38	NP
Benzene	260		6 8	50	ug/L	224448	50	05/24/2016 13 00	NP
Ethylbenzene	1400		10	50	ug/L	224448	50	05/24/2016 13 00	NP
Methyl tert-butyl ether	4 3		0 22	1 0	ug/L	224448	1	05/25/2016 08 38	NP
Naphthalene	390		6 4	250	ug/L	224448	50	05/24/2016 13 00	NP
Toluene	3200		10	50	ug/L	224448	50	05/24/2016 13 00	NP
Xylenes, Total	4700		15	50	ug/L	224448	50	05/24/2016 13 00	NP
Surr: 4-Bromofluorobenzene	95 9		0	70-130	%REC	224448	50	05/24/2016 13 00	NP
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	224448	1	05/25/2016 08 38	NP
Surr: Dibromofluoromethane	97 5		0	70-130	%REC	224448	50	05/24/2016 13 00	NP
Surr: Dibromofluoromethane	88 8		0	70-130	%REC	224448	1	05/25/2016 08 38	NP
Surr: Toluene-d8	96 6		0	70-130	%REC	224448	50	05/24/2016 13 00	NP
Surr: Toluene-d8	95 6		0	70-130	%REC	224448	1	05/25/2016 08 38	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224448	1	05/25/2016 08 38	NP
Ethanol	BRL		25	100	ug/L	224448	1	05/25/2016 08 38	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224448	1	05/25/2016 08 38	NP
Isopropyl ether	11		3 9	10	ug/L	224448	1	05/25/2016 08 38	NP
tert-Amyl alcohol	2100		43	100	ug/L	224448	1	05/25/2016 08 38	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224448	1	05/25/2016 08 38	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224448	1	05/25/2016 08 38	NP
tert-Butyl formate	BRL		31	100	ug/L	224448	1	05/25/2016 08 38	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW34
Project Name:	Clouds Chevron	**Collection Date:**	5/15/2016 4:51:00 PM
Lab ID:	1605G81-066	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224448	1	05/25/2016 03 09	NP
Benzene	BRL		0 14	1 0	ug/L	224448	1	05/25/2016 03 09	NP
Ethylbenzene	BRL		0 20	1 0	ug/L	224448	1	05/25/2016 03 09	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224448	1	05/25/2016 03 09	NP
Naphthalene	BRL		0 13	5 0	ug/L	224448	1	05/25/2016 03 09	NP
Toluene	BRL		0 20	1 0	ug/L	224448	1	05/25/2016 03 09	NP
Xylenes, Total	BRL		0 30	1 0	ug/L	224448	1	05/25/2016 03 09	NP
Surr: 4-Bromofluorobenzene	90		0	70-130	%REC	224448	1	05/25/2016 03 09	NP
Surr: Dibromofluoromethane	98 9		0	70-130	%REC	224448	1	05/25/2016 03 09	NP
Surr: Toluene-d8	96 1		0	70-130	%REC	224448	1	05/25/2016 03 09	NP
Oxygenates SW8260B					(SW5030B)				
3.3-Dimethyl-1-butanol	BRL		44	100	ug/L	224448	1	05/25/2016 03 09	NP
Ethanol	BRL		25	100	ug/L	224448	1	05/25/2016 03 09	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	224448	1	05/25/2016 03 09	NP
Isopropyl ether	BRL		3.9	10	ug/L	224448	1	05/25/2016 03 09	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224448	1	05/25/2016 03 09	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224448	1	05/25/2016 03 09	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224448	1	05/25/2016 03 09	NP
tert-Butyl formate	BRL		31	100	ug/L	224448	1	05/25/2016 03 09	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW35
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 6:19:00 PM
Lab ID:	1605G81-067	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224448	1	05/25/2016 03 33	NP
Benzene	130		0 14	1 0	ug/L	224448	1	05/25/2016 03 33	NP
Ethylbenzene	23		0 20	1 0	ug/L	224448	1	05/25/2016 03 33	NP
Methyl tert-butyl ether	4 6		0 22	1 0	ug/L	224448	1	05/25/2016 03 33	NP
Naphthalene	46		0 13	5 0	ug/L	224448	1	05/25/2016 03 33	NP
Toluene	130		0 20	1 0	ug/L	224448	1	05/25/2016 03 33	NP
Xylenes, Total	490		0 30	1 0	ug/L	224448	1	05/25/2016 03 33	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	224448	1	05/25/2016 03 33	NP
Surr: Dibromofluoromethane	95 1		0	70-130	%REC	224448	1	05/25/2016 03 33	NP
Surr: Toluene-d8	99 8		0	70-130	%REC	224448	1	05/25/2016 03 33	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224448	1	05/25/2016 03 33	NP
Ethanol	BRL		25	100	ug/L	224448	1	05/25/2016 03 33	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224448	1	05/25/2016 03 33	NP
Isopropyl ether	8 6	J	3 9	10	ug/L	224448	1	05/25/2016 03 33	NP
tert-Amyl alcohol	120		43	100	ug/L	224448	1	05/25/2016 03 33	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224448	1	05/25/2016 03 33	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224448	1	05/25/2016 03 33	NP
tert-Butyl formate	BRL		31	100	ug/L	224448	1	05/25/2016 03 33	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW36
Project Name:	Clouds Chevron	**Collection Date:**	5/15/2016 4:01:00 PM
Lab ID:	1605G81-068	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		0.24	1 0	ug/L	224448	1	05/25/2016 03 57	NP
Benzene	1 0		0 14	1 0	ug/L	224448	1	05/25/2016 03 57	NP
Ethylbenzene	14		0 20	1 0	ug/L	224448	1	05/25/2016 03 57	NP
Methyl tert-butyl ether	BRL		0 22	1 0	ug/L	224448	1	05/25/2016 03 57	NP
Naphthalene	54		0 13	5 0	ug/L	224448	1	05/25/2016 03 57	NP
Toluene	BRL		0 20	1 0	ug/L	224448	1	05/25/2016 03 57	NP
Xylenes, Total	0 47	J	0 30	1 0	ug/L	224448	1	05/25/2016 03 57	NP
Surr: 4-Bromofluorobenzene	94 6		0	70-130	%REC	224448	1	05/25/2016 03 57	NP
Surr: Dibromofluoromethane	96 3		0	70-130	%REC	224448	1	05/25/2016 03 57	NP
Surr: Toluene-d8	99 4		0	70-130	%REC	224448	1	05/25/2016 03 57	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224448	1	05/25/2016 03 57	NP
Ethanol	BRL		25	100	ug/L	224448	1	05/25/2016 03 57	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224448	1	05/25/2016 03 57	NP
Isopropyl ether	BRL		3 9	10	ug/L	224448	1	05/25/2016 03 57	NP
tert-Amyl alcohol	BRL		43	100	ug/L	224448	1	05/25/2016 03 57	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224448	1	05/25/2016 03 57	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224448	1	05/25/2016 03 57	NP
tert-Butyl formate	BRL		31	100	ug/L	224448	1	05/25/2016 03 57	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DUPLICATE (PW1R)
Project Name:	Clouds Chevron	**Collection Date:**	5/18/2016 1:12:00 PM
Lab ID:	1605G81-069	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224448	1	05/25/2016 04 20	NP
Benzene	210		1 4	10	ug/L	224448	10	05/25/2016 14 23	NP
Ethylbenzene	180		0 20	1 0	ug/L	224448	1	05/25/2016 04 20	NP
Methyl tert-butyl ether	7 0		0 22	1 0	ug/L	224448	1	05/25/2016 04 20	NP
Naphthalene	170		0 13	5 0	ug/L	224448	1	05/25/2016 04 20	NP
Toluene	1200		2 0	10	ug/L	224448	10	05/25/2016 14 23	NP
Xylenes, Total	3600		3 0	10	ug/L	224448	10	05/25/2016 14 23	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	224448	10	05/25/2016 14 23	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	224448	1	05/25/2016 04 20	NP
Surr: Dibromofluoromethane	89 7		0	70-130	%REC	224448	1	05/25/2016 04 20	NP
Surr: Dibromofluoromethane	94 1		0	70-130	%REC	224448	10	05/25/2016 14 23	NP
Surr: Toluene-d8	97 9		0	70-130	%REC	224448	1	05/25/2016 04 20	NP
Surr: Toluene-d8	97 3		0	70-130	%REC	224448	10	05/25/2016 14 23	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224448	1	05/25/2016 04 20	NP
Ethanol	BRL		25	100	ug/L	224448	1	05/25/2016 04 20	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224448	1	05/25/2016 04 20	NP
Isopropyl ether	5 1	J	3 9	10	ug/L	224448	1	05/25/2016 04 20	NP
tert-Amyl alcohol	370		43	100	ug/L	224448	1	05/25/2016 04 20	NP
tert-Amyl methyl ether	BRL		3 5	10	ug/L	224448	1	05/25/2016 04 20	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224448	1	05/25/2016 04 20	NP
tert-Butyl formate	BRL		31	100	ug/L	224448	1	05/25/2016 04 20	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 26-May-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DUPLICATE (35)
Project Name:	Clouds Chevron	**Collection Date:**	5/16/2016 6:14:00 PM
Lab ID:	1605G81-070	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B				(SW5030B)					
1,2-Dichloroethane	BRL		0 24	1 0	ug/L	224448	1	05/25/2016 04 43	NP
Benzene	200		0 14	1 0	ug/L	224448	1	05/25/2016 04 43	NP
Ethylbenzene	39		0 20	1 0	ug/L	224448	1	05/25/2016 04 43	NP
Methyl tert-butyl ether	7 6		0 22	1 0	ug/L	224448	1	05/25/2016 04 43	NP
Naphthalene	88		0 13	5 0	ug/L	224448	1	05/25/2016 04 43	NP
Toluene	210		2 0	10	ug/L	224448	10	05/25/2016 14 47	NP
Xylenes, Total	760		3 0	10	ug/L	224448	10	05/25/2016 14 47	NP
Surr: 4-Bromofluorobenzene	98 4		0	70-130	%REC	224448	10	05/25/2016 14 47	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	224448	1	05/25/2016 04 43	NP
Surr: Dibromofluoromethane	93 1		0	70-130	%REC	224448	1	05/25/2016 04 43	NP
Surr: Dibromofluoromethane	95 4		0	70-130	%REC	224448	10	05/25/2016 14 47	NP
Surr: Toluene-d8	95 4		0	70-130	%REC	224448	10	05/25/2016 14 47	NP
Surr: Toluene-d8	96 7		0	70-130	%REC	224448	1	05/25/2016 04 43	NP
Oxygenates SW8260B				(SW5030B)					
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	224448	1	05/25/2016 04 43	NP
Ethanol	BRL		25	100	ug/L	224448	1	05/25/2016 04 43	NP
Ethyl tert-butyl ether	BRL		3 5	100	ug/L	224448	1	05/25/2016 04 43	NP
Isopropyl ether	13		3 9	10	ug/L	224448	1	05/25/2016 04 43	NP
tert-Amyl alcohol	210		43	100	ug/L	224448	1	05/25/2016 04 43	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	224448	1	05/25/2016 04 43	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	224448	1	05/25/2016 04 43	NP
tert-Butyl formate	BRL		31	100	ug/L	224448	1	05/25/2016 04 43	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Access-Crawford Work Order Number 1605681

Checklist completed by Parth Masudi 5/20/16
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition?	Yes ✓	No __	Not Present __
Custody seals intact on shipping container/cooler?	Yes __	No __	Not Present ✓
Custody seals intact on sample bottles?	Yes __	No __	Not Present ✓
Container/Temp Blank temperature in compliance? (0°≤6°C)*	Yes ✓	No __	

Cooler #1 4.1° Cooler #2 2.6° Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present?	Yes ✓	No __
Chain of custody signed when relinquished and received?	Yes ✓	No __
Chain of custody agrees with sample labels?	Yes __	No ✓
Samples in proper container/bottle?	Yes ✓	No __
Sample containers intact?	Yes __	No ✓
Sufficient sample volume for indicated test?	Yes ✓	No __
All samples received within holding time?	Yes ✓	No __
Was TAT marked on the COC?	Yes ✓	No __
Proceed with Standard TAT as per project history?	Yes __	No __ Not Applicable ✓
Water - VOA vials have zero headspace?	No VOA vials submitted __	Yes __ No ✓
Water - pH acceptable upon receipt?	Yes ✓	No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good __ Other(Explain) (3) broken vials

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 31-May-16

Client:	Crawford Environmental Services
Project Name:	Clouds Chevron
Lab Order:	1605G81

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1605G81-001A	MW51	5/18/2016 2:05:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-001A	MW51	5/18/2016 2:05:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-002A	MW54	5/18/2016 12:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-002A	MW54	5/18/2016 12:30:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-003A	MW55	5/18/2016 12:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-003A	MW55	5/18/2016 12:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/25/2016
1605G81-003A	MW55	5/18/2016 12:20:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-004A	MW56	5/18/2016 12:50:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-004A	MW56	5/18/2016 12:50:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-005A	MW59	5/18/2016 12:40:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-005A	MW59	5/18/2016 12:40:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-005A	MW59	5/18/2016 12:40:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-006A	MW63	5/18/2016 4:02:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-006A	MW63	5/18/2016 4:02:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-007A	MW67	5/18/2016 2:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-007A	MW67	5/18/2016 2:15:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-008A	MW70	5/18/2016 3:48:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-008A	MW70	5/18/2016 3:48:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-009A	MW5AR	5/15/2016 11:21:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-009A	MW5AR	5/15/2016 11:21:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-010A	PW-1R	5/18/2016 1:12:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-010A	PW-1R	5/18/2016 1:12:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/25/2016
1605G81-010A	PW-1R	5/18/2016 1:12:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/25/2016
1605G81-011A	MW-52	5/18/2016 2:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-011A	MW-52	5/18/2016 2:10:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-012A	MW-41W	5/18/2016 3:35:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-012A	MW-41W	5/18/2016 3:35:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-013A	FB1	5/15/2016 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-013A	FB1	5/15/2016 12:00:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/23/2016

Analytical Environmental Services, Inc

Date: 31-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Lab Order: 1605G81

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1605G81-014A	FB2	5/16/2016 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-014A	FB2	5/16/2016 12:00:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-015A	FB3	5/17/2016 12 00 00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15 00AM	05/23/2016
1605G81-015A	FB3	5/17/2016 12:00:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-016A	FB4	5/18/2016 12.00 00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-016A	FB4	5/18/2016 12:00:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-017A	TB1	5/20/2016 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-017A	TB1	5/20/2016 12:00:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15 00AM	05/23/2016
1605G81-018A	TB2	5/20/2016 12:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-018A	TB2	5/20/2016 12:00:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/23/2016
1605G81-019A	DUPLICATE (MW9)	5/16/2016 12:38:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15 00AM	05/23/2016
1605G81-019A	DUPLICATE (MW9)	5/16/2016 12:38:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/25/2016
1605G81-019A	DUPLICATE (MW9)	5/16/2016 12:38:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/25/2016
1605G81-020A	DW01	5/16/2016 12:16:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-020A	DW01	5/16/2016 12:16:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:15:00AM	05/24/2016
1605G81-021A	DW02	5/16/2016 11:01:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-021A	DW02	5/16/2016 11:01:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-022A	DW03	5/18/2016 12:57:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38 00AM	05/23/2016
1605G81-022A	DW03	5/18/2016 12:57 00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/25/2016
1605G81-022A	DW03	5/18/2016 12:57:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38:00AM	05/23/2016
1605G81-023A	DW04	5/18/2016 1:18:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-023A	DW04	5/18/2016 1:18:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-024A	DW05	5/16/2016 1:59:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-024A	DW05	5/16/2016 1:59.00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/25/2016
1605G81-024A	DW05	5/16/2016 1:59:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-025A	DW06	5/18/2016 2:54:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-025A	DW06	5/18/2016 2 54:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-026A	DW07	5/18/2016 10:57:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38 00AM	05/24/2016
1605G81-026A	DW07	5/18/2016 10:57:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10 38 00AM	05/24/2016

Analytical Environmental Services, Inc

Date: 31-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Lab Order: 1605G81

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1605G81-027A	DW09	5/18/2016 12:18:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10 38 00AM	05/24/2016
1605G81-027A	DW09	5/18/2016 12:18.00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38·00AM	05/24/2016
1605G81-028A	SW01	5/18/2016 12:45.00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-028A	SW01	5/18/2016 12·45:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-029A	MW11	5/18/2016 1:50:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10 38:00AM	05/24/2016
1605G81-029A	MW11	5/18/2016 1:50:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10.38:00AM	05/24/2016
1605G81-030A	MW12	5/18/2016 10.06:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10.38:00AM	05/24/2016
1605G81-030A	MW12	5/18/2016 10·06:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10 38·00AM	05/25/2016
1605G81-030A	MW12	5/18/2016 10:06:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10·38 00AM	05/25/2016
1605G81-031A	MW13	5/16/2016 12:12:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10·38:00AM	05/24/2016
1605G81-031A	MW13	5/16/2016 12:12:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38 00AM	05/24/2016
1605G81-032A	MW16	5/18/2016 9:58:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38·00AM	05/24/2016
1605G81-032A	MW16	5/18/2016 9:58.00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-033A	MW18	5/15/2016 12:31:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38.00AM	05/24/2016
1605G81-033A	MW18	5/15/2016 12:31:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-034A	MW19	5/18/2016 1:26:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/23/2016
1605G81-034A	MW19	5/18/2016 1:26:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/25/2016
1605G81-034A	MW19	5/18/2016 1:26·00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38:00AM	05/23/2016
1605G81-035A	MW20	5/15/2016 9:21:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/23/2016
1605G81-035A	MW20	5/15/2016 9:21:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/25/2016
1605G81-035A	MW20	5/15/2016 9:21:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10·38:00AM	05/23/2016
1605G81-036A	MW22	5/15/2016 10:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10 38:00AM	05/24/2016
1605G81-036A	MW22	5/15/2016 10:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10 38:00AM	05/25/2016
1605G81-036A	MW22	5/15/2016 10:20:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10·38:00AM	05/24/2016
1605G81-037A	MW23	5/18/2016 1:42 00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-037A	MW23	5/18/2016 1:42:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10 38:00AM	05/24/2016
1605G81-038A	MW26	5/17/2016 3:47:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10·38:00AM	05/24/2016
1605G81-038A	MW26	5/17/2016 3:47:00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10·38:00AM	05/24/2016
1605G81-039A	MW-2	5/16/2016 12:52:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10 38:00AM	05/24/2016

Analytical Environmental Services, Inc

Date: 31-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Lab Order: 1605G81

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1605G81-039A	MW-2	5/16/2016 12 52 00PM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-040A	MW-3	5/16/2016 9.50 00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-040A	MW-3	5/16/2016 9:50:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/23/2016 10:38:00AM	05/25/2016
1605G81-040A	MW-3	5/16/2016 9:50:00AM	Groundwater	Oxygenates by GC/MS		5/23/2016 10:38:00AM	05/24/2016
1605G81-041A	MW-4	5/16/2016 10:01:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-041A	MW-4	5/16/2016 10:01:00AM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-042A	MW-5	5/16/2016 1:50:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-042A	MW-5	5/16/2016 1:50 00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-043A	MW-6	5/17/2016 3:36.00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10.36:00AM	05/24/2016
1605G81-043A	MW-6	5/17/2016 3:36:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-044A	MW-7	5/16/2016 2.15.00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-044A	MW-7	5/16/2016 2 15 00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-045A	MW-8	5/17/2016 4:18:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-045A	MW-8	5/17/2016 4.18:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-046A	MW-9	5/16/2016 12:38:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/25/2016
1605G81-046A	MW-9	5/16/2016 12:38:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36 00AM	05/25/2016
1605G81-047A	MW-10	5/18/2016 10:28:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36 00AM	05/24/2016
1605G81-047A	MW-10	5/18/2016 10:28:00AM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-048A	DUPLICATE A	5/18/2016 10.30.00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10 36:00AM	05/24/2016
1605G81-048A	DUPLICATE A	5/18/2016 10:30 00AM	Groundwater	Oxygenates by GC/MS		5/24/2016 10 36:00AM	05/24/2016
1605G81-049A	MW37	5/16/2016 5:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-049A	MW37	5/16/2016 5:25.00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-050A	MW38	5/18/2016 1:38:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10.36:00AM	05/24/2016
1605G81-050A	MW38	5/18/2016 1:38:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-051A	MW39	5/18/2016 3 10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-051A	MW39	5/18/2016 3 10:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-052A	MW41	5/18/2016 3:24:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-052A	MW41	5/18/2016 3:24:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36 00AM	05/24/2016
1605G81-053A	MW42	5/18/2016 2:47:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10 36 00AM	05/24/2016

Analytical Environmental Services, Inc

Date: 31-May-16

Client:	Crawford Environmental Services
Project Name:	Clouds Chevron
Lab Order:	1605G81

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1605G81-053A	MW42	5/18/2016 2:47:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-054A	MW43	5/18/2016 8:59:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-054A	MW43	5/18/2016 8:59:00AM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-055A	MW44	5/18/2016 9:27:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-055A	MW44	5/18/2016 9:27:00AM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-056A	MW45	5/18/2016 9:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-056A	MW45	5/18/2016 9:15:00AM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/24/2016
1605G81-057A	MW46	5/16/2016 11:37:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/25/2016
1605G81-057A	MW46	5/16/2016 11:37:00AM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/25/2016
1605G81-058A	MW48	5/18/2016 9:43:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/25/2016
1605G81-058A	MW48	5/18/2016 9:43:00AM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/25/2016
1605G81-059A	MW27	5/17/2016 1:50:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/25/2016
1605G81-059A	MW27	5/17/2016 1:50:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/25/2016
1605G81-060A	MW28	5/17/2016 1:56:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 10:36:00AM	05/25/2016
1605G81-060A	MW28	5/17/2016 1:56:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 10:36:00AM	05/25/2016
1605G81-061A	MW29	5/17/2016 1:47:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-061A	MW29	5/17/2016 1:47:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-062A	MW30	5/15/2016 5:53:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-062A	MW30	5/15/2016 5:53:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-063A	MW31	5/17/2016 5:01:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-063A	MW31	5/17/2016 5:01:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-064A	MW32	5/17/2016 4:33:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-064A	MW32	5/17/2016 4:33:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-065A	MW33	5/15/2016 8:29:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 11:00:00AM	05/24/2016
1605G81-065A	MW33	5/15/2016 8:29:00AM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-065A	MW33	5/15/2016 8:29:00AM	Groundwater	Oxygenates by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-066A	MW34	5/15/2016 4:51:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-066A	MW34	5/15/2016 4:51:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-067A	MW35	5/16/2016 6:19:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 11:00:00AM	05/25/2016

Analytical Environmental Services, Inc

Date: 31-May-16

Client:	Crawford Environmental Services
Project Name:	Clouds Chevron
Lab Order:	1605G81

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1605G81-067A	MW35	5/16/2016 6:19:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-068A	MW36	5/15/2016 4:01:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-068A	MW36	5/15/2016 4:01:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-069A	DUPLICATE (PW1R)	5/18/2016 1:12:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-069A	DUPLICATE (PW1R)	5/18/2016 1:12:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-070A	DUPLICATE (35)	5/16/2016 6:14:00PM	Groundwater	Volatile Organic Compounds by GC/MS		5/24/2016 11:00:00AM	05/25/2016
1605G81-070A	DUPLICATE (35)	5/16/2016 6:14:00PM	Groundwater	Oxygenates by GC/MS		5/24/2016 11:00:00AM	05/25/2016

Analytical Environmental Services, Inc

Date: 26-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224399

Sample ID: **MB-224399**	Client ID:			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **224399**	Analysis Date: **05/23/2016**	Seq No: **6838693**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	46.19	0	50.00		92.4	70	130				
Surr: Dibromofluoromethane	49.65	0	50.00		99.3	70	130				
Surr: Toluene-d8	48.60	0	50.00		97.2	70	130				

Sample ID: **MB-224399**	Client ID:			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **MBLK**	TestCode: **Oxygenates SW8260B**			BatchID: **224399**	Analysis Date: **05/23/2016**	Seq No: **6838916**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-224399**	Client ID:			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **224399**	Analysis Date: **05/23/2016**	Seq No: **6838689**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 26-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224399

Sample ID: **LCS-224399**	Client ID:			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**			BatchID: **224399**	Analysis Date: **05/23/2016**	Seq No: **6838689**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	60.00	1.0	50.00		120	70	130				
Benzene	54.88	1.0	50.00		110	70	130				
Ethylbenzene	58.06	1.0	50.00		116	70	130				
Naphthalene	63.45	5.0	50.00		127	70	130				
Toluene	54.22	1.0	50.00		108	70	130				
Xylenes, Total	176.5	1.0	150.0		118	70	130				
Surr: 4-Bromofluorobenzene	50.60	0	50.00		101	70	130				
Surr: Dibromofluoromethane	50.65	0	50.00		101	70	130				
Surr: Toluene-d8	47.92	0	50.00		95.8	70	130				

Sample ID: **LCS-224399**	Client ID:			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **LCS**	TestCode: **Oxygenates** **SW8260B**			BatchID: **224399**	Analysis Date: **05/23/2016**	Seq No: **6838913**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	862.2	100	1000		86.2	70	130				
Ethanol	978.0	100	1000		97.8	70	130				
Ethyl tert-butyl ether	251.1	100	200.0		126	70	130				
Isopropyl ether	246.3	10	200.0		123	70	130				
tert-Amyl alcohol	905.0	100	1000		90.5	70	130				
tert-Amyl methyl ether	246.2	10	200.0		123	70	130				
tert-Butyl Alcohol	897.7	100	1000		89.8	70	130				
tert-Butyl formate	1113	100	1000		111	70	130				

Sample ID: **1605G81-003AMS**	Client ID: **MW55**			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**			BatchID: **224399**	Analysis Date: **05/23/2016**	Seq No: **6838712**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	5518	100	5000		110	66.5	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224399

Sample ID: **1605G81-003AMS**	Client ID: **MW55**			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **224399**	Analysis Date: **05/23/2016**	Seq No: **6838712**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	6426	100	5000	930.0	110	70.1	132				
Ethylbenzene	6075	100	5000	240.0	117	77.8	129				
Naphthalene	5953	500	5000		119	50.2	134				
Toluene	5427	100	5000	54.00	107	70.1	133				
Xylenes, Total	17410	100	15000	181.0	115	74.7	133				
Surr: 4-Bromofluorobenzene	5174	0	5000		103	70	130				
Surr: Dibromofluoromethane	5080	0	5000		102	70	130				
Surr: Toluene-d8	4891	0	5000		97.8	70	130				

Sample ID: **1605G81-003AMS**	Client ID: **MW55**			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **MS**	TestCode: **Oxygenates SW8260B**			BatchID: **224399**	Analysis Date: **05/23/2016**	Seq No: **6838941**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	75350	10000	100000		75.4	61.1	139				
Ethanol	57850	10000	100000		57.8	61.7	144				S
Ethyl tert-butyl ether	22730	10000	20000		114	69.6	130				
Isopropyl ether	23150	1000	20000		116	70.1	134				
tert-Amyl alcohol	75440	10000	100000		75.4	66.5	145				
tert-Amyl methyl ether	21770	1000	20000		109	70.1	127				
tert-Butyl Alcohol	66270	10000	100000		66.3	70	149				S
tert-Butyl formate	102500	10000	100000		102	41.5	139				

Sample ID: **1605G81-003AMSD**	Client ID: **MW55**			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **224399**	Analysis Date: **05/23/2016**	Seq No: **6838713**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	5482	100	5000		110	66.5	133	5518	0.655	20	
Benzene	6284	100	5000	930.0	107	70.1	132	6426	2.23	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc **Date:** 26-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224399

Sample ID: **1605G81-003AMSD** Client ID: **MW55** Units: **ug/L** Prep Date: **05/23/2016** Run No: **317413**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **224399** Analysis Date: **05/23/2016** Seq No: **6838713**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	6060	100	5000	240.0	116	77.8	129	6075	0.247	20	
Naphthalene	6024	500	5000		120	50.2	134	5953	1.19	32.5	
Toluene	5299	100	5000	54.00	105	70.1	133	5427	2.39	20	
Xylenes, Total	17350	100	15000	181.0	114	74.7	133	17410	0.305	22.7	
Surr: 4-Bromofluorobenzene	5107	0	5000		102	70	130	5174	0	0	
Surr: Dibromofluoromethane	4985	0	5000		99.7	70	130	5080	0	0	
Surr: Toluene-d8	4764	0	5000		95.3	70	130	4891	0	0	

Sample ID: **1605G81-003AMSD** Client ID: **MW55** Units: **ug/L** Prep Date: **05/23/2016** Run No: **317413**
SampleType: **MSD** TestCode: **Oxygenates SW8260B** BatchID: **224399** Analysis Date: **05/23/2016** Seq No: **6838942**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	82100	10000	100000		82.1	61.1	139	75350	8.57	24.9	
Ethanol	83710	10000	100000		83.7	61.7	144	57850	36.5	27.9	R
Ethyl tert-butyl ether	22960	10000	20000		115	69.6	130	22730	1.00	20	
Isopropyl ether	22600	1000	20000		113	70.1	134	23150	2.41	20	
tert-Amyl alcohol	84930	10000	100000		84.9	66.5	145	75440	11.8	24.8	
tert-Amyl methyl ether	22010	1000	20000		110	70.1	127	21770	1.09	20	
tert-Butyl Alcohol	82460	10000	100000		82.5	70	149	66270	21.8	29.4	
tert-Butyl formate	100800	10000	100000		101	41.5	139	102500	1.71	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc **Date:** 26-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224400

Sample ID: **MB-224400**	Client ID:			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**			BatchID: **224400**	Analysis Date: **05/23/2016**	Seq No: **6838694**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	46.19	0	50.00		92.4	70	130				
Surr: Dibromofluoromethane	50.60	0	50.00		101	70	130				
Surr: Toluene-d8	49.00	0	50.00		98.0	70	130				

Sample ID: **MB-224400**	Client ID:			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **MBLK**	TestCode: **Oxygenates** **SW8260B**			BatchID: **224400**	Analysis Date: **05/23/2016**	Seq No: **6838918**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-224400**	Client ID:			Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**			BatchID: **224400**	Analysis Date: **05/23/2016**	Seq No: **6838691**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 26-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224400

Sample ID: **LCS-224400**	Client ID:		Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**		BatchID: **224400**	Analysis Date: **05/23/2016**	Seq No: **6838691**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	53.58	1.0	50.00		107	70	130				
Benzene	48.48	1.0	50.00		97.0	70	130				
Ethylbenzene	50.30	1.0	50.00		101	70	130				
Naphthalene	57.21	5.0	50.00		114	70	130				
Toluene	47.25	1.0	50.00		94.5	70	130				
Xylenes, Total	152.2	1.0	150.0		101	70	130				
Surr: 4-Bromofluorobenzene	50.56	0	50.00		101	70	130				
Surr: Dibromofluoromethane	49.78	0	50.00		99.6	70	130				
Surr: Toluene-d8	47.87	0	50.00		95.7	70	130				

Sample ID: **LCS-224400**	Client ID:		Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **LCS**	TestCode: **Oxygenates** **SW8260B**		BatchID: **224400**	Analysis Date: **05/23/2016**	Seq No: **6838914**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	800.4	100	1000		80.0	70	130				
Ethanol	818.9	100	1000		81.9	70	130				
Ethyl tert-butyl ether	224.9	100	200.0		112	70	130				
Isopropyl ether	214.0	10	200.0		107	70	130				
tert-Amyl alcohol	823.3	100	1000		82.3	70	130				
tert-Amyl methyl ether	219.5	10	200.0		110	70	130				
tert-Butyl Alcohol	841.7	100	1000		84.2	70	130				
tert-Butyl formate	983.5	100	1000		98.4	70	130				

Sample ID: **1605G81-022AMS**	Client ID: **DW03**		Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**		BatchID: **224400**	Analysis Date: **05/23/2016**	Seq No: **6838714**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	2886	50	2500		115	66.5	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc **Date:** 26-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224400

Sample ID: **1605G81-022AMS**	Client ID: **DW03**				Units: **ug/L**		Prep Date: **05/23/2016**		Run No: **317413**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **224400**		Analysis Date: **05/23/2016**		Seq No: **6838714**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	5350	50	2500	2566	111	70.1	132				
Ethylbenzene	4588	50	2500	1420	127	77.8	129				
Naphthalene	3570	250	2500	410.5	126	50.2	134				
Toluene	13580	50	2500	11280	92.0	70.1	133				E
Xylenes, Total	17780	50	7500	8243	127	74.7	133				
Surr: 4-Bromofluorobenzene	2530	0	2500		101	70	130				
Surr: Dibromofluoromethane	2416	0	2500		96.6	70	130				
Surr: Toluene-d8	2392	0	2500		95.7	70	130				

Sample ID: **1605G81-022AMS**	Client ID: **DW03**				Units: **ug/L**		Prep Date: **05/23/2016**		Run No: **317413**	
SampleType: **MS**	TestCode: **Oxygenates SW8260B**				BatchID: **224400**		Analysis Date: **05/23/2016**		Seq No: **6838943**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	40760	5000	50000		81.5	61.1	139				
Ethanol	43710	5000	50000		87.4	61.7	144				
Ethyl tert-butyl ether	11290	5000	10000		113	69.6	130				
Isopropyl ether	11390	500	10000		114	70.1	134				
tert-Amyl alcohol	43070	5000	50000		86.1	66.5	145				
tert-Amyl methyl ether	10780	500	10000		108	70.1	127				
tert-Butyl Alcohol	42240	5000	50000		84.5	70	149				
tert-Butyl formate	48280	5000	50000		96.6	41.5	139				

Sample ID: **1605G81-022AMSD**	Client ID: **DW03**				Units: **ug/L**		Prep Date: **05/23/2016**		Run No: **317413**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **224400**		Analysis Date: **05/23/2016**		Seq No: **6838715**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	2820	50	2500		113	66.5	133	2886	2.30	20	
Benzene	5340	50	2500	2566	111	70.1	132	5350	0.196	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224400

Sample ID: **1605G81-022AMSD**	Client ID: **DW03**	Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **224400**	Analysis Date: **05/23/2016**	Seq No: **6838715**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	4530	50	2500	1420	124	77.8	129	4588	1.28	20	
Naphthalene	3542	250	2500	410.5	125	50.2	134	3570	0.787	32.5	
Toluene	13370	50	2500	11280	83.8	70.1	133	13580	1.52	20	E
Xylenes, Total	17670	50	7500	8243	126	74.7	133	17780	0.590	22.7	
Surr: 4-Bromofluorobenzene	2569	0	2500		103	70	130	2530	0	0	
Surr: Dibromofluoromethane	2424	0	2500		96.9	70	130	2416	0	0	
Surr: Toluene-d8	2371	0	2500		94.8	70	130	2392	0	0	

Sample ID: **1605G81-022AMSD**	Client ID: **DW03**	Units: **ug/L**	Prep Date: **05/23/2016**	Run No: **317413**
SampleType: **MSD**	TestCode: **Oxygenates SW8260B**	BatchID: **224400**	Analysis Date: **05/23/2016**	Seq No: **6838944**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	42200	5000	50000		84.4	61.1	139	40760	3.49	24.9	
Ethanol	42410	5000	50000		84.8	61.7	144	43710	3.03	27.9	
Ethyl tert-butyl ether	11380	5000	10000		114	69.6	130	11290	0.834	20	
Isopropyl ether	11210	500	10000		112	70.1	134	11390	1.58	20	
tert-Amyl alcohol	45440	5000	50000		90.9	66.5	145	43070	5.36	24.8	
tert-Amyl methyl ether	10910	500	10000		109	70.1	127	10780	1.24	20	
tert-Butyl Alcohol	45490	5000	50000		91.0	70	149	42240	7.42	29.4	
tert-Butyl formate	48390	5000	50000		96.8	41.5	139	48280	0.213	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224447

Sample ID: **MB-224447**	Client ID:				Units: **ug/L**		Prep Date: **05/24/2016**		Run No: **317498**	
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **224447**		Analysis Date: **05/24/2016**		Seq No: **6840736**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	47.41	0	50.00		94.8	70	130				
Surr: Dibromofluoromethane	48.87	0	50.00		97.7	70	130				
Surr: Toluene-d8	47.85	0	50.00		95.7	70	130				

Sample ID: **MB-224447**	Client ID:				Units: **ug/L**		Prep Date: **05/24/2016**		Run No: **317498**	
SampleType: **MBLK**	TestCode: **Oxygenates SW8260B**				BatchID: **224447**		Analysis Date: **05/24/2016**		Seq No: **6840954**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-224447**	Client ID:				Units: **ug/L**		Prep Date: **05/24/2016**		Run No: **317498**	
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **224447**		Analysis Date: **05/24/2016**		Seq No: **6840733**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc **Date:** 26-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224447

Sample ID: **LCS-224447**	Client ID:		Units: **ug/L**	Prep Date: **05/24/2016**	Run No: **317498**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **224447**	Analysis Date: **05/24/2016**	Seq No: **6840733**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	53.79	1.0	50.00		108	70	130				
Benzene	49.56	1.0	50.00		99.1	70	130				
Ethylbenzene	53.33	1.0	50.00		107	70	130				
Naphthalene	60.33	5.0	50.00		121	70	130				
Toluene	47.97	1.0	50.00		95.9	70	130				
Xylenes, Total	157.9	1.0	150.0		105	70	130				
Surr: 4-Bromofluorobenzene	51.51	0	50.00		103	70	130				
Surr: Dibromofluoromethane	48.05	0	50.00		96.1	70	130				
Surr: Toluene-d8	47.13	0	50.00		94.3	70	130				

Sample ID: **LCS-224447**	Client ID:		Units: **ug/L**	Prep Date: **05/24/2016**	Run No: **317498**
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**		BatchID: **224447**	Analysis Date: **05/24/2016**	Seq No: **6840952**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	932.8	100	1000		93.3	70	130				
Ethanol	845.6	100	1000		84.6	70	130				
Ethyl tert-butyl ether	208.0	100	200.0		104	70	130				
Isopropyl ether	207.0	10	200.0		104	70	130				
tert-Amyl alcohol	997.8	100	1000		99.8	70	130				
tert-Amyl methyl ether	202.6	10	200.0		101	70	130				
tert-Butyl Alcohol	1021	100	1000		102	70	130				
tert-Butyl formate	921.8	100	1000		92.2	70	130				

Sample ID: **1605G81-046AMS**	Client ID: **MW-9**		Units: **ug/L**	Prep Date: **05/24/2016**	Run No: **317498**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **224447**	Analysis Date: **05/24/2016**	Seq No: **6840758**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	5329	100	5000		107	66.5	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224447

Sample ID: 1605G81-046AMS	Client ID: MW-9			Units: ug/L	Prep Date: 05/24/2016	Run No: 317498
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B			BatchID: 224447	Analysis Date: 05/24/2016	Seq No: 6840758

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	4763	100	5000	79.00	93.7	70.1	132				
Ethylbenzene	5995	100	5000	836.0	103	77.8	129				
Naphthalene	6949	500	5000	257.0	134	50.2	134				
Toluene	6472	100	5000	1801	93.4	70.1	133				
Xylenes, Total	19470	100	15000	3532	106	74.7	133				
Surr: 4-Bromofluorobenzene	5162	0	5000		103	70	130				
Surr: Dibromofluoromethane	4777	0	5000		95.5	70	130				
Surr: Toluene-d8	4715	0	5000		94.3	70	130				

Sample ID: 1605G81-046AMS	Client ID: MW-9			Units: ug/L	Prep Date: 05/24/2016	Run No: 317498
SampleType: MS	TestCode: Oxygenates SW8260B			BatchID: 224447	Analysis Date: 05/24/2016	Seq No: 6840975

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	100900	10000	100000		101	61.1	139				
Ethanol	88220	10000	100000		88.2	61.7	144				
Ethyl tert-butyl ether	21040	10000	20000		105	69.6	130				
Isopropyl ether	20390	1000	20000		102	70.1	134				
tert-Amyl alcohol	109700	10000	100000		110	66.5	145				
tert-Amyl methyl ether	20480	1000	20000		102	70.1	127				
tert-Butyl Alcohol	110600	10000	100000		111	70	149				
tert-Butyl formate	93380	10000	100000		93.4	41.5	139				

Sample ID: 1605G81-046AMSD	Client ID: MW-9			Units: ug/L	Prep Date: 05/24/2016	Run No: 317498
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B			BatchID: 224447	Analysis Date: 05/24/2016	Seq No: 6840759

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	5589	100	5000		112	66.5	133	5329	4.76	20	
Benzene	4934	100	5000	79.00	97.1	70.1	132	4763	3.53	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224447

Sample ID: **1605G81-046AMSD** Client ID: **MW-9** Units: **ug/L** Prep Date: **05/24/2016** Run No: **317498**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **224447** Analysis Date: **05/24/2016** Seq No: **6840759**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	6224	100	5000	836.0	108	77.8	129	5995	3.75	20	
Naphthalene	7107	500	5000	257.0	137	50.2	134	6949	2.25	32.5	S
Toluene	6740	100	5000	1801	98.8	70.1	133	6472	4.06	20	
Xylenes, Total	20020	100	15000	3532	110	74.7	133	19470	2.79	22.7	
Surr: 4-Bromofluorobenzene	5078	0	5000		102	70	130	5162	0	0	
Surr: Dibromofluoromethane	4773	0	5000		95.5	70	130	4777	0	0	
Surr: Toluene-d8	4711	0	5000		94.2	70	130	4715	0	0	

Sample ID: **1605G81-046AMSD** Client ID: **MW-9** Units: **ug/L** Prep Date: **05/24/2016** Run No: **317498**
SampleType: **MSD** TestCode: **Oxygenates SW8260B** BatchID: **224447** Analysis Date: **05/24/2016** Seq No: **6840978**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	100700	10000	100000		101	61.1	139	100900	0.162	24.9	
Ethanol	93350	10000	100000		93.4	61.7	144	88220	5.65	27.9	
Ethyl tert-butyl ether	22010	10000	20000		110	69.6	130	21040	4.49	20	
Isopropyl ether	21120	1000	20000		106	70.1	134	20390	3.51	20	
tert-Amyl alcohol	106700	10000	100000		107	66.5	145	109700	2.84	24.8	
tert-Amyl methyl ether	21520	1000	20000		108	70.1	127	20480	4.95	20	
tert-Butyl Alcohol	111100	10000	100000		111	70	149	110600	0.464	29.4	
tert-Butyl formate	96380	10000	100000		96.4	41.5	139	93380	3.16	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value
BRL	Below reporting limit	E	Estimated (value above quantitation range)
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix
B	Analyte detected in the associated method blank		
H	Holding times for preparation or analysis exceeded		
R	RPD outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 26-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224448

Sample ID: **MB-224448**	Client ID:			Units: **ug/L**	Prep Date: **05/24/2016**	Run No: **317498**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**			BatchID: **224448**	Analysis Date: **05/24/2016**	Seq No: **6840737**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	46.33	0	50.00		92.7	70	130				
Surr: Dibromofluoromethane	49.94	0	50.00		99.9	70	130				
Surr: Toluene-d8	48.54	0	50.00		97.1	70	130				

Sample ID: **MB-224448**	Client ID:			Units: **ug/L**	Prep Date: **05/24/2016**	Run No: **317498**
SampleType: **MBLK**	TestCode: **Oxygenates** **SW8260B**			BatchID: **224448**	Analysis Date: **05/24/2016**	Seq No: **6840955**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-224448**	Client ID:			Units: **ug/L**	Prep Date: **05/24/2016**	Run No: **317498**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**			BatchID: **224448**	Analysis Date: **05/24/2016**	Seq No: **6840735**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 26-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224448

Sample ID: **LCS-224448**	Client ID:		Units: **ug/L**	Prep Date: **05/24/2016**	Run No: **317498**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**		BatchID: **224448**	Analysis Date: **05/24/2016**	Seq No: **6840735**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	51.63	1.0	50.00		103	70	130				
Benzene	47.19	1.0	50.00		94.4	70	130				
Ethylbenzene	50.24	1.0	50.00		100	70	130				
Naphthalene	58.39	5.0	50.00		117	70	130				
Toluene	46.67	1.0	50.00		93.3	70	130				
Xylenes, Total	151.5	1.0	150.0		101	70	130				
Surr: 4-Bromofluorobenzene	50.55	0	50.00		101	70	130				
Surr: Dibromofluoromethane	47.86	0	50.00		95.7	70	130				
Surr: Toluene-d8	46.84	0	50.00		93.7	70	130				

Sample ID: **LCS-224448**	Client ID:		Units: **ug/L**	Prep Date: **05/24/2016**	Run No: **317498**
SampleType: **LCS**	TestCode: **Oxygenates** **SW8260B**		BatchID: **224448**	Analysis Date: **05/24/2016**	Seq No: **6840953**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	917.5	100	1000		91.7	70	130				
Ethanol	893.9	100	1000		89.4	70	130				
Ethyl tert-butyl ether	205.6	100	200.0		103	70	130				
Isopropyl ether	202.9	10	200.0		101	70	130				
tert-Amyl alcohol	955.7	100	1000		95.6	70	130				
tert-Amyl methyl ether	201.1	10	200.0		101	70	130				
tert-Butyl Alcohol	991.9	100	1000		99.2	70	130				
tert-Butyl formate	918.2	100	1000		91.8	70	130				

Sample ID: **1605G81-065AMS**	Client ID: **MW33**		Units: **ug/L**	Prep Date: **05/24/2016**	Run No: **317498**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**		BatchID: **224448**	Analysis Date: **05/24/2016**	Seq No: **6840760**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	2611	50	2500		104	66.5	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc **Date:** 26-May-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224448

Sample ID: **1605G81-065AMS**	Client ID: **MW33**				Units: **ug/L**		Prep Date: **05/24/2016**		Run No: **317498**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **224448**		Analysis Date: **05/24/2016**		Seq No: **6840760**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
Benzene	2600	50	2500	256.0	93.8	70.1	132			
Ethylbenzene	3888	50	2500	1358	101	77.8	129			
Naphthalene	3574	250	2500	391.5	127	50.2	134			
Toluene	5456	50	2500	3196	90.4	70.1	133			
Xylenes, Total	12360	50	7500	4748	101	74.7	133			
Surr: 4-Bromofluorobenzene	2538	0	2500		102	70	130			
Surr: Dibromofluoromethane	2424	0	2500		96.9	70	130			
Surr: Toluene-d8	2362	0	2500		94.5	70	130			

Sample ID: **1605G81-065AMS**	Client ID: **MW33**				Units: **ug/L**		Prep Date: **05/24/2016**		Run No: **317498**	
SampleType: **MS**	TestCode: **Oxygenates SW8260B**				BatchID: **224448**		Analysis Date: **05/24/2016**		Seq No: **6840981**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
3,3-Dimethyl-1-butanol	42580	5000	50000		85.2	61.1	139			
Ethanol	39950	5000	50000		79.9	61.7	144			
Ethyl tert-butyl ether	10300	5000	10000		103	69.6	130			
Isopropyl ether	9930	500	10000		99.3	70.1	134			
tert-Amyl alcohol	46450	5000	50000		92.9	66.5	145			
tert-Amyl methyl ether	9943	500	10000		99.4	70.1	127			
tert-Butyl Alcohol	46540	5000	50000		93.1	70	149			
tert-Butyl formate	44620	5000	50000		89.2	41.5	139			

Sample ID: **1605G81-065AMSD**	Client ID: **MW33**				Units: **ug/L**		Prep Date: **05/24/2016**		Run No: **317498**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **224448**		Analysis Date: **05/24/2016**		Seq No: **6840761**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit Qual
1,2-Dichloroethane	2576	50	2500		103	66.5	133	2611	1.37	20
Benzene	2540	50	2500	256.0	91.3	70.1	132	2600	2.35	20

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1605G81

ANALYTICAL QC SUMMARY REPORT

BatchID: 224448

Sample ID: **1605G81-065AMSD**	Client ID: **MW33**			Units: **ug/L**	Prep Date: **05/24/2016**	Run No: **317498**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **224448**	Analysis Date: **05/24/2016**	Seq No: **6840761**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	3825	50	2500	1358	98.7	77.8	129	3888	1.63	20	
Naphthalene	3506	250	2500	391.5	125	50.2	134	3574	1.92	32.5	
Toluene	5323	50	2500	3196	85.1	70.1	133	5456	2.47	20	
Xylenes, Total	12270	50	7500	4748	100	74.7	133	12360	0.678	22.7	
Surr: 4-Bromofluorobenzene	2580	0	2500		103	70	130	2538	0	0	
Surr: Dibromofluoromethane	2370	0	2500		94.8	70	130	2424	0	0	
Surr: Toluene-d8	2360	0	2500		94.4	70	130	2362	0	0	

Sample ID: **1605G81-065AMSD**	Client ID: **MW33**			Units: **ug/L**	Prep Date: **05/24/2016**	Run No: **317498**
SampleType: **MSD**	TestCode: **Oxygenates SW8260B**			BatchID: **224448**	Analysis Date: **05/24/2016**	Seq No: **6840983**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	42050	5000	50000		84.1	61.1	139	42580	1.26	24.9	
Ethanol	41980	5000	50000		84.0	61.7	144	39950	4.97	27.9	
Ethyl tert-butyl ether	10210	5000	10000		102	69.6	130	10300	0.916	20	
Isopropyl ether	9727	500	10000		97.3	70.1	134	9930	2.06	20	
tert-Amyl alcohol	45020	5000	50000		90.0	66.5	145	46450	3.13	24.8	
tert-Amyl methyl ether	9733	500	10000		97.3	70.1	127	9943	2.13	20	
tert-Butyl Alcohol	44790	5000	50000		89.6	70	149	46540	3.84	29.4	
tert-Butyl formate	43460	5000	50000		86.9	41.5	139	44620	2.62	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

APPENDIX D

Data Verification Checklist

CRAWFORD
ENVIRONMENTAL
SERVICES

UST Programmatic QAPP Contractor Checklist				
Item #	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	Yes		
2	Is UST Owner/Operator name, address, provided?			n/a
3	Is name, address, & phone number of current property owner provided?	Yes		
4	Is the SCDHEC Certified UST Site Rehabilitation Contractor's name, address, phone number, and certification number provided?	Yes		
5	Is the name, address ,telephone number, and certification number of the well driller that installed the boring/monitoring wells provided?			n/a
6	Is the name, address, telephone number, and certification number of the certified laboratories performing analytical analyses provided	Yes		
7	Has the facility history be summarized?			n/a
8	Has the regional geology and hydrogeology been summarized?			n/a
9	Are the receptor survey results provided as required?			n/a
10	Has the current use of the site and adjacent land been described?	Yes		
11	Has the site specific geology been described?			n/a
12	Has the primary soil type been described?			n/a
13	Have the field screening results been described?			n/a
14	Has a description of the soil sample collection and preservation been detailed?			n/a
15	Has the field screening methodology been detailed?			n/a
16	Has the monitoring well installation and development dates been provided?			n/a
17	Has the method of well development been detailed? (Table 2)			n/a
18	Has the justification been provided for the locations of the monitoring wells?			n/a
19	Have the monitoring wells been labeled in accordance with the UST QAPP guidelines?	Yes		
20	Has the groundwater sampling methodology been detailed?	Yes		
21	Have the groundwater sampling dates and groundwater measurements been provided?	Yes		
22	Has the purging methodology been detailed?	Yes		
23	Has the volume of water purged from each well been provided along with the measurements to verify purging is complete?	Yes		
24	If free-product is present, has the thickness been provided?			n/a
25	Does the report include a brief discussion of the assessment done and the results?			n/a

UST Programmatic QAPP Contractor Checklist				
26	Does the report include a brief discussion of the aquifer evaluation and the results?	Yes		
27	Does the report include a brief discussion of the fate & transport models used?			n/a
28	Are the site-conceptual tables included (Tier 1 risk evaluation)			n/a
29	Have the exposure pathways been analyzed (Tier 2 risk evauluation)			n/a
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 risk evaluation)	Yes		
31	Have recommendations for further action been provided and explained?			n/a
32	Has the soil analytical data for the site been provided in tabular format? (Table 5)			n/a
33	Has the potentiometric data for the site been provided in tabular format?	Yes		
34	Has the current and historical laboratory data been provided in tabular format	Yes		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			n/a
36	Have the Site conceptual model tables been included (Tier 1 risk evaluation)			n/a
37	Has the topographic map been provided with all the required elements?	Yes		
38	Has the site base map been provided with all the required elements?	Yes		
39	Have the CoC maps been provided?	Yes		
40	Have the potentiometric maps been provided?	Yes		
41	Have the geologic cross-sections been provided			n/a
42	Have maps showing the predicted migration of the CoCs through time been provided?			n/a
43	Has the site survey been provided and include all necessary elements? (Appendix A)			n/a
44	Have the sampling logs, chain of custody forms and analytical data package been included with all elements? (Appendix B)	Yes		
45	Is the laboratory performing the analyses properly certified? (Appendix B)	Yes		
46	Has the tax map been included with all necessary elements? (Appendix C)			n/a
47	Have the soil/boring field screening logs been provided? (Appendix D)			n/a
48	Have the well completion logs been provided? (Appendix E)			n/a
49	Have the aquifer evaluation forms,data, graphs, equations,etc. been provided? (Appendix F)			n/a
50	Have the disposal manifests been provided? (Appendix G)	Yes		
51	Has a copy of the local zoning regulations been provided? (Appendix H)			n/a

UST Programmatic QAPP Contractor Checklist				
52	Has all fate and transport modeling been provided? (Appendix I)			n/a
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			n/a
54	Has a copy of this form been attached to the final report and are explainations for any missing or incomplete data been provided?	Yes		
Comments:				

D H E C

PROMOTE PROTECT PROSPER

Communication Slip

Date: 8/30/16

To: Kim Kuhn

BLWM - UST

- ☐ Approval
- ☐ As Requested
- ☐ Necessary Action
- ☐ Note and Return
- ☐ Prepare Reply
- ☑ Note and File
- ☐ Comment
- ☐ Other

Remarks: 07584 - 258 tech

07777 - 193 tech

12352 - 128 tech

From: C. WARGO BAW - UIC

DHEC 3001 (2/1997)

dhec
Healthy People Healthy Communities

August 30, 2016

(BOW-GWPROT-CAW)
Mr. Charles F. Crawford
Crawford Environmental Services, Inc.
15 Chruch Ave., SW
Roanoke, VA 24011

Re: Underground Injection Control Permit #SCHE03020184M
Cloud's Chevron/Handy Pantry #65/University Mart (UST # 07584 / 07777 / 12352) Site
Richland County

Dear Mr. Crawford:

Enclosed is a Permit to Operate four (4) Class V.A.-I (Aquifer Remediation) injection wells at the Cloud's Chevron/Handy Pantry #65/University Mart (UST # 07584 / 07777 / 12352) Site, Richland County, SC.

South Carolina Board of Health and Environmental Control
Guide to Board Review
Pursuant to S.C. Code Ann. § 44-1-60
Effective April 1, 2013

The decision of the South Carolina Department of Health and Environmental Control (Department) becomes the final agency decision fifteen (15) calendar days after notice of the decision has been mailed to the applicant, permittee, licensee and affected persons who have requested in writing to be notified, unless a written request for final review accompanied by a filing fee in the amount of $100 is filed with Department by the applicant, permittee, licensee or affected person.

Applicants, permittees, licensees, and affected parties are encouraged to engage in mediation during the final review process.

If the Board declines in writing to schedule a final review conference, the Department's decision becomes the final agency decision and an applicant, permittee, licensee, or affected person may request a contested case hearing before the Administrative Law Court within thirty (30) calendar days after notice is mailed that the Board declined to hold a final review conference.

I. Filing of Request for Final Review

1. A written Request for Final Review (RFR)and the required filing fee of one hundred dollars ($100) must be received by Clerk of the Board within fifteen (15)calendar days after notice of the staff decision has been mailed to the applicant, permittee, licensee, or affected persons. If the 15th day occurs on a weekend or State holiday, the RFR must be received by the Clerk on the next working day. RFRs will not be accepted after5:00 p.m.

2. RFRs shall be in writing and should include, at a minimum, the following information:

    - The grounds for amending, modifying, or rescinding the staff decision;
    - a statement of any significant issues or factors the Board should consider in deciding how to handle the matter;
    - the relief requested; and
    - a copy of the decision for which review is requested.

3. RFRs should be filed in person or by mail at the following address:

South Carolina Board of Health and Environmental Control

Attention: Clerk of the Board

2600 Bull Street

Columbia, South Carolina 29201

Alternatively, RFR's may be filed with the Clerk by facsimile (803-898-3393) or by electronic mail (boardclerk@dhec.sc.gov).

4. The filing fee maybe paid by cash, certified check or credit card. If a RFR is filed by facsimile or electronic mail, the filing fee may be mailed to the Clerk of the Board and the envelope must be postmarked within the time allowed for filing a RFR.

5. If there is any perceived discrepancy in compliance with this RFR filing procedure, the Clerk should consult with the Chairman or, if the Chairman is unavailable, the Vice-Chairman. The Chairman or the Vice-Chairman will determine whether the RFR is timely and properly filed and direct the Clerk to (1) process the RFR for consideration by the Board or (2) return the RFR and filing fee to the requestor with a cover letter explaining why the RFR was not timely or properly filed. Processing an RFR for consideration by the Board shall not be interpreted as a waiver of any claim or defense by the agency in subsequent proceedings concerning the RFR.

6. If the RFR will be processed for Board consideration, the Clerk will send an Acknowledgement of RFR to the Requestor and the applicant, permittee, or licensee, if other than the Requestor.

7. The Clerk will email the RFR to all Board members for review, and all Board members will confirm receipt of the RFR to the Clerk by email. If a Board member does not confirm receipt of the RFR within twenty-four (24) hour period, the Clerk will contact the Board member and confirm receipt. If a Board member believes the RFR should be considered by the RFR Committee, he or she will respond to the Clerk's email within forty-eight (48) hours and will request further review. If no Board member requests further review of the RFR within the forty-eight (48) hour period, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, stating the Board will not hold a Final Review Conference. A copy of the Notice of Appeal Procedure will be included with the letter.

NOTE: If the time periods described above end on a weekend or State holiday, the time is automatically extended to 5:00 p.m. on the next business day.

8. If the RFR is to be considered by the RFR Committee, the Clerk will forward a copy of the RFR to Department staff and Office of General Counsel. A Department response to the RFR should be provided by Department staff to the Clerk within eight (8) working days after the RFR is forwarded.

II. Final Review Conference Scheduling

1. If a Conference will be held, the Clerk will send a letter by certified mail to the Requestor, with copy by regular mail to the applicant, permittee, or licensee, if not the Requestor, informing the Requestor of the determination.

2. The Clerk will request Department staff provide the Administrative Record.

3. The Clerk will send Notice of Final Review Conference to the parties at least ten (10) days before the Conference. The Conference will be publicly noticed and should:

   - include the place, date and time of the Conference;
   - state the presentation times allowed in the Conference;
   - state evidence may be presented at the Conference;
   - if the conference will be held by committee, include a copy of the Chairman's order appointing the committee; and
   - inform the Requestor of his or her right to request a transcript of the proceedings of the Conference prepared at Requestor's expense.

4. If a party requests a transcript of the proceedings of the Conference and agrees to pay all related costs in writing, including costs for the transcript, the Clerk will schedule a court reporter for the Conference.

III. **Final Review Conference and Decision**

1. The order of presentation in the Conference will, subject to the presiding officer's discretion, be as follows:
   - Department staff will provide an overview of the staff decision and the applicable law to include [10 minutes]:
     - Type of decision (permit, enforcement, etc.) and description of the program.
     - Parties
     - Description of facility/site
     - Applicable statutes and regulations
     - Decision and materials relied upon in the administrative record to support the staff decision.
   - Requestor(s) will state the reasons for protesting the staff decision and may provide evidence to support amending, modifying, or rescinding the staff decision. [15 minutes] *NOTE: The burden of proof is on the Requestor(s)*
   - Rebuttal by Department staff[15 minutes]
   - Rebuttal by Requestor(s)[10 minutes]

     Note: Times noted in brackets are for information only and are superseded by times stated in the Notice of Final Review Conference or by the presiding officer.
2. Parties may present evidence during the conference; however, the rules of evidence do not apply.
3. At any time during the conference, the officers conducting the conference may request additional information and may question the Requestor, the staff, and anyone else providing information at the conference.
4. The presiding officer, in his or her sole discretion, may allow additional time for presentations and may impose time limits on the Conference.
5. All Conferences are open to the public.
6. The officers may deliberate in closed session.
7. The officers may announce the decision at conclusion of the Conference or it may be reserved for consideration.
8. The Clerk will mail the written final agency decision (FAD) to parties within 30 days after the Conference. The written decision must explain the basis for the decision and inform the parties of their right to request a contested case hearing before the Administrative Law Court. The FAD will be sent by certified mail, return receipt requested.
9. Communications may also be sent by electronic mail, in addition to the forms stated herein, when electronic mail addresses are provided to the Clerk.

The above information is provided as a courtesy; parties are responsible for complying with all applicable legal requirements.

If you have any questions, please call Christopher Wargo at (803) 898-3799.

Sincerely,

Christopher Wargo, Hydrogeologist
Groundwater Protection Section
Bureau of Water

cc: Kim Kuhn, SCHEC-BLWM-UST

dhec
Healthy People Healthy Communities

WATER MONITORING ASSESSMENT & PROTECTION DIVISION

Injection Well Operating Approval

for

Class II, III, and V.A. Injection Well(s)

Permit #SCHE03020184M Date of Issue: August 30, 2016

In accordance with R.61-72 this permit will become final unless it is appealed within fifteen (15) days of the issuance date.

In accordance with the provisions of Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, and pursuant to receiving a Permit to Operate four (4) Class V.A.-I (Aquifer Remediation) injection wells, authorization is granted to Crawford Environmental Services, Inc. to operate four (4) Class V.A.-I (Aquifer Remediation) injection wells located at the Cloud's Chevron/Handy Pantry #65/University Mart (UST # 07584 / 07777 / 12352) Site, Richland County, SC, and are subject to the attached provisos noted for the operator.

The Class V.A.-I injection wells are four (4) inches in diameter and approximately twenty (20) feet deep.

Pursuant to Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended, this authorization may be rescinded if these injection wells should, at any time, contaminate, pollute, or otherwise adversely affect other water in the vicinity or for any other conditions contained in R61-87, Title 48, Chapter 1, South Carolina Code of Laws, 1976, as amended.

Expires: April 11, 2019

Date August 30, 2016

Christopher Wargo, Hydrogeologist
Groundwater Protection Section
Bureau of Water

Provisions to the Injection Well Operating Approval
for
Underground Injection Well Permit #SCHE03020184M
Cloud's Chevron/Handy Pantry #65/University Mart (UST # 07584 / 07777 / 12352)
Richland County, S.C.
August 30, 2016

1) Construction of new or abandonment of existing wells must be reported to the Department within thirty (30) days of completion.

2) Only PetroSolve Surfactant, Hydrogen Peroxide, NutriMax and PetroBac as described in the corrective action plan may be injected into the subsurface at the four (4) Class V.A.-I (Aquifer Remediation) injection wells. Any changes in the system operation other than as presented in the UIC Permit Application must be reported to the Department prior to implementation.

Document Receipt Information

☒ Hard Copy ☒ CD ☐ Email

Date Received 11-23-16

Permit Number 07584 - 07777 - 12352

Project Manager Kim Kuhn

Name of Contractor Crawford Env. Services

UST Certification Number _____

Docket Number _____

Scanned _____

CASE

07584 - 259 T
07777 - 194 T
12352 - 129 T

CRAWFORD
ENVIRONMENTAL
SERVICES

November 15, 2016

Ms. Sonya Utz
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

RE: Corrective Action System Evaluation – October 2016 (Sampling Date)
Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352

Dear Ms. Utz:

Enclosed please find one copy of the October 2016 Corrective Action System Evaluation (CASE) report prepared by Crawford Environmental Services, Inc. (CES) for the referenced site. Should you have any questions regarding the enclosed material, or if additional information is required, please feel free to contact Charlie Crawford or myself at 540.343.6256.

Best Regards,

Daniel Fisher
Division Manager

cc:

CRAWFORD
ENVIRONMENTAL
SERVICES

Corrective Action System Evaluation Report

Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352
November 15, 2016
Revision 0

CORRETIVE ACTION SYSTEM EVALUATION REPORT

Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352

Submitted To:
Ms. Sonya Utz
State of South Carolina
Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

Prepared For:
Ms. Sonya Utz
State of South Carolina
Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

November 15, 2016
CES Job Number: 7.0547

Prepared By:	**Reviewed By:**	**Approved By:**
Daniel J. Fisher	Charles F. Crawford	B. Thomas Houghton
Division Manager	President / CEO	P.G. #2343

CRAWFORD ENVIRONMENTAL SERVICES

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Appendix D – Injection Well Installation Summary
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1.0 Facility Information

The subject property is in a primarily commercial area of Columbia, South Carolina (Figure 1). The subject sites, operating as Handy Pantry #65/University Mart and former Cloud's Chevron, is bordered by light commercial properties in all directions. A site plan depicting pertinent features of the subject property is provided as Figure 2.

1.1 Project Information Summary:

1.2.1 Site Address

Handy Pantry #65 / University Mart / Clouds Chevron
2367 Taylor Street
Columbia, South Carolina

1.2.2 Property Owner Information

Mr. Mahesh Patel
2367 Taylor Street
Columbia, South Carolina

Mr. Andrew Diggins
1600 Block Two Notch Road
Columbia, South Carolina

1.2.3 Contractor Information

Crawford Environmental Services
15 Church Avenue, SW
Roanoke, Virginia 24011
1 (540) 343-6256
Contractor Number: UCC-0388

1.2.4 Laboratory Information

Access Analytical, Inc. (AA)
7478 Carlisle Street
Irmo, SC 29063
1 (803) 781-4243
SC Certification: 32575001

Analytical Environmental Services Inc. (AES)
3785 Presidential Pkwy.
Atlanta, GA 30340
1 (770) 457-8177
SC Certification: 98016003

2.0 Corrective Action Activities

Corrective Action activities at the facility for this phase of work included the following:

-Semi-Annual Sampling Event
-Injection Well Installation

2.1 Water Sample Collection

A comprehensive groundwater sampling event, including; recording equilibrated static water levels, product thicknesses, and the collection of chemical samples was completed by CES personnel between October 19 - 25, 2016. CES personnel utilized an electronic water level indicator for water level measurements and an oil/water interface probe for free phase product measurements. Samples for the shallow wells were collected utilizing disposable polyethylene bailers. Shallow wells that exhibited groundwater above the screened bracket were purged of at least three well volumes or purged till dry before sample collection. Deep and intermediate wells exhibiting groundwater above the screened bracket were purged utilizing submersible pumps with dedicated tubing. For sample collection, disposable polyethylene bailers were lowered slowly to the top of the water column (after purging in some cases) allowed to fill one volume, then removed. Disposal records for the 141-gallons of purge water generated are included as Appendix A. Groundwater was then transferred to the appropriate sampling containers and was then placed in coolers, maintaining 4˚C, and delivered to an independent laboratory. Groundwater chemical samples were submitted to Access Analytical, Inc., {SC Certification: 32575001} for analysis.

2.1.1 Groundwater Sampling

Equilibrated static water levels and free-product thicknesses were recorded for monitoring wells MW-2, MW-3, MW-4, MW-5AR, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-13, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20, MW-22, MW-23, MW-25, MW-27, MW-28, MW-29, MW-30, MW-31, MW-33, MW-34, MW-35, MW-36, MW-37, MW-38, MW-39, MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, MW-51, MW-53, MW-54, MW-55, MW-56, MW-59, MW-63, MW-67, MW-70, PW-1R, DW-1, DW-2, DW-3, DW-4, DW-5, DW-6, DW-7, and DW-9. Groundwater sampling data sheets are included as Appendix B.

During the referenced sampling event, CES was unable to access monitoring wells MW-48, MW-49 and MW-50 due to a locked gate and monitoring wells MW-53, MW-57, MW-60, MW-61, MW-64, MW-66 and MW-68 were unable to be located. CES also utilized a metal detector to locate the wells, however, the overgrown site conditions did not permit the location of the aforementioned monitoring wells. Monitoring well MW-15 maintained free phase petroleum and was not sampled. Monitoring well MW-1 and MW-5 did not maintain sufficient water columns to collect groundwater samples. Due to obstructions covering the wells, monitoring wells MW-32, MW-58, DW-8 (construction materials), MW-26 (vehicle), and MW-62 (trailer) were not able to be sampled.

A surface water sample, SW-1, was unable to be taken from the drainage ditch on the east side of Ontario Street. This was caused by overgrown brush not allowing access.

CES sampled the monitoring wells, as part of the October 2016 sampling event, for the following chemical analyses:
Benzene/Toluene/Ethylbenzene/Xylenes (BTEX), naphthalene, Methyl Tert-Butyl Ether (MTBE), Tert-Amyl Methyl Ether (TAME), Tert-Butyl Alcohol (TBA), and Tert-Amyl Alcohol (TAA).

During the sampling event CES collected duplicate samples of monitoring wells MW-6, MW-19, MW-33, MW-54, and MW-63. Review of the duplicate samples collected from aforementioned monitoring well samples did not yield significant data gaps.

In addition to duplicate samples, CES also collected daily field blank samples at the conclusion of the sample events. The samples were collected at the conclusion of the day to be representative of all samples that were collected during that day. Sealed trip blank samples were also stored with samples during each day of the sample event.

Table 2 presents the laboratory data for the submitted groundwater samples collected as part of this assessment. The groundwater concentration maps are included as Figure 3. The groundwater elevation map is included as Figure 4.

2.2 Injection Well Installation

In accordance with the approved Corrective Action Plan (CAP) for the subject site, CES installed four additional injection wells between July 28 and July 27, 2016. The injection well completion summary as submitted to the Underground Injection Control (UIC) Department is included as Appendix D.

3.0 Summary

During the corrective action activities performed at the subject property, CES conducted a comprehensive groundwater monitoring event, to determine the effectiveness of the current corrective action plan. The qualitative and quantitative data collected from recent assessment activities indicates the following regarding current site conditions;

1. Groundwater from monitoring wells MW-3, MW-9, MW-10, MW-12, MW-17, MW-18, MW-19, MW-20, MW-22, MW-23, MW-25, MW-33, MW-35, MW-37, MW-39, MW-54, MW-5AR, PW-1R and DW-3 exhibited hydrocarbon constituent concentrations above the SSTLs for the chemicals of concern.

2. CES calculated a COC reduction of 75.92 percent during this phase of work.

3. Free-phase petroleum was observed at monitoring wells MW-15 at a thickness of 0.60 inches.

4. A surfactant injection / recovery event is scheduled for December 2016 to address free-phase petroleum identified at MW-15.

Tables

Table 1: Summary of Groundwater Elevation Data
Table 2: Summary of Groundwater Analytical Data
Table 3: Site Specific Target Levels Summary

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-1	27	17	27	93.89	10/19/2016	NA	DRY	NA	NA	DRY
					5/15/2016	NA	DRY	NA	NA	DRY
					11/3/2015	NA	DRY	NA	NA	DRY
					5/29/2015	NA	DRY	NA	NA	DRY
					11/11/2014	NA	DRY	NA	NA	DRY
					4/2/2014	NA	DRY	NA	NA	DRY
MW-2	30	20	30	94.70	10/19/2016	NA	21.17	NA	NA	73.53
					5/16/2016	NA	20.08	NA	NA	74.62
					11/3/2015	NA	20.32	NA	NA	74.38
					5/29/2015	22.56	22.57	0.01	72.14	72.13
					11/4/2014	NA	23.03	NA	NA	71.67
					4/2/2014	NA	21.12	NA	NA	73.58
MW-3	29	19	29	94.45	10/19/2016	NA	20.18	NA	NA	74.27
					5/16/2016	NA	19.84	NA	NA	74.61
					11/3/2015	NA	23.29	NA	NA	71.16
					5/29/2015	23.2	23.29	0.09	71.25	71.16
					4/2/2014	NA	21.40	NA	NA	73.05
					11/12/2014	NA	23.16	NA	NA	71.29
MW-4	28	18	28	94.85	10/19/2016	NA	20.42	NA	NA	74.43
					5/16/2016	NA	19.20	NA	NA	75.65
					11/3/2015	NA	20.35	NA	NA	74.50
					5/29/2015	NA	21.52	NA	NA	73.33
					11/11/2014	NA	21.76	NA	NA	73.09
					4/2/2014	NA	21.31	NA	NA	73.54
MW-5	26	16	26	95.26	10/19/2016	NA	DRY	NA	NA	DRY
					5/16/2016	NA	19.75	NA	NA	75.51
					11/3/2015	NA	DRY	NA	NA	DRY
					5/29/2015	NA	DRY	NA	NA	DRY
					11/11/2014	NA	DRY	NA	NA	DRY
					4/2/2014	NA	DRY	NA	NA	DRY
MW-6	30	20	30	94.96	10/19/2016	NA	22.04	NA	NA	72.92
					5/17/2016	NA	20.59	NA	NA	74.37
					11/3/2015	NA	21.21	NA	NA	73.75
					5/29/2015	NA	22.38	NA	NA	72.58
					11/11/2014	NA	23.98	NA	NA	70.98
					4/3/2014	NA	22.61	NA	NA	72.35
MW-7	30	20	30	95.93	10/19/2016	NA	22.20	NA	NA	73.73
					5/16/2016	NA	20.98	NA	NA	74.95
					11/3/2015	NA	21.79	NA	NA	74.14
					5/29/2015	NA	23.48	NA	NA	72.45
					11/11/2014	NA	24.12	NA	NA	71.81
					4/3/2014	NA	23.02	NA	NA	72.91
MW-8	28	18.5	28	94.79	10/19/2016	NA	19.70	NA	NA	75.09
					5/17/2016	NA	18.75	NA	NA	76.04
					11/3/2015	NA	19.19	NA	NA	75.60
					5/29/2015	NA	20.08	NA	NA	74.71
					11/11/2014	NA	21.43	NA	NA	73.36
					4/3/2014	NA	19.95	NA	NA	74.84
MW-9	30	20	30	92.30	10/19/2016	NA	20.30	NA	NA	72.00
					5/16/2016	NA	18.78	NA	NA	73.52
					11/3/2015	NA	20.04	NA	NA	72.26
					5/28/2015	NA	21.19	NA	NA	71.11
					11/11/2014	NA	21.69	NA	NA	70.61
					4/2/2014	NA	20.60	NA	NA	71.70
MW-10	28	18	28	85.98	10/19/2016	NA	15.75	NA	NA	70.23
					5/18/2016	NA	14.52	NA	NA	71.46
					11/3/2015	NA	14.58	NA	NA	71.40
					5/28/2015	NA	16.64	NA	NA	69.34
					11/11/2014	Interface Probe Failure - 1.25-Feet of Product Observed in Bailer				
					4/1/2014	NA	17.69	NA	NA	68.29
MW-11	30	Unknown		88.46	10/19/2016	NA	18.19	NA	NA	70.27
					5/18/2016	NA	16.66	NA	NA	71.80
					11/3/2015	NA	17.16	NA	NA	71.30
					5/29/2015	NA	18.93	NA	NA	69.53
					11/11/2014	NA	19.38	NA	NA	69.08
					4/2/2014	NA	18.61	NA	NA	69.85
MW-12	24.65	Unknown		72.80	10/19/2016	NA	3.32	NA	NA	69.48
					5/18/2016	NA	2.73	NA	NA	70.07
					11/3/2015	NA	3.15	NA	NA	69.65
					5/28/2015	NA	4.38	NA	NA	68.42
					11/11/2014	NA	4.63	NA	NA	68.17
					4/2/2014	NA	4.20	NA	NA	68.60

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-13	30.1	Unknown		80.44	10/19/2016	NA	10.83	NA	NA	69.61
					5/16/2016	NA	9.71	NA	NA	70.73
					11/3/2015	NA	9.82	NA	NA	70.62
					5/28/2015	NA	11.71	NA	NA	68.73
					11/11/2014	NA	12.15	NA	NA	68.29
					4/1/2014	NA	11.13	NA	NA	69.31
MW-15	25	15	25	86.44	10/19/2016	15.70	15.82	0.12	70.74	70.62
					5/18/2016	14.58	15.02	0.13	71.86	71.42
					11/3/2015	14.51	14.64	0.13	71.93	71.80
					5/29/2015	16.45	16.61	0.16	69.99	69.83
					11/11/2014	Interface Probe Failure - 0.25-Feet of Product Observed in Bailer				
					4/1/2014	16.60	16.00	0.60	69.84	70.88*
MW-16	25	15	25	88.19	10/19/2016	NA	17.55	NA	NA	68.89
					5/18/2016	NA	16.29	NA	NA	71.90
					11/3/2015	NA	16.29	NA	NA	70.15
					5/29/2015	Unable to Locate				
					11/12/2014	NA	18.98	NA	NA	69.21
					4/2/2014	NA	17.54	NA	NA	70.65
MW-17	22	20	30	92.45	10/19/2016	NA	21.58	NA	NA	70.87
					5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	NA	20.47	NA	NA	71.98
					5/28/2015	NA	22.70	NA	NA	69.75
					11/12/2014	NA	23.45	NA	NA	69.00
					4/2/2014	NA	22.00	NA	NA	70.45
MW-18	30	20	30	94.81	10/19/2016	NA	23.46	NA	NA	71.35
					5/15/2016	NA	22.04	NA	NA	72.77
					11/3/2015	NA	22.28	NA	NA	72.53
					5/28/2015	NA	24.41	NA	NA	70.40
					11/12/2014	NA	25.08	NA	NA	69.73
					4/2/2014	NA	23.68	NA	NA	71.13
MW-19	30	20	30	93.96	10/19/2016	NA	23.70	NA	NA	70.26
					5/18/2016	NA	21.76	NA	NA	72.20
					11/3/2015	NA	21.81	NA	NA	72.15
					5/28/2015	NA	24.00	NA	NA	69.96
					11/13/2014	NA	24.56	NA	NA	69.40
					4/3/2014	NA	23.33	NA	NA	70.63
MW-20	25	15	25	94.12	10/19/2016	NA	21.89	NA	NA	72.23
					5/15/2016	NA	20.41	NA	NA	73.71
					11/3/2015	NA	20.18	NA	NA	73.94
					5/28/2015	22.67	22.61	0.06	71.45	71.51
					11/13/2014	NA	23.28	NA	NA	70.84
					4/3/2014	NA	21.95	NA	NA	72.17
MW-22	30	20	30	94.25	10/19/2016	NA	21.16	NA	NA	73.09
					5/15/2016	NA	19.61	NA	NA	74.64
					11/3/2015	NA	19.01	NA	NA	75.24
					5/28/2015	NA	21.85	NA	NA	72.40
					11/11/2014	NA	22.68	NA	NA	71.57
					4/3/2014	NA	21.11	NA	NA	73.14
MW-23	30	20	30	94.43	10/19/2016	NA	23.06	NA	NA	71.37
					5/18/2016	NA	21.95	NA	NA	72.48
					11/3/2015	NA	21.95	NA	NA	72.48
					5/28/2015	NA	24.25	NA	NA	70.18
					11/13/2014	NA	24.98	NA	NA	69.45
					4/3/2014	NA	23.65	NA	NA	70.78
MW-25	25.6	Unknown		93.09	10/19/2016	NA	19.96	NA	NA	73.13
					5/15/2016	Unable to Locate				
					11/3/2015	NA	17.73	NA	NA	75.36
					5/28/2015	NA	20.65	NA	NA	72.44
					11/10/2014	NA	21.60	NA	NA	71.49
					4/1/2014	NA	19.71	NA	NA	73.38
MW-26	30	Unknown		95.96	10/19/2016	Not Sampled due to Obstruction				
					5/17/2016	NA	20.24	NA	NA	75.72
					11/3/2015	NA	21.06	NA	NA	74.90
					6/5/2015	NA	22.49	NA	NA	73.47
					11/11/2014	NA	22.95	NA	NA	73.01
					4/3/2014	NA	20.01	NA	NA	75.95
MW-27	30	15	30	91.40	10/19/2016	NA	17.46	NA	NA	73.94
					5/17/2016	NA	15.62	NA	NA	75.78
					11/3/2015	NA	11.21	NA	NA	80.19
					5/28/2015	NA	17.75	NA	NA	73.65
					11/13/2014	NA	18.85	NA	NA	72.55
					4/1/2014	NA	14.65	NA	NA	76.75

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-28	30	15	30	91.46	10/19/2016	NA	17.53	NA	NA	73.93
					5/17/2016	NA	15.90	NA	NA	75.56
					11/3/2015	NA	13.08	NA	NA	78.38
					5/28/2015	NA	17.97	NA	NA	73.49
					11/13/2014	NA	19.75	NA	NA	71.71
					4/1/2014	NA	15.63	NA	NA	75.83
MW-29	30	15	30	91.09	10/19/2016	NA	17.76	NA	NA	73.33
					5/17/2016	NA	15.88	NA	NA	75.21
					11/3/2015	NA	13.19	NA	NA	77.90
					5/28/2015	17.91	17.92	0.01	73.18	73.17
					11/13/2014	NA	19.92	NA	NA	71.17
					4/1/2014	NA	15.51	NA	NA	75.58
MW-30	30	15	30	92.77	10/19/2016	NA	29.20	NA	NA	63.57
					5/15/2016	NA	19.27	NA	NA	73.50
					11/3/2015	NA	17.43	NA	NA	75.34
					5/28/2015	NA	26.70	NA	NA	66.07
					11/10/2014	NA	22.90	NA	NA	69.87
					4/1/2014	NA	20.50	NA	NA	72.27
MW-31	35	20	35	95.20	10/19/2016	NA	24.41	NA	NA	70.79
					5/17/2016	NA	22.98	NA	NA	72.22
					11/3/2015	NA	22.53	NA	NA	72.67
					5/28/2015	25.61	25.62	0.01	69.59	69.58
					11/12/2014	NA	26.36	NA	NA	68.84
					4/2/2014	NA	24.41	NA	NA	70.79
MW-32	30	15	30	92.87	10/19/2016	Not Sampled due to Obstruction				
					5/17/2016	NA	19.75	NA	NA	73.12
					11/3/2015	NA	19.12	NA	NA	73.75
					5/28/2015	NA	22.00	NA	NA	70.87
					11/12/2014	NA	23.16	NA	NA	69.71
					4/2/2014	NA	21.28	NA	NA	71.59
MW-33	35	20	35	93.84	10/19/2016	NA	23.00	NA	NA	70.84
					5/15/2016	NA	21.57	NA	NA	72.27
					11/3/2015	NA	21.48	NA	NA	72.36
					5/28/2015	NA	23.83	NA	NA	70.01
					11/12/2014	NA	24.65	NA	NA	69.19
					4/1/2014	NA	23.18	NA	NA	70.66
MW-34	35	20	35	94.77	10/19/2016	NA	23.81	NA	NA	70.96
					5/15/2016	NA	22.38	NA	NA	72.39
					11/3/2015	NA	21.52	NA	NA	73.25
					5/28/2015	NA	24.72	NA	NA	70.05
					11/12/2014	NA	25.49	NA	NA	69.28
					4/1/2014	NA	24.06	NA	NA	70.71
MW-35	35	20	35	93.71	10/19/2016	NA	22.89	NA	NA	70.82
					5/16/2016	NA	21.48	NA	NA	72.23
					11/3/2015	NA	21.37	NA	NA	72.34
					5/28/2015	NA	23.80	NA	NA	69.91
					11/12/2014	NA	24.66	NA	NA	69.05
					4/1/2014	NA	21.35	NA	NA	72.36
MW-36	35	20	35	93.89	10/19/2016	NA	22.91	NA	NA	70.98
					5/15/2016	NA	21.36	NA	NA	72.53
					11/3/2015	NA	21.36	NA	NA	72.53
					5/28/2015	NA	23.63	NA	NA	70.26
					11/12/2014	NA	24.72	NA	NA	69.17
					4/1/2014	NA	22.84	NA	NA	71.05
MW-37	35	20	35	93.78	10/19/2016	NA	23.04	NA	NA	70.74
					5/16/2016	NA	21.61	NA	NA	72.17
					11/3/2015	NA	21.36	NA	NA	72.42
					5/28/2015	NA	23.98	NA	NA	69.80
					11/12/2014	NA	24.87	NA	NA	68.91
					4/1/2014	NA	22.24	NA	NA	71.54
MW-38	35	20	35	95.53	10/19/2016	NA	24.32	NA	NA	71.21
					5/18/2016	NA	24.83	NA	NA	70.70
					11/3/2015	NA	22.89	NA	NA	72.64
					6/2/2015	NA	25.26	NA	NA	70.27
					11/12/2014	NA	26.17	NA	NA	69.36
					4/1/2014	NA	24.61	NA	NA	70.92
MW-39	35	20	35	96.19	10/19/2016	NA	25.37	NA	NA	70.82
					5/18/2016	NA	24.02	NA	NA	72.17
					11/3/2015	NA	23.79	NA	NA	72.40
					6/2/2015	NA	26.45	NA	NA	69.74
					11/12/2014	NA	27.36	NA	NA	68.83
					4/2/2014	NA	25.59	NA	NA	70.60

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-40	35	20	35	95.69	10/19/2016	NA	25.04	NA	NA	70.65
					5/18/2016	NA	25.25	NA	NA	70.44
					11/3/2015	NA	23.43	NA	NA	72.26
					6/2/2015	NA	26.12	NA	NA	69.57
					11/12/2014	NA	27.01	NA	NA	68.68
					4/2/2014	NA	25.29	NA	NA	70.40
MW-41	35	20	35	94.85	10/19/2016	NA	24.45	NA	NA	70.40
					5/18/2016	NA	23.71	NA	NA	71.14
					11/3/2015	NA	22.77	NA	NA	72.08
					6/2/2015	NA	25.69	NA	NA	69.16
					11/11/2014	NA	26.99	NA	NA	67.86
					4/1/2014	NA	24.70	NA	NA	70.15
MW-42	35	20	35	95.81	10/19/2016	NA	25.08	NA	NA	70.73
					5/18/2016	NA	23.73	NA	NA	72.08
					11/3/2015	NA	23.46	NA	NA	72.35
					6/2/2015	NA	26.25	NA	NA	69.56
					11/12/2014	NA	27.22	NA	NA	68.59
					4/1/2014	NA	25.35	NA	NA	70.46
MW-43	40	20	40	95.15	10/19/2016	NA	23.70	NA	NA	71.45
					5/18/2016	NA	22.04	NA	NA	73.11
					11/3/2015	NA	22.21	NA	NA	72.94
					5/28/2015	NA	24.66	NA	NA	70.49
					11/11/2014	NA	25.61	NA	NA	69.54
					4/2/2014	NA	24.00	NA	NA	71.15
MW-44	31	16	31	94.57	10/19/2016	NA	22.16	NA	NA	72.41
					5/18/2016	NA	20.11	NA	NA	74.46
					11/3/2015	NA	20.33	NA	NA	74.24
					5/28/2015	NA	22.70	NA	NA	71.87
					11/11/2014	NA	24.23	NA	NA	70.34
					4/1/2014	NA	24.42	NA	NA	70.15
MW-45	30	15	30	92.51	10/19/2016	NA	20.99	NA	NA	71.52
					5/18/2016	NA	19.43	NA	NA	73.08
					11/3/2015	NA	19.45	NA	NA	73.06
					5/28/2015	NA	21.75	NA	NA	70.76
					11/11/2014	NA	22.63	NA	NA	69.88
					4/1/2014	NA	21.22	NA	NA	71.29
MW-46	35	20	35	94.50	10/19/2016	NA	23.25	NA	NA	71.25
					5/16/2016	NA	21.70	NA	NA	72.80
					11/3/2015	NA	21.84	NA	NA	72.66
					5/28/2015	NA	24.19	NA	NA	70.31
					11/11/2014	NA	24.95	NA	NA	69.55
					4/1/2014	NA	23.55	NA	NA	70.95
MW-48	30	15	30	89.95	10/19/2016	Unable to Access - Locked Gate				
					5/18/2016	NA	18.21	NA	NA	71.74
					11/3/2015	Unable to Access - Locked Gate				
					5/29/2015	NA	19.63	NA	NA	70.32
					11/11/2014	Unable to Access - Locked Gate				
					4/2/2014	NA	19.70	NA	NA	70.25
MW-49	30	15	30	88.18	10/19/2016	Unable to Access - Locked Gate				
					5/15/2016					
					11/3/2015					
					5/29/2015					
					11/11/2014					
					4/2/2014					
MW-50	30	15	30	84.09	10/19/2016	Unable to Access - Locked Gate				
					5/15/2016					
					11/3/2015					
					5/29/2015					
					11/11/2014					
					4/2/2014					
MW-51	35	20	35	93.91	10/19/2016	NA	22.78	NA	NA	71.13
					5/18/2016	NA	20.76	NA	NA	73.15
					11/3/2015	NA	21.87	NA	NA	72.04
					5/29/2015	NA	23.72	NA	NA	70.19
					11/11/2014	NA	24.29	NA	NA	69.62
					4/2/2014	NA	21.23	NA	NA	72.68
MW-53	20	5	20	79.60	10/19/2016	Unable to Locate- Overgrown Field				
					5/15/2016	Unable to Locate- Overgrown Field				
					11/3/2015	NA	8.49	NA	NA	71.11
					5/28/2015	NA	10.50	NA	NA	69.10
					11/11/2014	NA	11.02	NA	NA	68.58
					4/3/2014	NA	9.60	NA	NA	70.00

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-54	20	5	20	77.58	10/19/2016	NA	10.66	NA	NA	66.92
					5/18/2016	NA	10.15	NA	NA	67.43
					11/3/2015	NA	9.83	NA	NA	67.75
					5/28/2015	NA	11.27	NA	NA	66.31
					11/11/2014	Unable to Locate - Overgrown Field				
					4/1/2014	NA	11.31	NA	NA	66.27
MW-55	14	4	14	71.22	10/19/2016	NA	4.26	NA	NA	66.96
					5/18/2016	NA	1.55	NA	NA	69.67
					11/3/2015	NA	1.19	NA	NA	70.03
					5/28/2015	NA	3.83	NA	NA	67.39
					11/11/2014	Unable to Locate - Overgrown Field				
					4/3/2014	NA	2.51	NA	NA	68.71
MW-56	20	5	20	76.39	10/19/2016	NA	7.45	NA	NA	68.94
					5/18/2016	NA	6.76	NA	NA	69.63
					11/3/2015	NA	6.4	NA	NA	69.99
					5/28/2015	NA	8.22	NA	NA	68.17
					11/11/2014	Unable to Locate - Overgrown Field				
					4/3/2014	NA	5.12	NA	NA	71.27
MW-58	19	4	19	76.37	10/19/2016	Not Sampled due to Obstruction				
					5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	NA	4.52	NA	NA	71.85
					5/29/2015	NA	6.85	NA	NA	69.52
					11/11/2014	Abandoned				
					4/2/2014					
MW-59	17	2	17	68.02	10/19/2016	NA	5.84	NA	NA	62.18
					5/18/2016	NA	5.46	NA	NA	62.56
					11/3/2015	NA	5.04	NA	NA	62.98
					5/28/2015	NA	6.46	NA	NA	61.56
					11/11/2014	NA	6.69	NA	NA	61.33
					4/2/2014	NA	6.05	NA	NA	61.97
MW-60	14	4	14	67.94	10/19/2016	Unable to Locate				
					5/18/2016					
					11/3/2015					
					5/28/2015					
					11/11/2014					
					4/2/2014					
MW-62	35	20	35	94.05	10/19/2016	NA	22.64	NA	NA	71.41
					5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	22.15	22.67	0.52	71.90	71.38
					5/28/2015	22.21	23.71	1.5	71.84	70.34
					11/12/2014	NA	24.75	NA	NA	69.30
					4/1/2014	NA	22.32	NA	NA	71.73
MW-63	35	20	35	94.65	10/19/2016	NA	22.84	NA	NA	71.81
					5/18/2016	NA	21.66	NA	NA	72.99
					11/3/2015	NA	24.05	NA	NA	70.60
					5/28/2015	24.04	24.05	0.01	70.61	70.60
					11/12/2015	Unable to Locate				
					4/2/2014	NA	23.07	NA	NA	71.58
MW-65	35	20	35	94.04	10/19/2016	Unable to Locate - Paved over				
					5/15/2016					
					11/3/2015					
					5/28/2015					
					11/11/2014					
					4/2/2014					
MW-67	35	20	35	96.10	10/19/2016	NA	25.18	NA	NA	70.92
					5/18/2016	NA	23.73	NA	NA	72.37
					11/3/2015	NA	23.52	NA	NA	72.58
					6/2/2015	NA	26.29	NA	NA	69.81
					11/12/2014	NA	27.28	NA	NA	68.82
					4/1/2014	NA	24.44	NA	NA	71.66
MW-70	35	20	35	95.49	10/19/2016	NA	24.43	NA	NA	71.06
					5/18/2016	NA	23.11	NA	NA	72.38
					11/3/2015	NA	22.89	NA	NA	72.60
					5/28/2015	NA	25.60	NA	NA	69.89
					11/11/2014	NA	26.22	NA	NA	69.27
					4/2/2014	NA	24.70	NA	NA	70.79
MW-5AR	28	18	28	94.18	10/19/2016	NA	21.04	NA	NA	73.14
					5/15/2016	NA	19.59	NA	NA	74.59
					11/3/2015	NA	16.39	NA	NA	77.79
					5/28/2015	NA	20.91	NA	NA	73.27
					11/13/2014	NA	22.64	NA	NA	71.54
					4/1/2014	NA	21.24	NA	NA	72.94

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
PW-1R	50	45	50	93.75	10/19/2016	NA	22.36	NA	NA	71.39
					5/18/2016	NA	21.03	NA	NA	72.72
					11/3/2015	NA	21.43	NA	NA	72.32
					5/29/2015	23.19	23.20	0.01	70.56	70.55
					11/13/2014	NA	23.92	NA	NA	69.83
					4/3/2014	NA	23.11	NA	NA	70.64
DW-1	70	65	70	94.66	10/19/2016	NA	42.32	NA	NA	52.34
					5/16/2016	NA	42.71	NA	NA	51.95
					11/3/2015	NA	46.28	NA	NA	48.38
					5/29/2015	NA	46.28	NA	NA	48.38
					11/10/2014	NA	45.42	NA	NA	49.24
					4/2/2014	NA	45.00	NA	NA	49.66
DW-2	75	70	75	94.02	10/19/2016	NA	43.05	NA	NA	50.97
					5/16/2016	NA	41.99	NA	NA	52.03
					11/3/2015	NA	43.07	NA	NA	50.95
					11/11/2014	NA	44.88	NA	NA	49.14
					4/2/2014	NA	44.34	NA	NA	49.68
DW-3	52	47	52	93.75	10/19/2016	NA	23.07	NA	NA	70.68
					5/18/2016	NA	21.70	NA	NA	72.05
					11/3/2015	NA	21.29	NA	NA	72.46
					5/28/2015	NA	23.93	NA	NA	69.82
					11/13/2014	NA	24.42	NA	NA	69.33
					4/3/2014	NA	24.40	NA	NA	69.35
DW-4	110	105	110	93.79	10/19/2016	NA	42.79	NA	NA	51.00
					5/18/2016	NA	42.31	NA	NA	51.48
					11/3/2015	NA	43.34	NA	NA	50.45
					5/28/2015	NA	44.51	NA	NA	49.28
					11/13/2014	NA	3.45	NA	NA	90.34
					4/3/2014	NA	44.60	NA	NA	49.19
DW-5	70	65	70	93.74	10/19/2016	NA	42.51	NA	NA	51.23
					5/16/2016	NA	42.12	NA	NA	51.62
					11/3/2015	NA	42.89	NA	NA	50.85
					5/28/2015	NA	44.45	NA	NA	49.29
					11/12/2014	NA	44.75	NA	NA	48.99
					4/1/2014	NA	44.22	NA	NA	49.52
DW-6	70	65	70	95.90	10/19/2016	NA	44.54	NA	NA	51.36
					5/18/2016	NA	44.10	NA	NA	51.80
					11/3/2015	NA	44.59	NA	NA	51.31
					6/2/2015	NA	46.16	NA	NA	49.74
					11/12/2014	NA	46.64	NA	NA	49.26
					4/1/2014	NA	45.86	NA	NA	50.04
DW-7	55	50	55	72.79	10/19/2016	NA	22.24	NA	NA	50.55
					5/18/2016	NA	21.82	NA	NA	50.97
					11/3/2015	NA	22.97	NA	NA	49.82
					5/28/2015	NA	24.32	NA	NA	48.47
					11/11/2014	NA	24.75	NA	NA	48.04
					4/3/2014	NA	24.00	NA	NA	48.79
DW-8	55	50	55	68.63	10/19/2016	Not Sampled due to Obstruction				
					5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	NA	19.43	NA	NA	49.20
					5/29/2015	NA	5.37	NA	NA	63.26
					11/11/2014	Abandoned				
					4/2/2014					
DW-9	65	60	65	76.47	10/19/2016	NA	22.87	NA	NA	53.60
					5/18/2016	NA	22.42	NA	NA	54.05
					11/3/2015	NA	23.62	NA	NA	52.85
					5/28/2015	NA	24.90	NA	NA	51.57
					11/11/2014	NA	24.44	NA	NA	52.03
					4/2/2014	NA	25.00	NA	NA	51.47

INA = Information not available

* = GW Elevation Corrected for The Presence of Free Product

n/a = not applicable

CRAWFORD ENVIRONMENTAL SERVICES

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-1	4/2/2014	Dry								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
MW-2	4/2/2014	170	41	200	960	320	150	230	1	6.8
	11/4/2014	140	300	220	1300	410	160	210	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/4/2015	0.61	0.48	1.4	5.5	<1	2.6	<100	<10	<100
	5/16/2016	11	0.83 J	0.98 J	49	18	12	<100	<10	<100
	10/21/2016	34	4.9	23	60	56	18	68 J	<10	47 J
MW-3	4/2/2014	6900	18000	1200	16000	1800	600	980	560.000	340
	11/12/2014	4600	11000	620	8700	1300	280	<5000	310.000	<5000
	5/29/2015	0.09-Feet of Free Product								
	11/4/2015	3000	8700	600	7200	720	360	<2000	140	<2000
	5/16/2016	7800	22000	1800	21000	2500	870	<5000	410 J	<5000
	10/21/2016	480	1000	76	2100	67	61	210	29	330
MW-4	4/2/2014	<1	<1	<1	<1	3.5	<5	<100	10.000	<100
	11/11/2014	<1	<1	<1	<1	1.6	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	0.87 J	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	1	<5	<100	<10	<100
MW-5	4/2/2014	Dry								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/16/2016	0.29 J	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	Dry								
MW-6	4/3/2014	2.6	<1	2.4	10	2.5	4.2	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	0.8	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	1.7	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	1.9 J	<100	<10	<100
MW-7	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	0.71	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-8	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-9	4/2/2014	830	7500	1700	14000	50	590	1700	5000	5000
	11/11/2014	380	11000	1900	13000	5	650	1100	<10	<100
	5/28/2015	250	5700	1200	8200	<50	480	<5000	<500	<5000
	11/4/2015	520	6200	1100	8600	<50	470	3000	<500	<5000
	5/16/2016	78	1900	1000	4300	<1	440	200	<10	<100
	10/21/2016	60	1500	730	3800	<1	210	550	<10	<100
MW-10	4/1/2014	1800	5700	350	8500	50	690	5000	500	5000
	11/11/2014	1.25-Feet of Free Product								
	5/28/2015	66	76	67	860	<1	370	<100	<10	<100
	11/4/2015	10	18	4.5	120	<1	46	<100	<10	<100
	5/18/2016	88	11	22	97	<1	170	<100	<10	<100
	10/21/2016	27	7.1	11	93	<1	47	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-11	4/2/2014	2.3	4.1	11	4.1	<1	4.4	120	<10	<100
	11/11/2014	0.53	<1	<1	<1	<1	<5	80	<10	58
	5/29/2015	0.51	<1	<1	3.8	<1	6.6	50	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-12	4/2/2014	2.9	0.67	1.6	0.91	18	4.7	630	9	<100
	11/11/2014	990	19	910	140	21	180	3600	14	<100
	5/28/2015	53	2.7	430	14	22	44	2300	<10	<100
	11/4/2015	110	2	53	25	<1	10	1800	8	<100
	5/18/2016	260	83	710	330	17	190	1300	<10	<100
	10/20/2016	180	18	420	300	13	110	4000	<10	<100
MW-13	4/1/2014	0.62	8.8	4.5	86	<1	31	10	<10	<100
	11/11/2014	<1	<1	<	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<1	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-15	4/1/2014	0.60-Feet of Free Product								
	11/11/2014	0.25-Feet of Free Product								
	5/29/2015	0.16-Feet of Free Product								
	11/3/2015	0.14-Feet of Free Product								
	5/15/2016	0.44-Feet of Free Product								
	10/19/2016	0.60-Feet of Free Product								
MW-16	4/2/2014	<1	<1	<1	<1	<1	3.4	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	Unable to Locate								
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-17	4/2/2014	280	5100	450	13000	50	850	2200	500	5000
	11/12/2014	32	3000	450	8300	<10	690	270	<100	<1000
	5/28/2015	210	7500	480	12000	<50	830	2200	<500	<5000
	11/4/2015	280	10000	660	13000	<100	720	<10000	<1000	<10000
	5/15/2016	Not Sampled due to Obstruction								
	10/20/2016	<100	5500	510	11000	<100	560	<10000	<1000	<10000
MW-18	4/2/2014	1900	7200	630	8300	340	370	4900	70	5000
	11/12/2014	3100	11000	560	8700	510	290	12000	<1000	<10000
	5/28/2015	970	2500	180	4100	230	180	3000	33	<100
	11/3/2015	990	5800	600	8900	93	260	<10000	<1000	<10000
	5/15/2016	260	1900	220	4900	20	220	690	<10	<100
	10/20/2016	510	2400	230	3700	68	120	5500	48	1100
MW-19	4/3/2014	300	1800	490	12000	50	900	610	500	5000
	11/13/2014	1400	2800	1600	24000	<50	1400	1300	<50	<5000
	5/28/2015	2100	17000	330	16000	<50	1200	6200	<500	<5000
	11/3/2015	2900	19000	720	17000	<100	1100	5400	<1000	<10000
	5/18/2016	2900	19000	1100	22000	200	1400	4300 J	<500	<5000
	10/21/2016	2500	18000	1200	19000	<500	1200 J	<50000	<5000	<50000
MW-20	4/3/2014	1800	11000	460	11000	50	960	3100	65	5000
	11/13/2014	1400	12000	500	14000	120	1100	<10000	<1000	<10000
	5/29/2015	0.06-Feet of Free Product								
	11/3/2015	930	11000	1000	17000	<50	1400	<5000	<500	<5000
	5/15/2016	690	10000	2100	23000	<50	1600	<5000	<500	<5000
	10/21/2016	490	7000	1600	20000	<50	1200	4200 J	<500	<5000
MW-22	4/3/2014	5700	12000	880	23000	50	990	3600	500	5000
	11/11/2014	6300	23000	700	21000	<20	1200	9600	<20	<140
	6/5/2015	4800	16000	760	26000	<100	840	<10000	<1000	<10000
	11/3/2015	6400	20000	740	24000	<100	1000	3900	<1000	<10000
	5/15/2016	1900	11000	1500	28000	<50	1400	<5000	<500	<5000
	10/21/2016	3400	20000	1600	20000	<500	720 J	<50000	<5000	<50000

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-23	4/3/2014	4200	16000	880	19000	120	1100	5900	500.000	5000
	11/13/2014	890	3600	450	16000	<50	1200	1500	<50	<340
	5/28/2015	570	1500	89	8300	<50	660	<5000	<500	<5000
	11/3/2015	2.9	8.5	1.5	190	<1	52	<100	<10	<100
	5/18/2016	280	990	110	4200	7.3	470	520	<10	<100
	10/21/2016	600	1900	130	4600	18	390	4000	<10	<100
MW-25	4/1/2014	5.5	200	320	4400	<1	1300	170	<10	<100
	11/10/2014	38	140	200	2600	1.9	490	2800	<10	<100
	5/28/2015	29	140	190	3000	<1	560	430	<10	<100
	11/3/2015	14	150	200	2600	<1	340	390	<10	<100
	5/15/2016	Unable to Locate								
	10/19/2016	8.8	120	230	3400	<1	450	<100	<10	<100
MW-26	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	Not Sampled due to Obstruction								
MW-27	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-28	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-29	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-30	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/10/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-31	4/2/2014	0.9	<1	<1	<1	2.7	<5	59	<10	<100
	11/12/2014	30	9.8	310	9.3	4.1	160	460	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	7.9	<1	6.1	<1	<1	130	<100	<10	<100
MW-32	4/2/2014	0.94	<1	1.9	2.4	<1	6.6	170	<10	<100
	11/12/2014	4	13	72	10	<1	45	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	2.8 J	<100	<10	<100
	10/19/2016	Not Sampled due to Obstruction								
MW-33	4/1/2014	560	5200	2500	6900	50	670	4100	500.000	5000
	11/12/2014	130	410	210	550	1.2	71	1000	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	29	<10	<100
	11/3/2015	240	7500	1600	11000	<50	430	<5000	<500	<5000
	5/15/2016	260	3200	1400	4700	4.3	390	210	<10	<100
	10/19/2016	120	620	480	1700	<1	95	980	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-34	4/1/2014	<1	<1	<1	<1	<1	<5	39	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	39	<10	<100
	5/28/2015	<1	1.1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-35	4/1/2014	3700	4300	2000	6200	160	550	5600	54	5000
	11/12/2014	6000	7200	2800	7400	330	700	4700	76	<100
	5/28/2015	3300	5100	1500	4700	<50	640	4400	<500	<5000
	11/3/2015	1900	2200	1100	3300	84	530	2300	28	<100
	5/16/2016	130	130	23	490	4.6	46	120	<10	<100
	10/20/2016	2200	3300	1300	4100	64	360	5800	63	<100
MW-36	4/1/2014	5.1	<1	38	<1	<1	55	96	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	1.3	<1	2.3	<1	<5	<100	<10	<100
	11/3/2015	0.74	<1	1.6	<1	<1	16	<100	<10	<100
	5/15/2016	1	<1	14	0.47 J	<1	54	<100	<10	<100
	10/19/2016	1.8	<1	25	<1	<1	14	<100	<10	<100
MW-37	4/1/2014	<1	<1	<1	<1	<1	3.7	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	3.5	<1	<1	5.4	<1	5.5	77	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	0.95 J	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	1.0 J	<100	<10	<100
MW-38	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-39	4/2/2014	<1	3.2	2.2	14	<1	3.3	<100	<10	<100
	11/12/2014	11	1500	1000	3700	<1	340	220	<10	<100
	6/2/2015	1.3	160	140	1100	<1	160	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	1.2	1.9	4.9	<1	<5	<100	<10	<100
	10/20/2016	1.5	390	780	2300	<1	320	<100	<10	<100
MW-40	4/2/2014	5.8	14	2	580	<1	24	<100	<10	<100
	11/12/2014	140	970	300	2900	12	150	600	<10	<100
	6/2/2015	5.2	47	3.9	590	<1	38	<100	<10	<100
	11/4/2015	0.51	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	1.4	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	1.4	<1	<1	<5	<100	<10	<100
MW-41	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	26	3.2	510	15	<1	340	<100	<10	<100
MW-42	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	0.31 J	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-43	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-44	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-45	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-46	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-48	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	Unable to Access - Locked Gate								
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	Unable to Access - Locked Gate								
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/25/2016	Unable to Access - Locked Gate								
MW-49	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
MW-50	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
MW-51	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-53	4/3/2014	<1	<1	<1	<1	<1	4.1	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	4.1	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-54	4/1/2014	<1	<1	<1	<1	9.6	<5	<100	6.700	<100
	11/11/2014	Unable to Locate								
	5/28/2015	<1	<1	<1	<1	6.4	<5	140	<10	<100
	11/4/2015	<1	<1	<1	<1	1.5	<5	<100	<10	<100
	5/18/2016	0.60 J	<1	<1	<1	5.0	<5	60 J	<10	<100
	10/20/2016	<1	<1	<1	<1	2.0	<5	130	<10	<100
MW-55	4/3/2014	10	1	3.5	<1	24	3.9	98	6.400	<100
	11/11/2014	Unable to Locate								
	5/28/2015	1000	40	410	260	190	180	1700	15	<100
	11/4/2015	640	64	200	230	160	120	1200	11	56
	5/18/2016	950	44	320	210	220	130	2600	15	<100
	10/21/2016	1500	310	860	1100	210	240	6000	43	370

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-56	4/3/2014	<1	<1	<1	<1	<1	<5	50	<10	<100
	11/11/2014	Unable to Locate								
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-58	4/2/2014	Abandoned								
	11/11/2014									
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	Not Sampled due to Obstruction								
	10/19/2016	Not Sampled due to Obstruction								
MW-59	4/2/2014	28	2.8	300	6.4	130	45	2600	42	160
	11/11/2014	81	3.6	730	14	91	96	4500	27	<100
	5/28/2015	1400	23	1100	620	89	290	3900	34	<100
	11/4/2015	1300	48	440	850	58	250	2800	19	<100
	5/18/2016	1900	51	950	760	96	260	4300	28	<100
	10/20/2016	2400	61	1400	2300	62	390	10000	63	300
MW-60	4/2/2014	Unable to Locate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
MW-62	4/1/2014	0.86	<1	<1	<1	3	3.3	260	<10	<100
	11/12/2014	51	<1	<1	0.93	2.6	65	730	<10	<100
	5/29/2015	1.50-Feet of Free Product								
	12/17/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	Not Sampled due to Obstruction								
	10/19/2016	Not Sampled due to Obstruction								
MW-63	4/2/2014	<1	<1	<1	<1	<1	5	120	<10	<100
	11/12/2014	Unable to Locate								
	5/29/2001	0.01-Feet of Free Product								
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-65	4/2/2014	Unable to Locate - Paved over								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
MW-67	4/1/2014	<1	<1	<1	<1	<1	5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-70	4/2/2014	<1	<1	<1	<1	<1	5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	1.5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	0.44 J	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-5AR	4/1/2014	12000	13000	2400	13000	70	1000	<5000	160.000	<5000
	11/13/2014	830	180	98	670	13	130	<100	13.000	<100
	5/28/2015	2500	1200	280	1300	43	460	650	52.000	<100
	11/3/2015	5200	10000	810	5300	<100	580	<10000	<1000	<10000
	5/15/2016	7000	6400	1200	8000	<100	890	<10000	<1000	<10000
	10/21/2016	6300	3000	1100	7200	<50	1100	<5000	<500	<5000

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron | UST | 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina | Crawford Project No. | 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
PW-1R	4/3/2014	460	3400	320	9200	<50	<250	710	<500	<5000
	11/13/2014	850	6900	580	18000	<50	1300	<5000	<500	<5000
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	830	20000	1200	14000	<500	600	<50000	<5000	<50000
	5/18/2016	210	1200	170	3200	6.8	200	380	<10	<100
	10/21/2016	410	5900	440	7200	<20	320	1900 J	<200	<2000
DW-1	4/2/2014	0.45	1.2	1.7	7.2	<1.0	<5.0	<100	<10	<100
	11/10/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-2	4/2/2014	<1.0	<1.0	<1.0	<1.0	7.1	4.1	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	10	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	8.7	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	2.9	<5	<100	<10	<100
DW-3	4/3/2014	9800	22000	3700	17000	990	780	10000	190	<5000
	11/13/2014	2000	20000	2800	10000	23	650	2700	<20	<140
	5/28/2015	310	4000	79	3100	6.5	130	750	<10	<100
	11/3/2015	4300	16000	2300	11000	230	800	2600	50	<2000
	5/18/2016	2600	10000	1400	8200	160	410	<5000	<500	<5000
	10/21/2016	4200	8300	1800	5200	240	450 J	8200 J	<1000	<10000
DW-4	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-5	4/1/2014	3300	68	37	1000	940	81	4300	83	<100
	11/12/2014	6700	380	240	3100	1400	190	5300	110	<100
	5/28/2015	6900	660	420	3800	1200	290	6300	<500	<5000
	11/4/2015	5900	490	200	1800	1100	170	4800	89	<100
	5/16/2016	9200	1600	750	5300	1400	470	4300	95 J	<100
	10/25/2016	5700	1200	460	2800	1000	200 J	17000	<1000	<10000
DW-6	4/1/2014	8.5	1.2	1.6	7.2	3	5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/25/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-7	4/3/2014	0.52	0.46	<1.0	1.4	2.6	4.2	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	1.2	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-8	4/2/2014	Abandoned								
	11/11/2014									
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	Not Sampled due to Obstruction								
	10/21/2016	Not Sampled due to Obstruction								
DW-9	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	2.8	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	42	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	3.1	<5	<100	<10	<100

Table 2

Facility Name:	Handy Pantry #65 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address:	2367 Taylor Street Columbia, South Carolina	Crawford Project No.	7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
SW-1	4/2/2014	180	8.4	30	53	42	6.5	350	9.500	100
	11/12/2014	Unable to Access - Overgrown Brush								
	5/28/2015	230	18	89	160	30	24	590	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	44	<10	<100
	5/18/2016	130	18	53	92	12	16	430	<10	<100
	10/19/2016	Unable to Access - Overgrown Brush								

BDL= Below Detectable Limit
RBSL= Risk Based Screening Levels
NE= Not Established

CRAWFORD ENVIRONMENTAL SERVICES

1,2 DCA = 1,2 Dichloroethane
J = Estimated value detected below reporting limit

Table 3

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Site Specific Target Level Summary

Well ID:	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-2	Initial	140.0	280.0	56.0	460.0	380.0	54.0	200.0	9.2	140.0	1719.2	
	SSTL	77.0	280.0	56.0	460.0	380.0	54.0	200.0	9.2	140.0	1656.2	
	Initial > SSTL	63.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.0	
	Subsequent	34.00	4.90	23.00	60.0	56.0	18.0	68.0	10.0	47.0	320.9	
	SSTL	77.0	280.0	56.0	460.0	380.0	54.0	200.0	9.2	140.0	1656.2	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-3	Initial	3000.0	7400.0	260.0	4500.0	3300.0	260.0	2000.0	340.0	1300.0	22360.0	
	SSTL	111.0	7400.0	260.0	4500.0	1976.0	108.0	2000.0	340.0	1300.0	17995.0	
	Initial > SSTL	2889.0	0.0	0.0	0.0	1324.0	152.0	0.0	0.0	0.0	4365.0	
	Subsequent	480.0	1000.0	76.0	2100.0	67.0	61.0	210.0	29.0	330.0	4353.0	
	SSTL	111.0	7400.0	260.0	4500.0	1976.0	108.0	2000.0	340.0	1300.0	17995.0	
	Subsequent > SSTL	369.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	369.0	
MW-5	Initial	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	
	SSTL	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Subsequent	0.3	1.0	1.0	1.0	1.0	5.0	100.0	10.0	100.0	219.3	
	SSTL	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-9	Initial	4100.0	27000.0	2500.0	19000.0	150.0	960.0	1600.0	2000.0	20000.0	77310.0	
	SSTL	35.0	7134.0	2500.0	19000.0	150.0	68.0	809.0	270.0	15628.0	45594.0	
	Initial > SSTL	4065.0	19866.0	0.0	0.0	0.0	892.0	791.0	1730.0	4372.0	31716.0	
	Subsequent	60	1500	730	3800	1	210	550	10	100	6961.0	
	SSTL	35.0	7134.0	2500.0	19000.0	150.0	68.0	809.0	270.0	15628.0	45594.0	
	Subsequent > SSTL	25.0	0.0	0.0	0.0	0.0	142.0	0.0	0.0	0.0	167.0	
MW-10	Initial	740.0	7800.0	2500.0	15000.0	2500.0	950.0	50000.0	5000.0	50000.0	134490.0	
	SSTL	24.0	7800.0	2500.0	15000.0	294.0	53.0	793.0	707.0	11042.0	38213.0	
	Initial > SSTL	716.0	0.0	0.0	0.0	2206.0	897.0	49207.0	4293.0	38958.0	96277.0	
	Subsequent	27	7.1	11	93	1	47	100	10	100	396.1	
	SSTL	24.0	7800.0	2500.0	15000.0	294.0	53.0	793.0	707.0	11042.0	38213.0	
	Subsequent > SSTL	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	
MW-12	Initial	1.7	5.0	11.0	5.0	5.6	4.7	370.0	1.5	19.0	423.5	
	SSTL	1.7	5.0	11.0	5.0	5.6	4.7	370.0	1.5	19.0	423.5	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	
	Subsequent	180	18	420	300	13	110	4000	10	100	1.0	
	SSTL	1.7	5.0	11.0	5.0	5.6	4.7	370.0	1.5	19.0	423.5	
	Subsequent > SSTL	178.3	13.0	409.0	295.0	7.4	105.3	3630.0	0.0	0.0	4638.0	
MW-15	Initial	Free Product										Free Product
	SSTL	16.0	3198.0	3700.0	21680.0	730.0	45.0	492.0	199.0	5838.0	35898.0	
	Initial > SSTL											
	Subsequent											
	SSTL	16.0	3198.0	3700.0	21680.0	730.0	45.0	492.0	199.0	5838.0	35898.0	
	Subsequent > SSTL										0.0	

Table 3

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Site Specific Target Level Summary

Well ID:	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total
MW-17	Initial	1400.0	26000.0	2500.0	23000.0	1000.0	1000.0	9400.0	2000.0	20000.0	86300.0
	SSTL	32.0	6631.0	2500.0	21680.0	1000.0	66.0	773.0	263.0	14286.0	47231.0
	Initial > SSTL	1368.0	19369.0	0.0	1320.0	0.0	934.0	8627.0	1737.0	5714.0	39069.0
	Subsequent	100	5500	510	11000	100	560	10000	1000.0	10000	38770.0
	SSTL	32.0	6631.0	2500.0	21680.0	1000.0	66.0	773.0	263.0	14286.0	47231.0
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	494.0	0.0	0.0	0.0	494.0
MW-18	Initial	1900.0	7200.0	630.0	8300.0	340.0	370.0	4900.0	70.0	5000.0	28710.0
	SSTL	40.0	19326.0	3700.0	21680.0	4260.0	348.0	938.0	4989.0	54462.0	109743.0
	Initial > SSTL	1860.0	0.0	0.0	0.0	0.0	22.0	3962.0	0.0	0.0	5844.0
	Subsequent	510	2400	230	3700	68	120	5500	48.00	100	12676.0
	SSTL	40.0	19326.0	3700.0	21680.0	4260.0	348.0	938.0	4989.0	54462.0	109743.0
	Subsequent > SSTL	470.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	470.0
MW-19	Initial	300.0	1800.0	490.0	12000.0	50.0	900.0	610.0	500.0	5000.0	21650.0
	SSTL	54.0	11081.0	3700.0	21680.0	16080.0	86.0	1065.0	320.0	26814.0	80880.0
	Initial > SSTL	246.0	0.0	0.0	0.0	0.0	814.0	0.0	180.0	0.0	1240.0
	Subsequent	2500	18000	1200	19000	500	1200	5000	500.00	5000	52900.0
	SSTL	54.0	11081.0	3700.0	21680.0	16080.0	86.0	1065.0	320.0	26814.0	80880.0
	Subsequent > SSTL	2446.0	6919.0	0.0	0.0	0.0	1114.0	0.0	0.0	0.0	10479.0
MW-20	Initial	412.0	2930.0	728.0	8820.0	88.7	817.0	2850.0	200.0	2000.0	18845.7
	SSTL	83.0	2930.0	728.0	8820.0	88.7	108.0	1403.0	200.0	2000.0	16360.7
	Initial > SSTL	329.0	0.0	0.0	0.0	0.0	709.0	1447.0	0.0	0.0	2485.0
	Subsequent	490.0	7000.0	1600.0	20000.0	50.0	1200.0	4200.0	500.0	5000.0	40040.0
	SSTL	83.0	2930.0	728.0	8820.0	88.7	108.0	1403.0	200.0	2000.0	16360.7
	Subsequent > SSTL	407.0	4070.0	872.0	11180.0	0.0	1092.0	2797.0	0.0	0.0	20418.0
MW-22	Initial	3300.0	17000.0	2900.0	20000.0	1000.0	640.0	6200.0	130.0	20000.0	71170.0
	SSTL	90.0	17000.0	2900.0	20000.0	1000.0	112.0	1469.0	130.0	20000.0	62701.0
	Initial > SSTL	3210.0	0.0	0.0	0.0	0.0	528.0	4731.0	0.0	0.0	8469.0
	Subsequent	3400	20000	1600	20000	500	720	50000	5000.00	50000	151220.0
	SSTL	90.0	17000.0	2900.0	20000.0	1000.0	112.0	1469.0	130.0	20000.0	62701.0
	Subsequent > SSTL	3310.0	3000.0	0.0	0.0	0.0	608.0	0.0	0.0	0.0	6918.0
MW-23	Initial	4200.0	16000.0	880.0	19000.0	120.0	1100.0	5900.0	500.0	5000.0	52700.0
	SSTL	72.0	14880.0	3700.0	21680.0	33368.0	100.0	1279.0	359.0	38475.0	113913.0
	Initial > SSTL	4128.0	1120.0	0.0	0.0	0.0	1000.0	4621.0	141.0	0.0	11010.0
	Subsequent	600	1900	130	4600	18	390	4000	10	100	11748.0
	SSTL	72.0	14880.0	3700.0	21680.0	33368.0	100.0	1279.0	359.0	38475.0	113913.0
	Subsequent > SSTL	528.0	0.0	0.0	0.0	0.0	290.0	2721.0	0.0	0.0	3539.0
MW-25	Initial	5000.0	3000.0	1900.0	23000.0	5000.0	5000.0	100000.0	10000.0	100000.0	252900.0
	SSTL	104.0	3000.0	1900.0	23000.0	5000.0	121.0	1612.0	415.0	60494.0	95646.0
	Initial > SSTL	4896.0	0.0	0.0	0.0	0.0	4879.0	98388.0	9585.0	39506.0	157254.0
	Subsequent	8.8	120	230	3400	1	450	100	10	100	4419.8
	SSTL	104.0	3000.0	1900.0	23000.0	5000.0	121.0	1612.0	415.0	60494.0	95646.0
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	329.0	0.0	0.0	0.0	329.0

Facility Name:	Handy Pantry #65 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address:	2367 Taylor Street Columbia, South Carolina	Crawford Project No.	7.0547

Site Specific Target Level Summary

Well ID:	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-31	Initial	57.0	90.0	520.0	250.0	12.0	210.0	510.0	50.0	500.0	2199.0	
	SSTL	51.0	90.0	520.0	250.0	12.0	210.0	510.0	50.0	500.0	2193.0	
	Initial > SSTL	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	
	Subsequent	7.9	1.0	6.1	1.0	1.0	130.0	100.0	10.0	100.0	357.0	
	SSTL	51.0	90.0	520.0	250.0	12.0	210.0	510.0	50.0	500.0	2193.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-33	Initial	520.0	7200.0	1500.0	7200.0	500.0	410.0	3200.0	1000.0	10000.0	31530.0	
	SSTL	53.0	7200.0	1500.0	7200.0	500.0	410.0	1136.0	1000.0	10000.0	28999.0	
	Initial > SSTL	467.0	0.0	0.0	0.0	0.0	0.0	2064.0	0.0	0.0	2531.0	
	Subsequent	120	620	480	1700	1	95	980	10.00	100	4106.0	
	SSTL	53.0	7200.0	1500.0	7200.0	500.0	410.0	1136.0	1000.0	10000.0	28999.0	
	Subsequent > SSTL	67.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.0	
MW-35	Initial	4400.0	2000.0	1700.0	3500.0	300.0	580.0	5300.0	51.0	5000.0	22831.0	
	SSTL	56.0	2000.0	1700.0	3500.0	300.0	542.0	1181.0	51.0	5000.0	14330.0	
	Initial > SSTL	4344.0	0.0	0.0	0.0	0.0	38.0	4119.0	0.0	0.0	8501.0	
	Subsequent	2200	3300	1300	4100	64	360	5800	63	100	17287.0	
	SSTL	56.0	2000.0	1700.0	3500.0	300.0	542.0	1181.0	51.0	5000.0	14330.0	
	Subsequent > SSTL	2144.0	1300.0	0.0	600.0	0.0	0.0	4619.0	12.0	0.0	8675.0	
MW-37	Initial	240.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1959.0	
	SSTL	90.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1809.0	
	Initial > SSTL	150.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0	
	Subsequent	1	1	1	1	1	1	100	10	100	216.0	
	SSTL	90.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1809.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-39	Initial	13.0	1300.0	460.0	4200.0	250.0	330.0	5000.0	500.0	5000.0	17053.0	
	SSTL	13.0	1300.0	460.0	4200.0	250.0	330.0	1607.0	500.0	5000.0	13660.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	3393.0	0.0	0.0	3393.0	
	Subsequent	1.5	390	780	2300	1	320	100	10	100	4002.5	
	SSTL	13.0	1300.0	460.0	4200.0	250.0	330.0	1607.0	500.0	5000.0	13660.0	
	Subsequent > SSTL	0.0	0.0	320.0	0.0	0.0	0.0	0.0	0.0	0.0	320.0	
MW-40	Initial	290.0	2900.0	650.0	7100.0	500.0	530.0	10000.0	1000.0	10000.0	32970.0	
	SSTL	113.0	2900.0	650.0	7100.0	500.0	530.0	1876.0	1000.0	10000.0	24669.0	
	Initial > SSTL	177.0	0.0	0.0	0.0	0.0	0.0	8124.0	0.0	0.0	8301.0	
	Subsequent	1	1	1	1	1	5	100	10	100	220.0	
	SSTL	113.0	2900.0	650.0	7100.0	500.0	530.0	1876.0	1000.0	10000.0	24669.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-41	Initial	260.0	1000.0	1100.0	1000.0	1000.0	420.0	20000.0	2000.0	20000.0	46780.0	
	SSTL	257.0	1000.0	1100.0	1000.0	1000.0	420.0	3234.0	2000.0	20000.0	30011.0	
	Initial > SSTL	3.0	0.0	0.0	0.0	0.0	0.0	16766.0	0.0	0.0	16769.0	
	Subsequent	26	3.2	510	15	1	340	100	10	100	1105.2	
	SSTL	257.0	1000.0	1100.0	1000.0	1000.0	420.0	3234.0	2000.0	20000.0	30011.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Table 3

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Site Specific Target Level Summary

Well ID:	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-54	Initial	5.0	5.0	5.0	5.0	5.0	5.0	100.0	10.0	100.0	240.0	
	SSTL	5.0	5.0	5.0	5.0	5.0	5.0	110.0	2.0	14.0	156.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	86.0	94.0	
	Subsequent	1	1	1	1	2	5	130	10	100	251.0	
	SSTL	5.0	5.0	5.0	5.0	5.0	5.0	110.0	2.0	14.0	156.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0	20.0	
MW-58	Initial	4.8	25.0	20.0	25.0	93.0	11.0	1800.0	15.0	100.0	2093.8	
	SSTL	4.8	25.0	20.0	25.0	51.0	11.0	279.0	15.0	100.0	530.8	
	Initial > SSTL	0.0	0.0	0.0	0.0	42.0	0.0	1521.0	0.0	0.0	0.0	
	Subsequent	1	1	1	1	1	5	100	10	100	0.0	
	SSTL	1.0	1.0	1.0	1.0	1.0	5.0	100.0	10.0	100.0	220.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-65	Initial	420.0	398.0	234.0	262.0	16.4	168.0	648.0	50.0	500.0	2696.4	
	SSTL	326.0	398.0	234.0	262.0	16.4	168.0	648.0	50.0	500.0	2602.4	
	Initial > SSTL	94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Unable to Locate - Paved Over
	Subsequent	Unable to Locate - Paved Over										
	SSTL	326.0	398.0	234.0	262.0	16.4	168.0	648.0	50.0	500.0	2602.4	
	Subsequent > SSTL	Unable to Locate - Paved Over										
MW-5AR	Initial	9200.0	1000.0	1400.0	4400.0	160.0	810.0	1300.0	1000.0	10000.0	29270.0	
	SSTL	83.0	1000.0	1400.0	4400.0	160.0	108.0	1300.0	381.0	10000.0	18832.0	
	Initial > SSTL	9117.0	0.0	0.0	0.0	0.0	702.0	0.0	619.0	0.0	10438.0	
	Subsequent	6300	3000	1100	7200	50	1100	5000	500.00	5000	29250.0	
	SSTL	83.0	1000.0	1400.0	4400.0	160.0	108.0	1300.0	381.0	10000.0	18832.0	
	Subsequent > SSTL	6217.0	2000.0	0.0	2800.0	0.0	992.0	0.0	0.0	0.0	12009.0	
PW-1R	Initial	460.0	3400.0	320.0	9200.0	50.0	250.0	710.0	500.0	5000.0	19890.0	
	SSTL	58.0	11928.0	3700.0	21680.0	290.0	19298.0	1114.0	330.0	29344.0	87742.0	
	Initial > SSTL	402.0	0.0	0.0	0.0	0.0	0.0	0.0	170.0	0.0	572.0	
	Subsequent	410.0	5900.0	440.0	7200.0	20.0	320.0	1900.0	200.0	2000.0	18390.0	
	SSTL	58.0	11928.0	3700.0	21680.0	290.0	19298.0	1114.0	330.0	29344.0	87742.0	
	Subsequent > SSTL	352.0	0.0	0.0	0.0	0.0	0.0	786.0	0.0	0.0	1138.0	
DW-3	Initial	2600.0	19000.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	61020.0	
	SSTL	45.0	8470.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	47935.0	
	Initial > SSTL	2555.0	10530.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13085.0	
	Subsequent	4200	8300	1800	5200	240	450	8200	1000.000	10000	39390.0	
	SSTL	45.0	8470.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	47935.0	
	Subsequent > SSTL	4155.0	0.0	0.0	0.0	0.0	0.0	4600.0	0.0	0.0	8755.0	
SW-1	Initial	130.0	2.8	23.0	36.0	17.0	6.5	340.0	2.6	23.0	580.9	
	SSTL	5.0	2.8	23.0	36.0	17.0	6.5	240.0	2.6	23.0	355.9	
	Initial > SSTL	125.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	225.0	Unable to Access- Results from 5/18/2016
	Subsequent	130	18	53	92	12	16	430	10	100	861.0	
	SSTL	5.0	2.8	23.0	36.0	17.0	6.5	240.0	2.6	23.0	355.9	
	Subsequent > SSTL	125.0	15.2	30.0	56.0	0.0	9.5	190.0	7.4	77.0	510.1	

SSTL = Site Specific Target Level
RBSL= Risk Based Screening Levels
MtBE= Methyl Tert-Butyl Ether
n/a = not applicable
0.0 - Excluded from Calculations

CRAWFORD ENVIRONMENTAL SERVICES

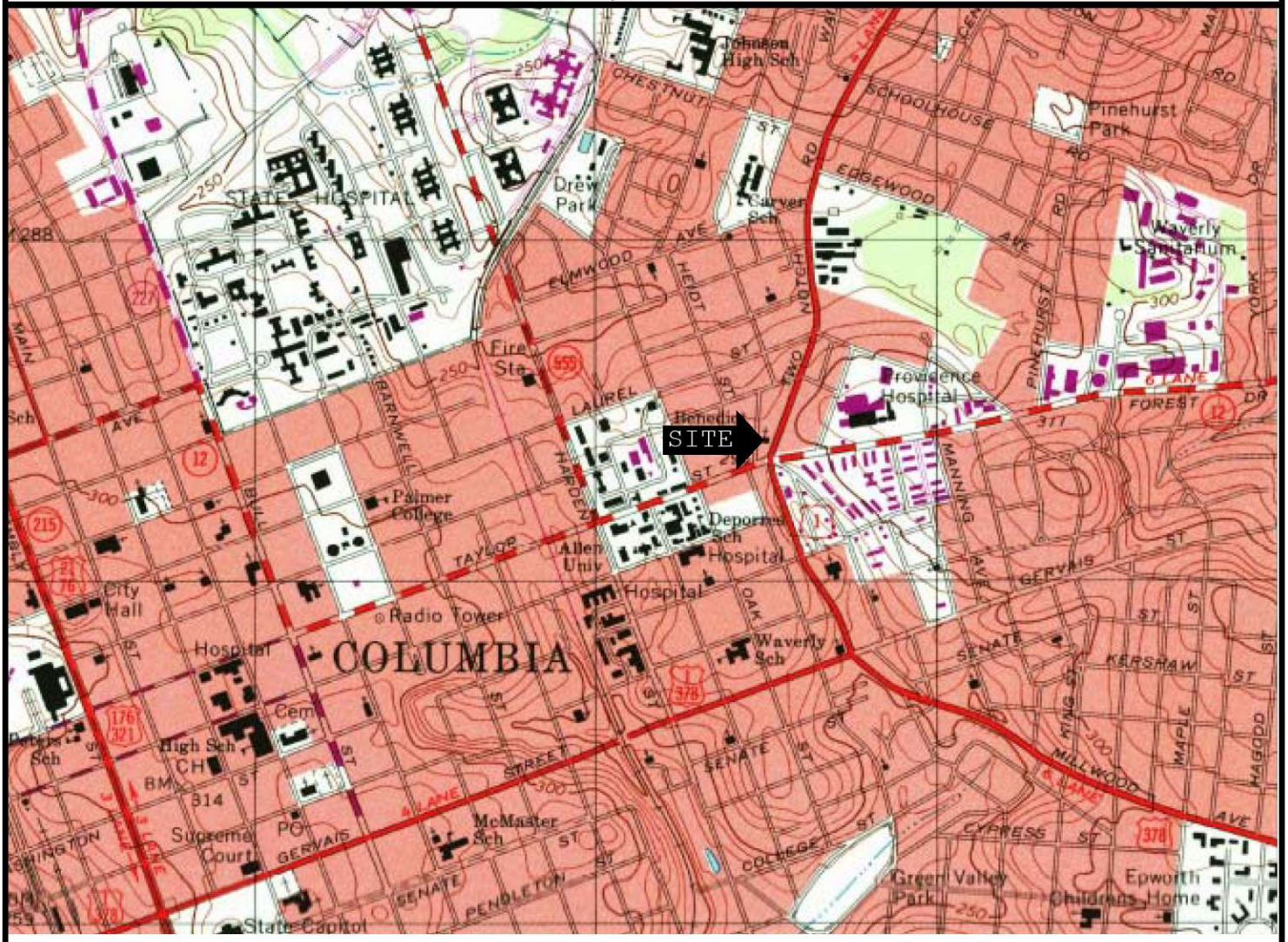
Initial>SSTL	325262.00
Subsequent>SSTL	79295.10
COC Reduction	75.62%

Figures

Figure 1: Topographic Map
Figure 2: Site Facility Base Map
Figure 3: Groundwater Chemicals of Concern Map
Figure 4: Groundwater Elevation Map

FIGURE 1

Site Location Map
Handy Pantry #65 / University Mart / Clouds Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina



CRAWFORD ENVIRONMENTAL SERVICES

15 Church Avenue, SW
Roanoke Virginia, 24011

540-343-6256 (office) 540-343-6259 (fax)

NORTH COLUMBIA, SOUTH CAROLINA

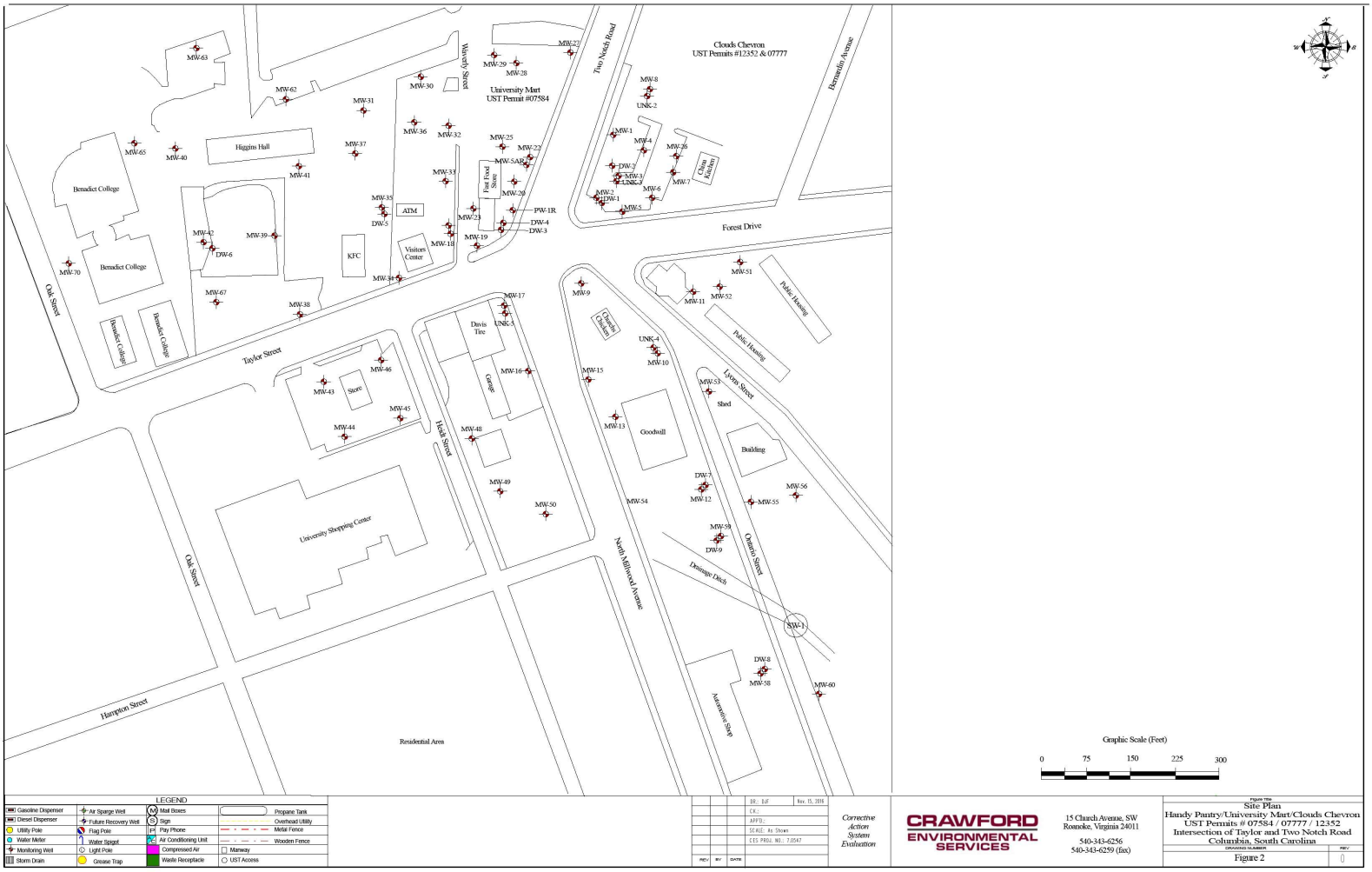
Source: U.S.G.S. Topographic Map of the Columbia North Quadrangle, Virginia, 7.5 Minute Series (1977, revised 1988)
Scale: 1:24,000 Contour Interval: 20 Feet
Vertical Datum: National Geodetic Vertical Datum 1929
Horizontal Datum: North American Datum1927

Project: CASE Report

Client: SCDHEC

CES Job #: 7.0547

Latitude:
034”00’42.72”N
Longitude:
081”01’00.13”W



Graphic Scale (Feet)

0 75 150 225 300

LEGEND

Gasoline Dispenser	Air Sparge Well	Mail Boxes	Propane Tank
Diesel Dispenser	Future Recovery Well	Sign	Overhead Utility
Utility Pole	Flag Pole	Pay Phone	Metal Fence
Water Meter	Water Spigot	Air Conditioning Unit	Wooden Fence
Monitoring Well	Light Pole	Compressed Air	Manway
Storm Drain	Grease Trap	Waste Receptacle	UST Access

REV.	BY	DATE	
			DR.: BJF Nov. 15, 2019
			CK.:
			APP'D.:
			SCALE: As Shown
			CES PROJ. NO.: 7.0547

Corrective Action System Evaluation

CRAWFORD ENVIRONMENTAL SERVICES
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Figure Title
Site Plan
Handy Pantry/University Mart/Clouds Chevron
UST Permits # 07584 / 07777 / 12352
Intersection of Taylor and Two Notch Road
Columbia, South Carolina

DRAWING NUMBER: Figure 2 REV: 0



Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-1	10/19/2016	Dry								
MW-2	10/21/2016	34	4.9	23	60	56	18	68 J	<10	47 J
MW-3	10/21/2016	480	1000	76	2100	67	61	210	29	330
MW-4	10/21/2016	<1	<1	<1	<1	1	<5	<100	<10	<100
MW-5	10/19/2016	Dry								
MW-6	10/21/2016	<1	<1	<1	<1	<1	1.9 J	<100	<10	<100
MW-7	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-8	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-9	10/21/2016	60	1500	730	3800	<1	210	550	<10	<100
MW-10	10/21/2016	27	7.1	11	93	<1	47	<100	<10	<100
MW-11	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-12	10/20/2016	180	18	420	300	13	110	4000	<10	<100
MW-13	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-15	10/19/2016	0.60-Feet of Free Product								
MW-16	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-17	10/20/2016	<100	5500	510	11000	<100	560	<10000	<1000	<10000
MW-18	10/20/2016	510	2400	230	3700	68	120	5500	48	1100
MW-19	10/21/2016	2500	18000	1200	19000	<500	1200 J	<50000	<5000	<50000
MW-20	10/21/2016	490	7000	1600	20000	<50	1200	4200 J	<500	<5000
MW-22	10/21/2016	3400	20000	1600	20000	<500	720 J	<50000	<5000	<50000
MW-23	10/21/2016	600	1900	130	4600	18	390	4000	<10	<100
MW-25	10/19/2016	8.8	120	230	3400	<1	450	<100	<10	<100
MW-26	10/19/2016	Not Sampled due to Obstruction								
MW-27	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-28	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-29	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-30	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-31	10/20/2016	7.9	<1	6.1	<1	<1	130	<100	<10	<100
MW-32	10/19/2016	Not Sampled due to Obstruction								
MW-33	10/19/2016	120	620	480	1700	<1	95	980	<10	<100
MW-34	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-35	10/20/2016	2200	3300	1300	4100	64	360	5800	63	<100
MW-36	10/19/2016	1.8	<1	<1	25	<1	14	<100	<10	<100
MW-37	10/20/2016	<1	<1	<1	<1	<1	1.0 J	<100	<10	<100
MW-38	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-39	10/20/2016	1.5	390	780	2300	<1	320	<100	<10	<100
MW-40	10/20/2016	<1	<1	1.4	<1	<1	<5	<100	<10	<100
MW-41	10/20/2016	26	3.2	510	15	<1	340	<100	<10	<100
MW-42	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-43	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-44	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-45	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-46	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-48	10/25/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-49	10/19/2016	Unable to Access - Locked Gate								
MW-50	10/19/2016	Unable to Access - Locked Gate								
MW-51	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-53	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-54	10/20/2016	<1	<1	<1	<1	2.0	<5	<100	<10	<100
MW-55	10/21/2016	1500	310	860	1100	210	240	6000	43	370
MW-56	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-58	10/19/2016	Not Sampled due to Obstruction								
MW-59	10/20/2016	2400	61	1400	2300	62	390	10000	63	300
MW-60	10/19/2016	Unable to Locate								
MW-62	10/19/2016	Not Sampled due to Obstruction								
MW-63	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-65	10/19/2016	Unable to Locate - Paved over								
MW-67	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-70	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-5AR	10/21/2016	6300	3000	1100	7200	<50	1100	<5000	<500	<5000
PW-1R	10/21/2016	410	5900	440	7200	<20	320	1900 J	<200	<2000
DW-1	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-2	10/21/2016	<1	<1	<1	<1	2.9	<5	<100	<10	<100
DW-3	10/21/2016	4200	8300	1800	5200	240	450 J	8200 J	<1000	<10000
DW-4	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-5	10/25/2016	5700	1200	460	2800	1000	200 J	17000	<1000	<10000
DW-6	10/25/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-7	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-8	10/21/2016	Not Sampled due to Obstruction								
DW-9	10/21/2016	<1	<1	<1	<1	3.1	<5	<100	<10	<100
SW-1	10/19/2016	Unable to Access - Overgrown Brush								

LEGEND

Gasoline Dispenser	Air Sparge Well	Mail Boxes	Propane Tank
Diesel Dispenser	Future Recovery Well	Sign	Overhead Utility
Utility Pole	Flag Pole	Pay Phone	Metal Fence
Water Meter	Water Spigot	Air Conditioning Unit	Wooden Fence
Monitoring Well	Light Pole	Compressed Air	Manway
Storm Drain	Grease Trap	Waste Receptacle	UST Access

DR.: BJF Nov 15, 2016
CK.:
APP'D.:
SCALE: As Shown
CES PROJ. NO.: 7.0547

REV. BY DATE

Corrective Action System Evaluation

CRAWFORD ENVIRONMENTAL SERVICES

15 Church Avenue, SW
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540-343-6259 (fax)

FIGURE TITLE
Concentrations of Concern Map
Handy Pantry/University Mart/Clouds Chevron
UST Permits # 07584 / 07777 / 12352
Intersection of Taylor and Two Notch Road
Columbia, South Carolina

DRAWING NUMBER: Figure 3

REV: 0



Monitor Well	Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-1	93.89	10/19/2016	NA	DRY	NA	NA	DRY
MW-2	94.70	10/19/2016	NA	21.17	NA	NA	73.53
MW-3	94.45	10/19/2016	NA	20.18	NA	NA	74.27
MW-4	94.85	10/19/2016	NA	20.42	NA	NA	74.43
MW-5	95.26	10/19/2016	NA	DRY	NA	NA	DRY
MW-6	94.96	10/19/2016	NA	22.04	NA	NA	72.92
MW-7	95.93	10/19/2016	NA	22.20	NA	NA	73.73
MW-8	94.79	10/19/2016	NA	19.70	NA	NA	75.09
MW-9	92.30	10/19/2016	NA	20.30	NA	NA	72.00
MW-10	85.98	10/19/2016	NA	15.75	NA	NA	70.23
MW-11	88.46	10/19/2016	NA	18.19	NA	NA	70.27
MW-12	72.80	10/19/2016	NA	3.32	NA	NA	69.48
MW-13	80.44	10/19/2016	NA	10.83	NA	NA	69.61
MW-15	86.44	10/19/2016	15.7	15.82	0.13	70.74	70.62
MW-16	88.19	10/19/2016	NA	17.55	NA	NA	68.43
MW-17	92.45	10/19/2016	NA	21.58	NA	NA	70.87
MW-18	94.81	10/19/2016	NA	22.04	NA	NA	72.77
MW-19	93.96	10/19/2016	NA	23.70	NA	NA	70.26
MW-20	94.12	10/19/2016	NA	21.89	NA	NA	72.23
MW-22	94.25	10/19/2016	NA	21.16	NA	NA	73.09
MW-23	94.43	10/19/2016	NA	23.06	NA	NA	71.37
MW-25	93.09	10/19/2016	NA	19.96	NA	NA	73.13
MW-26	95.96	10/19/2016	Not Sampled due to Obstruction				
MW-27	91.40	10/19/2016	NA	17.46	NA	NA	73.94
MW-28	91.46	10/19/2016	NA	17.53	NA	NA	73.93
MW-29	91.09	10/19/2016	NA	17.16	NA	NA	73.93
MW-30	92.77	10/19/2016	NA	29.20	NA	NA	63.57
MW-31	95.20	10/19/2016	NA	24.41	NA	NA	70.79
MW-32	92.87	10/19/2016	Not Sampled due to Obstruction				
MW-33	93.84	10/19/2016	NA	23.00	NA	NA	70.84
MW-34	94.77	10/19/2016	NA	23.81	NA	NA	70.96
MW-35	93.71	10/19/2016	NA	22.89	NA	NA	70.82
MW-36	93.89	10/19/2016	NA	22.91	NA	NA	70.98
MW-37	93.78	10/19/2016	NA	23.00	NA	NA	70.78
MW-38	95.53	10/19/2016	NA	24.32	NA	NA	71.21
MW-39	96.19	10/19/2016	NA	25.37	NA	NA	70.82
MW-40	95.69	10/19/2016	NA	25.04	NA	NA	70.65
MW-41	94.85	10/19/2016	NA	24.45	NA	NA	70.40
MW-42	95.81	10/19/2016	NA	25.08	NA	NA	70.73
MW-43	95.15	10/19/2016	NA	23.70	NA	NA	71.45
MW-44	94.57	10/19/2016	NA	22.16	NA	NA	72.41
MW-45	92.51	10/19/2016	NA	20.99	NA	NA	71.52
MW-46	94.50	10/19/2016	NA	23.25	NA	NA	71.25
MW-48	89.95	10/19/2016	Unable to Access - Locked Gate				
MW-49	88.18	10/19/2016	Unable to Access - Locked Gate				
MW-50	84.09	10/19/2016	Unable to Access - Locked Gate				
MW-51	93.91	10/19/2016	NA	22.78	NA	NA	71.13
MW-53	79.60	10/19/2016	Unable to Locate- Overgrown Field				
MW-54	77.58	10/19/2016	NA	10.66	NA	NA	66.92
MW-55	71.22	10/19/2016	NA	4.26	NA	NA	66.96
MW-56	76.39	10/19/2016	NA	7.45	NA	NA	68.94
MW-58	76.37	10/19/2016	Not Sampled due to Obstruction				
MW-59	68.02	10/19/2016	NA	5.84	NA	NA	62.18
MW-60	67.94	10/19/2016	Unable to Locate- Overgrown Field				
MW-62	94.05	10/19/2016	Not Sampled due to Obstruction				
MW-63	94.65	10/19/2016	NA	22.84	NA	NA	71.81
MW-65	94.04	10/19/2016	Unable to Locate- Paved Over				
MW-67	96.10	10/19/2016	NA	25.18	NA	NA	70.92
MW-70	95.49	10/19/2016	NA	24.43	NA	NA	71.06
MW-5AR	94.18	10/19/2016	NA	21.04	NA	NA	73.14
PW-1R	93.75	10/19/2016	NA	22.36	NA	NA	71.39
DW-1	94.66	10/19/2016	NA	42.32	NA	NA	52.34
DW-2	94.02	10/19/2016	NA	43.05	NA	NA	50.97
DW-3	93.75	10/19/2016	NA	23.07	NA	NA	70.68
DW-4	93.79	10/19/2016	NA	42.79	NA	NA	51.00
DW-5	93.74	10/19/2016	NA	42.51	NA	NA	51.23
DW-6	95.90	10/19/2016	NA	44.54	NA	NA	51.36
DW-7	72.79	10/19/2016	NA	22.24	NA	NA	50.55
DW-8	68.63	10/19/2016	Not Sampled due to Obstruction				
DW-9	76.47	10/19/2016	NA	22.87	NA	NA	53.60

LEGEND

Gasoline Dispenser	Air Sparge Well	Mail Boxes	Propane Tank
Diesel Dispenser	Future Recovery Well	Sign	Overhead Utility
Utility Pole	Flag Pole	Pay Phone	Metal Fence
Water Meter	Water Spigot	Air Conditioning Unit	Wooden Fence
Monitoring Well	Light Pole	Compressed Air	Manway
Storm Drain	Grease Trap	Waste Receptacle	UST Access

DR.: BJF June 3, 2016
CK.:
APP'D.:
SCALE: As Shown
CES PROJ. NO.: 7.0547

REV. BY DATE

Corrective Action System Evaluation

CRAWFORD ENVIRONMENTAL SERVICES
15 Church Avenue, SW
Roanoke, Virginia 24011
540-343-6256
540-343-6259 (fax)

FIGURE TITLE
Groundwater Elevation Map
Handy Pantry/University Mart/Clouds Chevron
UST Permits # 07584 / 07777 / 12352
Intersection of Taylor and Two Notch Road
Columbia, South Carolina

DRAWING NUMBER: Figure 4 REV: 0

APPENDIX A

Purge Water Disposal Manifest

CRAWFORD
ENVIRONMENTAL
SERVICES

November 15, 2016

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201

Re: Purge Water Report- Development & Groundwater Sampling
Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352

Dear Project Manager;

The letter presents the certification that Crawford Environmental Services (CES) treated purge waters referenced below with a granular activated carbon unit prior to discharge. This was completed in accordance with the conditions laid out in the "Proposed Conditions for use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater" produced by the SCDHEC Bureau of Water.

A total of 141 gallons were treated on October 19, 20, 21 and 25 for the above referenced facility.

A record of treatment is available upon request. If you have any questions or comments please feel free to contact us at 540-798-5068.

Sincerely,

Daniel Fisher
Division Manager
Crawford Environmental Services

APPENDIX B

Groundwater Sampling Data Sheets

1

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-1	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 17-27	Total Well Depth (TWD) (ft.): 27
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 17.38		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)								
PH (s.u.)		DRY						
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

2

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-2	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 20-30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 21.87		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1040							
PH (s.u.)	5.77							
Specific Conductivity (µS/cm)	202							
Water Temperature (°C)	24.41							
Turbidity (NTU)	14.6							
Dissolved Oxygen (mg/L)	1.24							
ORP	-7.1							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1040	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

3

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw-3	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 18-29	Total Well Depth (TWD) (ft.): 29
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 20.18		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1050							
PH (s.u.)	5.47							
Specific Conductivity (µS/cm)	148							
Water Temperature (°C)	25.84							
Turbidity (NTU)	7.2							
Dissolved Oxygen (mg/L)	0.76							
ORP	9.4							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1050	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

4

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-4	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 18-28	Total Well Depth (TWD) (ft.): 28
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 20.42		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1110							
PH (s.u.)	41.0							
Specific Conductivity (µS/cm)	142							
Water Temperature (°C)	26.18							
Turbidity (NTU)	10.8							
Dissolved Oxygen (mg/L)	2.60							
ORP	210.4							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1110	Duplicate: Y or N	If yes, Duplicate Time:

Notes: ___

Signature: ___

5

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-5	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 16-26	Total Well Depth (TWD) (ft.): 26
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 20.25		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)								
PH (s.u.)	DRY							
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature _____

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

6

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW-6	2"		X Bailer ___ Pump

X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): to 20-30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.04	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1100							
PH (s.u.)	4.56							
Specific Conductivity (µS/cm)	132							
Water Temperature (°C)	25.42							
Turbidity (NTU)	3.1							
Dissolved Oxygen (mg/L)	1.87							
ORP	108.9							

Proper

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1100	Duplicate: (Y) or N	If yes, Duplicate Time: 1105

Notes: ___

Signature ___

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

7

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-7	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 20-30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.20		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1120							
PH (s.u.)	4.26							
Specific Conductivity (µS/cm)	162							
Water Temperature (°C)	25.48							
Turbidity (NTU)	24.11							
Dissolved Oxygen (mg/L)	5.76							
ORP	226.1							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1120	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

8

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-8	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 18.5-28	Total Well Depth (TWD) (ft.): 28
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 19.70		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1130							
PH (s.u.)	4.77							
Specific Conductivity (µS/cm)	43							
Water Temperature (°C)	25.83							
Turbidity (NTU)	2.7							
Dissolved Oxygen (mg/L)	1.56							
ORP	212.0							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1130	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature _____

9

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
mw-9	2"		X Bailer ___Pump

X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): to 20-70	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 20.30	Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1030							
PH (s.u.)	5.46							
Specific Conductivity (µS/cm)	325							
Water Temperature (°C)	25.28							
Turbidity (NTU)	8.4							
Dissolved Oxygen (mg/L)	0.69							
ORP	-4.8							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1030	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

10

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW-10	2"		X Bailer ___ Pump

X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): to 18-28	Total Well Depth (TWD) (ft.): 28
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 15.75	Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.): 12.25	1 casing volume (CV = LWC x C) (gals.): 1.96	3 casing volumes (3 x CV) (gals.): 5.88

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1.96	3.92	5.88				
Time (military)	1020							
PH (s.u.)	5.96							
Specific Conductivity (µS/cm)	325							
Water Temperature (°C)	26.57							
Turbidity (NTU)	12.5							
Dissolved Oxygen (mg/L)	0.96							
ORP	-44.0							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1020	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

11

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW-11	2"		X Bailer ___ Pump

X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): to Unknown	Total Well Depth (TWD) (ft.): ~~Unknown~~ 30
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 18.19	Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	950							
PH (s.u.)	4.54							
Specific Conductivity (µS/cm)	113							
Water Temperature (°C)	23.43							
Turbidity (NTU)	14.5							
Dissolved Oxygen (mg/L)	0.92							
ORP	182.5							

Sampling Data 0950

Sampled By: Billy E. Marshall P	Sampling Time: 9.50	Duplicate: Y or N	If yes, Duplicate Time:

Notes: ___

Signature: ___

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D H E C

Underground Storage Tank Management Division
~~Field Data Information Sheet – Sampling~~

Site Information

Date: 102016	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW-12	2"		X Bailer ___ Pump

X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): to Unknown	Total Well Depth (TWD) (ft.): 24.65
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 3.22	Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1520							
PH (s.u.)	6.67							
Specific Conductivity (µS/cm)	247							
Water Temperature (°C)	29.09							
Turbidity (NTU)	27.1							
Dissolved Oxygen (mg/L)	0.75							
ORP	-4.3							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1520	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/20/16	Site ID #: 07584	Site Name: clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-13	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): to UNK		Total Well Depth (TWD) (ft.): 30.1
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 10.83		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1445							
PH (s.u.)	7.43							
Specific Conductivity (µS/cm)	56							
Water Temperature (°C)	26.00							
Turbidity (NTU)	8.9							
Dissolved Oxygen (mg/L)	4.56							
ORP	-42.3							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1445	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

15 F.P.

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-15	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 15-25	Total Well Depth (TWD) (ft.): 25
Depth to Free Product (DFP) (ft.): 15.70	Depth to Groundwater (DGW) (ft.): 15.82		Free Product Thickness (ft.): 1.02
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)								
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1020-16	Site ID #: 07584	Site Name: clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-17	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other ___Private WSW ___Public WSW		Screened Interval (ft.): to 20-30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 21.58		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1415							
PH (s.u.)	5.78							
Specific Conductivity (µS/cm)	306							
Water Temperature (°C)	26.08							
Turbidity (NTU)	4.8							
Dissolved Oxygen (mg/L)	.78							
ORP	1.0							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1415	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 19	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.30		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1450							
PH (s.u.)	5.76							
Specific Conductivity (µS/cm)	278							
Water Temperature (°C)	24.79							
Turbidity (NTU)	10.3							
Dissolved Oxygen (mg/L)	0.61							
ORP	-6.0							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1450	Duplicate: (Y) or N	If yes, Duplicate Time: 1445

Notes: _____

Signature _____

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 20	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 15 to 25		Total Well Depth (TWD) (ft.): 25
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 21.89		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1420							
PH (s.u.)	5.72							
Specific Conductivity (µS/cm)	298							
Water Temperature (°C)	25.95							
Turbidity (NTU)	34.8							
Dissolved Oxygen (mg/L)	0.71							
ORP	-40.6							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1420	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 22	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 21.16		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1250							
PH (s.u.)	5.19							
Specific Conductivity (µS/cm)	176							
Water Temperature (°C)	25.76							
Turbidity (NTU)	164							
Dissolved Oxygen (mg/L)	1.85							
ORP	69.0							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1250	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet -- Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny		Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.06		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1510							
PH (s.u.)	5.60							
Specific Conductivity (µS/cm)	207							
Water Temperature (°C)	24.59							
Turbidity (NTU)	32.3							
Dissolved Oxygen (mg/L)	0.66							
ORP	3.8							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1510	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-19-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW 25	2"		X Bailer ___ Pump

X MW ___ IW ___ RW ___ Other_____ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 25.6 to 15.6	Total Well Depth (TWD) (ft.): 25.6
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 19.96	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1510							
PH (s.u.)	6.05							
Specific Conductivity (µS/cm)	366							
Water Temperature (°C)	22.75							
Turbidity (NTU)	71.3							
Dissolved Oxygen (mg/L)	0.52							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1525	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Parallel with back wall of system building & Further left park at Food Mart Roof

Signature

26

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. MARshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-26	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to UNK	Total Well Depth (TWD) (ft.): ~~30~~
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)								
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Under small CAR Both Days

Signature:

NP

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-19-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW 27	2		X Bailer ___ Pump

___MW ___IW ___RW ___Other_____
___Private WSW ___Public WSW

Screened Interval (ft.):	Total Well Depth (TWD) (ft.):
15 to 30	30

Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 17.46	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	NP						
Time (military)	1405							
PH (s.u.)	4.80							
Specific Conductivity (µS/cm)	326							
Water Temperature (°C)	25.16							
Turbidity (NTU)	5.1							
Dissolved Oxygen (mg/L)	1.48							
ORP	151.4							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1405	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-19-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 28	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
___MW ___IW ___RW ___Other ___ ___Private WSW ___Public WSW	Screened Interval (ft.): 15 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 17.53		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1355							
PH (s.u.)	4.63							
Specific Conductivity (µS/cm)	157							
Water Temperature (°C)	22.47							
Turbidity (NTU)	35.3							
Dissolved Oxygen (mg/L)	0.45							
ORP	133.7							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1355	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

NP

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-19-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW 29	2		X Bailer ___ Pump
___MW ___IW ___RW ___Other ___Private WSW ___Public WSW	Screened Interval (ft.): 15 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 17.76		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	NP						
Time (military)	1344							
PH (s.u.)	6.62							
Specific Conductivity (µS/cm)	319							
Water Temperature (°C)	23.23							
Turbidity (NTU)	13.9							
Dissolved Oxygen (mg/L)	.85							
ORP	26.0							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1345	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature _____

MP

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-19-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 30	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other ___Private WSW ___Public WSW	Screened Interval (ft.): 30 to 45		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 29.20		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1440							
PH (s.u.)	5.65							
Specific Conductivity (µS/cm)	170							
Water Temperature (°C)	24.29							
Turbidity (NTU)	19.9							
Dissolved Oxygen (mg/L)	1.77							
ORP	11.3							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1440	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

DHEC 0423 (10/2012)

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-20-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 31	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other ___Private WSW ___Public WSW		Screened Interval (ft.): 35 to 20	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.41		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1000							
PH (s.u.)	5.25							
Specific Conductivity (µS/cm)	147							
Water Temperature (°C)	22.54							
Turbidity (NTU)	9.6							
Dissolved Oxygen (mg/L)	108.6							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1000	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

NP DUP-1

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-19-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 33	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.0		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1420							
PH (s.u.)	5.20							
Specific Conductivity (µS/cm)	209							
Water Temperature (°C)	25.06							
Turbidity (NTU)	21.8							
Dissolved Oxygen (mg/L)	0.83							
ORP	27.3							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1420	Duplicate: Y or N	If yes, Duplicate Time: 1425

Notes: _____

Signature: _____

DHEC 0423 (10/2012) SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-4-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW 34	2		___Bailer ___Pump

___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 35 to 20	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.81	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1510							
PH (s.u.)	4.47							
Specific Conductivity (µS/cm)	129							
Water Temperature (°C)	24.80							
Turbidity (NTU)	411.0							
Dissolved Oxygen (mg/L)	1.16							
	027	164.9						

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1510	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 102016	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 37	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW		Screened Interval (ft.): 35 to 20	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.04		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	930							
PH (s.u.)	4.19							
Specific Conductivity (µS/cm)	84							
Water Temperature (°C)	25.66							
Turbidity (NTU)	14.1							
Dissolved Oxygen (mg/L)	3.83							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 930	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

_____Signature: _____

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DHEC

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-20-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-40	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 20-35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 25.04		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1100							
PH (s.u.)	5.22							
Specific Conductivity (µS/cm)	88							
Water Temperature (°C)	22.57							
Turbidity (NTU)	74.1							
Dissolved Oxygen (mg/L)	2.74							
ORP	107.1							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1100	Duplicate: Y or N	If yes, Duplicate Time:

Notes: in front of second window from the right going left of Higgins Hall

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-2016	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW 41	2"		X Bailer ___ Pump

X MW ___ IW ___ RW ___ Other_____ ___ Private WSW ___ Public WSW	Screened Interval (ft.): to 20-35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 24.45	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1115							
PH (s.u.)	6.16							
Specific Conductivity (µS/cm)	323							
Water Temperature (°C)	22.85							
Turbidity (NTU)	12.2							
Dissolved Oxygen (mg/L)	.69							
ORP	5.8							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1115	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Left of Higgins Hall NO CAP

Signature:

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-20-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 42	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.08		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1130							
PH (s.u.)	5.62							
Specific Conductivity (µS/cm)	102							
Water Temperature (°C)	23.39							
Turbidity (NTU)	11.1							
Dissolved Oxygen (mg/L)	3.69							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1130	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-2016	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-43	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): to 20-40		Total Well Depth (TWD) (ft.): 40
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 23.70		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1300							
PH (s.u.)	4.48							
Specific Conductivity (µS/cm)	106							
Water Temperature (°C)	26.41							
Turbidity (NTU)	16.3							
Dissolved Oxygen (mg/L)	5.64							
ORP	276.1							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1300	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/20/16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-4	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ✓ Bailer ___ Pump
X MW ___ IW ___ RW ___ Other___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 16-31	Total Well Depth (TWD) (ft.): 31
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 20.16		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1315							
PH (s.u.)	3.50							
Specific Conductivity (µS/cm)	95							
Water Temperature (°C)	25.05							
Turbidity (NTU)	47							
Dissolved Oxygen (mg/L)	4.83							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1315	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-20-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-45	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 15-30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 20.94		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1345							
PH (s.u.)	3.63							
Specific Conductivity (µS/cm)	94							
Water Temperature (°C)	25.86							
Turbidity (NTU)	19.8							
Dissolved Oxygen (mg/L)	3.85							
ORP	3107							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1345	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-26-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW-46	2"		X Bailer ___ Pump

X MW ___ IW ___ RW ___ Other_____ ___ Private WSW ___ Public WSW	Screened Interval (ft.): to 20-35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 23.25	Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1400							
PH (s.u.)	3.67							
Specific Conductivity (µS/cm)	111							
Water Temperature (°C)	25.98							
Turbidity (NTU)	14.2							
Dissolved Oxygen (mg/L)	5.72							
ORP	314.0							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1400	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

H8

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 14	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW		Screened Interval (ft.): to 15-30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)								
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: No Access

Signature:

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 49	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW		Screened Interval (ft.): to 15-20	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 16.54		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1025							
PH (s.u.)	4.41							
Specific Conductivity (µS/cm)	212							
Water Temperature (°C)	23.52							
Turbidity (NTU)	38.5							
Dissolved Oxygen (mg/L)	6.06							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1030	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-16	Site ID #: 07584	Site Name: clouds	Field Personnel: Billy E. MARshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny		Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 50	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW		Screened Interval (ft.): to 15-36	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): ~~15.76~~		Free Product Thickness (ft.): ~~30~~
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)								
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E. MARshall P	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Unable to locate

Signature:

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-20-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW-51	2"		X Bailer ___ Pump

X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 20-25 to	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 22.78	Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1010							
PH (s.u.)	3.52							
Specific Conductivity (µS/cm)	115							
Water Temperature (°C)	23.39							
Turbidity (NTU)	55.1							
Dissolved Oxygen (mg/L)	3.59							
ORP	259.1							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1010	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-52	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.): 20
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 19.77		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)								
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Not Enough water to Sample

Signature: [signature]

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/21-16	Site ID #: 07584	Site Name: Cloud's	Field Personnel: Billy E. MARshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW-53	2"		____ Bailer ____ Pump
b MW ___ IW ___ RW ___ Other_____ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 5-20	Total Well Depth (TWD) (ft.): 20
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 9.73		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	0930							
PH (s.u.)	6.86							
Specific Conductivity (µS/cm)	86							
Water Temperature (°C)	26.46							
Turbidity (NTU)	30.0							
Dissolved Oxygen (mg/L)	3.42							
ORP	100.3							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 0930	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-20-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-54	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: C Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): to 5-20		Total Well Depth (TWD) (ft.): 20
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 10.66		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1500							
PH (s.u.)	6.26							
Specific Conductivity (µS/cm)	352							
Water Temperature (°C)	28.17							
Turbidity (NTU)	77.0							
Dissolved Oxygen (mg/L)	1.73							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1500	Duplicate: (Y) or N	If yes, Duplicate Time: 1505

Notes: _____

Signature: _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10.21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW-55	2"		X Bailer ___Pump

X MW ___IW ___RW ___Other ___ Private WSW ___Public WSW	Screened Interval (ft.): to 4-14	Total Well Depth (TWD) (ft.): 14
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 4.26	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	915							
PH (s.u.)	4.99							
Specific Conductivity (µS/cm)	231							
Water Temperature (°C)	26.80							
Turbidity (NTU)	102							
Dissolved Oxygen (mg/L)	1.08							
ORP	9.4							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 915	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: ___

Signature: ___

DHEC 0423 (10/2012) SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds		Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny		Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-56	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 5-20	Total Well Depth (TWD) (ft.): 20
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 7.45		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	0845							
PH (s.u.)	4.69							
Specific Conductivity (µS/cm)	142							
Water Temperature (°C)	26.10							
Turbidity (NTU)	16.6							
Dissolved Oxygen (mg/L)	1.64							
ORP	134							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 0845	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

DHEC 0423 (10/2012)

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/20/16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW-59	2"		X Bailer ___ Pump

X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 2-17	Total Well Depth (TWD) (ft.): 17
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 5.84	Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1535							
PH (s.u.)	7.10							
Specific Conductivity (µS/cm)	455							
Water Temperature (°C)	25.54							
Turbidity (NTU)	9.1							
Dissolved Oxygen (mg/L)	1.24							
ORP	-25.7							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: ___

Signature: ___

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-62	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 20-35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 22.64		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)								
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Blocked By Trailer

Signature:

63

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-20-16	Site ID #: 07584	Site Name: Clouds		Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Sunny		Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW-63	2"		X Bailer ___ Pump

X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): to 26-35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 22.84	Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1200							
PH (s.u.)	4.18							
Specific Conductivity (µS/cm)	146							
Water Temperature (°C)	23.23							
Turbidity (NTU)	733							
Dissolved Oxygen (mg/L)	1.34							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1200	Duplicate: (Y) or N	If yes, Duplicate Time: 1205

Notes: _____

Signature: _____

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D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-20-16	Site ID #: 07584	Site Name: clouds	Field Personnel: Billy E. MARshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw-67	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other ___ Private WSW ___Public WSW		Screened Interval (ft.): to 20.35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 25.18		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1030							
PH (s.u.)	4.47							
Specific Conductivity (µS/cm)	104							
Water Temperature (°C)	24.06							
Turbidity (NTU)	8.4							
Dissolved Oxygen (mg/L)	3.64							

Sampling Data

Sampled By: Billy E. MARshall P	Sampling Time: 1030	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature _____

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

70

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1020-16	Site ID #: 07584	Site Name: clouds		Field Personnel: Billy E. MARshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny		Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
mw-70	2"		____Bailer ____Pump
X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW		Screened Interval (ft.): to 20-35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 24.43		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1145							
PH (s.u.)	4.75							
Specific Conductivity (µS/cm)	108							
Water Temperature (°C)	22.94							
Turbidity (NTU)	7.9							
Dissolved Oxygen (mg/L)	.92							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1145	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

5AR

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. MARshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: ~~MW~~ 5AR	Well Diameter (ft.): 4	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 18 to 28		Total Well Depth (TWD) (ft.): 28
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 21.04		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1400							
PH (s.u.)	6.26							
Specific Conductivity (µS/cm)	791							
Water Temperature (°C)	20.36							
Turbidity (NTU)	16.8							
Dissolved Oxygen (mg/L)	1.32							
	079 -67.7							

Sampling Data

Sampled By: Billy E. MARshall P	Sampling Time: 1400	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature _____

PW-1R

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-27-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: ~~MW~~ PW-1R	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 45 to 50		Total Well Depth (TWD) (ft.): 50
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.36		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 27.64	1 casing volume (CV = LWC x C) (gals.): 4.4		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	18.0 Skid	36	@54				
Time (military)	1430	1445	1500					
PH (s.u.)	5.47	5.64	D					
Specific Conductivity (µS/cm)	167	221						
Water Temperature (°C)	24.90	25.40	R					
Turbidity (NTU)	242	342						
Dissolved Oxygen (mg/L)	2.47	2.26	Y					
ORP	-6.2	-10.3						

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

DSV-1

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID:	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection:
MW-28	2"		X Bailer X Pump

X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): to 15-70	Total Well Depth (TWD) (ft.): 70
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 43.32	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 26-77	1 casing volume (CV = LWC x C) (gals.): 4.2	3 casing volumes (3 x CV) (gals.): 12.6

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.2	8.4	12.6				
Time (military)	1140	1156						
PH (s.u.)	5.60		D					
Specific Conductivity (µS/cm)	33							
Water Temperature (°C)	24.33		12					
Turbidity (NTU)	41.8							
Dissolved Oxygen (mg/L)	0.34		Y					
ORP	166.9							

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1150	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

DW-2

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-16	Site ID #: 07584	Site Name: clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW-2	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer X Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW		Screened Interval (ft.): to 70-75	Total Well Depth (TWD) (ft.): 75
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 43.05		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 31.95	1 casing volume (CV = LWC x C) (gals.): 4.2		3 casing volumes (3 x CV) (gals.): 12.6

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.2	8.4	12.6				
Time (military)	1200	1210	1220	1230				
PH (s.u.)	7.59	6.97	5.87	5.88				
Specific Conductivity (µS/cm)	42	60	58	59				
Water Temperature (°C)	23.85	22.74	22.58	22.60				
Turbidity (NTU)	342	59	66.9	67.8				
Dissolved Oxygen (mg/L)	4.82	3.57	3.59	3.47				
	ORP 70.5	91.5						

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1230	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature _____

DW-3

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW-3	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ____Bailer ____Pump
___MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW		Screened Interval (ft.): 47 to 52	Total Well Depth (TWD) (ft.): 52
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.07		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 28.93	1 casing volume (CV = LWC x C) (gals.): 4.6		3 casing volumes (3 x CV) (gals.): 13.8

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.6	9.2	13.8				
Time (military)	1410	1420	1430	1440				
PH (s.u.)	5.86	5.85	5.72	5.70				
Specific Conductivity (µS/cm)	237	271	273	271				
Water Temperature (°C)	25.16	23.73	23.68	23.67				
Turbidity (NTU)	416	8.8	8.4	8.2				
Dissolved Oxygen (mg/L)	0.78	0.81	0.82	0.83				
ORP	-21.4	-16.1	-38.4	Sampling Data -38.6				

Sampled By: Billy E. Marshall P	Sampling Time: 1440	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature _____

D-W-4

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW-4	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer X Pump
___MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW	Screened Interval (ft.): 110 to 105		Total Well Depth (TWD) (ft.): 110
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 42.79		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 67.21	1 casing volume (CV = LWC x C) (gals.): 6.8		3 casing volumes (3 x CV) (gals.): 20.4

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	6.8	13.6	20.4				
Time (military)	1300	1315	1330	1340				
PH (s.u.)	6.34	6.33	5.76	5.74				
Specific Conductivity (µS/cm)	224	209	228	226				
Water Temperature (°C)	24.72	23.92	24.22	24.22				
Turbidity (NTU)	7.1	37.9	43.1	42.8				
Dissolved Oxygen (mg/L)	1.62	1.59	0.77	0.78				
ORP	112.1	63.1	32.6	Sampling Data 32.8				

Sampled By: Billy E. Marshall P	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

P

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-25-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: ~~MW~~ DW5	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW		Screened Interval (ft.): 70 to 65	Total Well Depth (TWD) (ft.): 70
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 42.51		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 27.49	1 casing volume (CV = LWC x C) (gals.): 4.39		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.39	8.78	13.14				
Time (military)	1000	1110						
PH (s.u.)	4.94	5.44						
Specific Conductivity (µS/cm)	~~.118~~	122						
Water Temperature (°C)	22.67	22.22						
Turbidity (NTU)	36.9	66.6						
Dissolved Oxygen (mg/L)	2.62	6.00						

DRY

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1115	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

DW-6

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW-6	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: ___Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW		Screened Interval (ft.): to 65-70	Total Well Depth (TWD) (ft.): 70
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 44.54		Free Product Thickness (ft.): NS
Length of water column (LWC = TWD – DGW) (ft.): 25.46	1 casing volume (CV = LWC x C) (gals.): 4.07		3 casing volumes (3 x CV) (gals.): 12.20

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.07	8.14	12.21				
Time (military)	1146	1150						
PH (s.u.)	5.83	6.20						
Specific Conductivity (µS/cm)	112	116						
Water Temperature (°C)	21.55	21.42						
Turbidity (NTU)	48.8	46.9						
Dissolved Oxygen (mg/L)	2.74	3.001						

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 1155	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

DW-7

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet -- Sampling

Site Information

Date: 10/21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW-7	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer X Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 50-55	Total Well Depth (TWD) (ft.): 55
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 22.24		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.): 32.76	1 casing volume (CV = LWC x C) (gals.): 5.24		3 casing volumes (3 x CV) (gals.): 15.75

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	5.25	10.50	15.75				
Time (military)	800	815	830	850				
PH (s.u.)	9.47	9.05	8.58	8.49				
Specific Conductivity (µS/cm)	244	207	125	118				
Water Temperature (°C)	23.72	23.27	22.97	22.96				
Turbidity (NTU)	11.9	over 1000	over	over 1000				
Dissolved Oxygen (mg/L)	5.94	5.98	6.13	6.14				
ORP	-94.5	-66.7	11.7	Sampling Data 11.9				

Sampled By: Billy E. Marshall P | Sampling Time: 845 | Duplicate: Y or (N) | If yes, Duplicate Time:

Notes:

Signature:

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

DW-9

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/21-16	Site ID #: 07584	Site Name: Clouds	Field Personnel: Billy E. Marshall P.	
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F): 80°	

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW-9	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: Y Bailer X Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to 10-65	Total Well Depth (TWD) (ft.): 65
Depth to Free Product (DFP) (ft.): NA	Depth to Groundwater (DGW) (ft.): 22.87		Free Product Thickness (ft.): NA
Length of water column (LWC = TWD – DGW) (ft.): 42.13	1 casing volume (CV = LWC x C) (gals.): 6.74		3 casing volumes (3 x CV) (gals.): 20.22

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	6.74	13.48	20.22				
Time (military)	815	830	845	900				
PH (s.u.)	5.66	5.20	5.09	4.99				
Specific Conductivity (µS/cm)	87	60	44	42				
Water Temperature (°C)	21.24	21.58	21.48	21.46				
Turbidity (NTU)	32.0	269	40.0	41.3				
Dissolved Oxygen (mg/L)	2.60	1.68	1.77	1.39				
ORP	6.2	28.9	44.6	42.9				

Sampling Data

Sampled By: Billy E. Marshall P	Sampling Time: 900	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

APPENDIX C

Groundwater Laboratory Analytical Report

ACCESS ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT

Crawford Environmental Services
15 Church Ave, SW
Roanoke VA 24011

ATTENTION
West Hubard

PROJECT ID
Clouds Chevron

LABORATORY REPORT NUMBER
1610O41

DATE
November 09, 2016

Primarv Data Review Bv

Chris Pafford
Project Manager, AES

Secondarv Data Review Bv

Ashley Amick

Project Manager, Access Analytical
aamick@axs-inc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Analytical Environmental Services Inc. (AES Inc), 3080 Presidential Drive, Atlanta, GA 30340.**
- **AES is SCDHEC certified laboratory # 98016, NCDENR certified lab # 562, GA certified lab # FL-E87582, NELAP certified laboratory # E87582**
- Local support services for this project are provided by Access Analytical, Inc. Access Analytical is a representative of AES serving client in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll fee at 883.315.4243

Access Analytical - Chain of Custody Record

LAB USE ONLY

Sales Order #_____ PO #_____ Access Quote # _____

Project Work Order # 1618041

Laboratory ID: _____

Company Name: CES

Report To: West Hubbard

Address: 5 Church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 540 343- Fax:

Email: WHubbard@Cowfood Environmental.com

Project ID: Clarks Chevron

Sampled By: Billy Ewing, Marshall Brown

Preservative: (*see codes) 1

Container Type: (*see codes) G

↓ REQUESTED LAB ANALYSIS: ↓ BTEX/OXY

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	# of containers collected per ↓ analysis
PW-1	10-21	1150	G	GW	SHW	3	3
2		1230					
3		1440					
4		1340					
5	10-25	1115					
6	10-25	1155					
7	10-21	0845					
8	10-21	0900					
PW-1 AR	10-21	1445					
5 AR	10-21	1400					

ACCESS ANALYTICAL, INC.

7478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4303

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***Preservative Codes** *(place corresponding # in block above analysis field)*: **0** = None, **1** = HCL, **2** = HNO_3, **3** = H_2SO_4, **4** = NaOH, **5** = $Na_2S_2O_3$, **6** = Method 5035 set w/ $NaHSO_4$ & CH_3OH, **7** = NaOH/ZnOAC, **8** = H_3PO_4

***Matrix Codes** *(place corresponding code in matrix column)*: **GW** = ground water, **WW** = waste water, **DW** = drinking water, **S** = soil, **SL** = sludge, **A** = air, **IW** = industrial waste, **WO** = waste oil, **OT** = other *(specify in comments section)*

***Program Area Codes:** **CWA** = Clean Water Act (for wastewaters), **SDWA** = Safe Drinking Water Act (for drinking waters), **SHW** = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

***Container Type:** **G** = Glass, **P** = Plastic

NOTES / COMMENTS

(if sample is a composite please use space below to note start/finish times & dates)

Turnaround Time:

X Standard
___ RUSH*
*Date Required:_____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:

X SC
___NC
___Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
Marshall Brown	AMartin	10/27/16	1515	___Y ___N	_____(°C)	_____(N/A)
AMartin	Healy	10-27-16	1700	___Y ___N	_____(°C)	_____(N/A)
	Alexa Lodge (FedEx)	10/28/16	1020	✓ Y ___N	2.4 3.3 (°C)	_____(N/A)
				___Y ___N	_____(°C)	_____(N/A)

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LAB USE ONLY

Project Work Order # AJ 10/28 ~~1610~~ 1610 04

Sales Order # _____ PO # _____ Access Quote # _____ Laboratory ID: _____

Company Name: CES

Report To: W Hubard

Address: 15 Church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 540 343 6256 Fax: 540 343 6259

Email: WHubard@CrawfordEnvironmental.com

Project ID: Clouds

Sampled By: Brandy Evans, MP

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	↓ REQUESTED LAB ANALYSIS: ↓
							Preservative: (*see codes) → 1
							Container Type: (*see codes) → G
							BTEX/OXY
MW - 2	10.21	1040	G	GW	SHW	3	3
3		1056					
4		1110					
6		1100					
7		1120					
8		1130					
9		1030					
16		1020					
11		0956					
12	10.20	1526					

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***Matrix Codes** *(place corresponding code in matrix column)*: **GW** = ground water, **WW** = waste water, **DW** = drinking water, **S** = soil, **SL** = sludge, **A** = air, **IW** = industrial waste, **WO** = waste oil, **OT** = other *(specify in comments section)*

***Program Area Codes:** **CWA** = Clean Water Act (for wastewaters), **SDWA** = Safe Drinking Water Act (for drinking waters), **SHW** = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

***Container Type:** **G** = Glass, **P** = Plastic

NOTES / COMMENTS

(if sample is a composite please use space below to note start/finish times & dates)

Turnaround Time:

X Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:
X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
[signature]	Anari	10/27/16	1515	___Y ___N	_____(°C)	_____(N/A)
Anari	Fedex	10-27-16	1700	___Y ___N	_____(°C)	_____(N/A)
	Alexa Judge (FedEx)	10/28/16	1020	✓Y ___N	2.4 3.3 (°C)	_____(N/A)
				___Y ___N	_____(°C)	_____(N/A)

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Project Work Order # 1610041

Sales Order # _____ PO # _____ Access Quote # _____ Laboratory ID: _____

Company Name: CES

Report To: W. Hubbard

Address: 15 Church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 540 342 0256 Fax: 540 343 6239

Email: WHubbard@Cranfordenvironmental.com

Project ID: Clouds

Sampled By: CE, MP

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	↓ REQUESTED LAB ANALYSIS: ↓ # of containers collected ↓ per ↓ analysis
							BTEX/COV
Preservative: (*see codes)							1
Container Type: (*see codes)							G
MW-13	10-20	1445	G	GW	SAM	3	3
16		1436					
17		1415					
18		1336					
19	10-21	1450					
20		1420					
22		1251					
23		1516					
25	10-19	1525					
27		1405					

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*Preservative Codes (place corresponding # in block above analysis field): 0 = None, 1 = HCL, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4

*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

NOTES / COMMENTS

(if sample is a composite please use space below to note start/finish times & dates)

Turnaround Time:

X Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:

X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
[signature]	A Martin	10/27/16	1515	___Y ___N	___(°C)	___(N/A)
A Martin	Fedex	10-27-16	1720	___Y ___N	___(°C)	___(N/A)
	Alexa Sudge (FedEx)	10/28/16	1020	✓Y ___N	3.3 2.4 (°C)	___(N/A)
				___Y ___N	___(°C)	___(N/A)

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LAB USE ONLY

Sales Order # _____ PO # _____ Access Quote # _____

Project Work Order # 1610041

Laboratory ID: _____

Company Name: CES

Report To: W. Hubard

Address: 15 church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 540 348 0256 Fax: 540 343 0259

Email: WHubard@CrawfordEnvironmental.com

Project ID: Clouds

Sampled By: [illegible]

Preservative: (*see codes) 1

Container Type: (*see codes) G

REQUESTED LAB ANALYSIS: → BTEX/OXY

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	# of containers collected → per → analysis	BTEX/OXY	NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)
MW-28	10-19	1355	G	GW	SHW	3		3	
29		1345							
30		1440							
31	10-20	1000							
33	10-19	1420							
34		1510							
35	10-20	0945							
36	10-19	1445							
37	10-20	0930							
38		1015							

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*Preservative Codes (place corresponding # in block above analysis field): 0 = None, 1 = HCL, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4

*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Turnaround Time:

X Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:
X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
[signature]	Amartin	10/27/16	1515	___Y ___N	___(°C)	___(N/A)
Amartin	Fedex	10-27-16	1700	___Y ___N	___(°C)	___(N/A)
	Alexa Judge (FedEx)	10/28/16	1020	✓Y ___N	3.3(°C)	___(N/A)
				___Y ___N	___(°C)	___(N/A)

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Sales Order # _____ PO # _____ Access Quote # _____

Project Work Order # 1610041

Laboratory ID: _____

Company Name: CES

Report To: W. Hubard

Address: 15 Church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 540 343 6250 Fax: 540 343 6259

Email: wHubard@Crawford Environmental.com

Project ID: Clouds

Sampled By: Billy Ewing, Mgr

Preservative: (*see codes) 1

Container Type: (*see codes) G

REQUESTED LAB ANALYSIS: BTEX/OXY

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*Preservative Codes (place corresponding # in block above analysis field): 0 = None, 1 = HCL, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4

*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

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*Container Type: G = Glass, P = Plastic

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	# of containers collected per analysis	BTEX/OXY	NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)
MW-39	10-26	1045	G	GW	SHW	3	3		
40		1100							
41		1115							
42		1130							
43		1300							
44		1315							
45		1345							
46		1400							
49	10-25	1030							
51	10-20	1010							

Turnaround Time:

X Standard
__ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:

X SC
__ NC
__ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
[signature]	A Martin	10/27/16	1515	__Y __N	____(°C)	____(N/A)
A Martin	[signature]	10/27/16	1700	__Y __N	____(°C)	____(N/A)
	[signature] (FedEx)	10/28/16	1020	✓Y __N	3.3 (°C)	____(N/A)
				__Y __N	____(°C)	____(N/A)

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LAB USE ONLY

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Project Work Order # 161004

Sales Order # _____ PO # _____ Access Quote # _____

Laboratory ID: _____

Company Name: CES

Report To: W. Hubbard

Address: 15 church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 540 343 0256 Fax: 540 343 6259

Email: WHubbard@CrawfordEnvironmental.com

Project ID: Clarks

Sampled By: Billy Emery MP

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	Preservative: (*see codes)	Container Type: (*see codes)	↓ REQUESTED LAB ANALYSIS: ↓
							1	G	BTEX/oxy
MW-53	10-21	0930	G	GW	SHW	3			3
54	10-20	1300							
55	10-21	0915							
56	10-21	0845							
59	10-20	1535							
63	10-20	1200							
67		1030							
70		1145							
FB 1	10-19	1530							
2	10-20	1550							

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***Preservative Codes** *(place corresponding # in block above analysis field)*: **0** = None, **1** = HCL, **2** = HNO_3, **3** = H_2SO_4, **4** = NaOH, **5** = $Na_2S_2O_3$, **6** = Method 5035 set w/ $NaHSO_4$ & CH_3OH, **7** = NaOH/ZnOAC, **8** = H_3PO_4

***Matrix Codes** *(place corresponding code in matrix column)*: **GW** = ground water, **WW** = waste water, **DW** = drinking water, **S** = soil, **SL** = sludge, **A** = air, **IW** = industrial waste, **WO** = waste oil, **OT** = other *(specify in comments section)*

***Program Area Codes:** **CWA** = Clean Water Act (for wastewaters), **SDWA** = Safe Drinking Water Act (for drinking waters), **SHW** = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

***Container Type:** **G** = Glass, **P** = Plastic

NOTES / COMMENTS

(if sample is a composite please use space below to note start/finish times & dates)

Turnaround Time:

X Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:
X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
[signature]	Anart-	10/27/16	1515	___Y ___N	____(°C)	____(N/A)
Anart-	Fedex	10/27/16	1700	___Y ___N	____(°C)	____(N/A)
	Alexandria (FedEx)	10/28/16	1020	✓Y ___N	2.4, 3.3 (°C)	____(N/A)
				___Y ___N	____(°C)	____(N/A)

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LAB USE ONLY

Sales Order #_____ PO #_____ Access Quote #_____

Project Work Order # 1610041

Laboratory ID: _____

Company Name: CES

Report To: W Howard

Address: 15 Church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 540 343 6256 Fax: 540 343 6259

Email: WHoward@Crawford Environmental.com

Project ID: Clouds

Sampled By: Billy Energy Jr

Preservative (*see codes): 1

Container Type (*see codes): G

↓ REQUESTED LAB ANALYSIS: ↓ BTEX/OXY

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	# of containers collected ↓ per ↓ analysis
FB 3	10-21	1530	G	GW	SDWA	3	3
4	10-25	1210					
~~5~~							
Dup - 1	10-19	1425					
2	10-20	1205					
3	10-20	1505					
4	10-21	1105					
5	10-21	1450					
~~6~~							
~~7~~							

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*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

NOTES / COMMENTS

(if sample is a composite please use space below to note start/finish times & dates)

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Turnaround Time:

X Standard
___ RUSH*
*Date Required:_____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:
X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
[signature]	Amart	10/27/16	1515	___Y ___N	_____(°C)	_____(N/A)
Amart	[signature]	10/27/16	1740	___Y ___N	_____(°C)	_____(N/A)
	Alicia Judge (FedEx)	10/28/16	1020	✓Y ___N	2.4, 3.3 (°C)	_____(N/A)
				___Y ___N	_____(°C)	_____(N/A)

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Client: Crawford Environmental Services
Project: Clouds Chevron
Lab ID: 1610O41

Case Narrative

At the request of Angela Martin via email on 10/28/16 @ 8:41 AM, all samples were analyzed for BTEX/Nap/MTBE/DCA and Oxy.

Sample Receiving Nonconformance:

Two Trip Blanks were provided but not listed on the Chain of Custody.

For samples "PW-1PR and MW-34," one of the three vials were received broken. We proceeded with analysis using the remaining vials.

Field Blank samples provided were not identified on the sample labels, however they were identified according to the collection date/time on the Chain of Custody.

Volatile Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1610O41-003, -005, -009, -010, -023, -025, -026, -027 & -067 required dilution during preparation and/or analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-1
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 11:50:00 AM
Lab ID:	1610O41-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 04:47	NP
Benzene	BRL		0.14	1.0	ug/L	232158	1	11/03/2016 04:47	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 04:47	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232158	1	11/03/2016 04:47	NP
Naphthalene	BRL		0.13	5.0	ug/L	232158	1	11/03/2016 04:47	NP
Toluene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 04:47	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232158	1	11/03/2016 04:47	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	232158	1	11/03/2016 04:47	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	232158	1	11/03/2016 04:47	NP
Surr: Toluene-d8	95.4		0	70-130	%REC	232158	1	11/03/2016 04:47	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 04:47	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 04:47	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 04:47	NP
Isopropyl ether	BRL		3.9	10	ug/L	232158	1	11/03/2016 04:47	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232158	1	11/03/2016 04:47	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 04:47	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232158	1	11/03/2016 04:47	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 04:47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-2
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 12:30:00 PM
Lab ID:	1610O41-002	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 05:12	NP
Benzene	BRL		0.14	1.0	ug/L	232158	1	11/03/2016 05:12	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 05:12	NP
Methyl tert-butyl ether	2.9		0.22	1.0	ug/L	232158	1	11/03/2016 05:12	NP
Naphthalene	BRL		0.13	5.0	ug/L	232158	1	11/03/2016 05:12	NP
Toluene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 05:12	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232158	1	11/03/2016 05:12	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232158	1	11/03/2016 05:12	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	232158	1	11/03/2016 05:12	NP
Surr: Toluene-d8	96.6		0	70-130	%REC	232158	1	11/03/2016 05:12	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 05:12	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 05:12	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 05:12	NP
Isopropyl ether	BRL		3.9	10	ug/L	232158	1	11/03/2016 05:12	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232158	1	11/03/2016 05:12	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 05:12	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232158	1	11/03/2016 05:12	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 05:12	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-3
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 2:40:00 PM
Lab ID:	1610O41-003	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		24	100	ug/L	232158	100	11/02/2016 17:30	NP
Benzene	4200		14	100	ug/L	232158	100	11/02/2016 17:30	NP
Ethylbenzene	1800		20	100	ug/L	232158	100	11/02/2016 17:30	NP
Methyl tert-butyl ether	240		22	100	ug/L	232158	100	11/02/2016 17:30	NP
Naphthalene	450	J	13	500	ug/L	232158	100	11/02/2016 17:30	NP
Toluene	8300		20	100	ug/L	232158	100	11/02/2016 17:30	NP
Xylenes, Total	5200		30	100	ug/L	232158	100	11/02/2016 17:30	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	232158	100	11/02/2016 17:30	NP
Surr: Dibromofluoromethane	109		0	70-130	%REC	232158	100	11/02/2016 17:30	NP
Surr: Toluene-d8	95.4		0	70-130	%REC	232158	100	11/02/2016 17:30	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		4400	10000	ug/L	232158	100	11/02/2016 17:30	NP
Ethanol	BRL		2500	10000	ug/L	232158	100	11/02/2016 17:30	NP
Ethyl tert-butyl ether	BRL		350	10000	ug/L	232158	100	11/02/2016 17:30	NP
Isopropyl ether	750	J	390	1000	ug/L	232158	100	11/02/2016 17:30	NP
tert-Amyl alcohol	8200	J	4300	10000	ug/L	232158	100	11/02/2016 17:30	NP
tert-Amyl methyl ether	BRL		350	1000	ug/L	232158	100	11/02/2016 17:30	NP
tert-Butyl Alcohol	BRL		4600	10000	ug/L	232158	100	11/02/2016 17:30	NP
tert-Butyl formate	BRL		3100	10000	ug/L	232158	100	11/02/2016 17:30	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-4
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 1:40:00 PM
Lab ID:	1610O41-004	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 05:38	NP
Benzene	BRL		0.14	1.0	ug/L	232158	1	11/03/2016 05:38	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 05:38	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232158	1	11/03/2016 05:38	NP
Naphthalene	BRL		0.13	5.0	ug/L	232158	1	11/03/2016 05:38	NP
Toluene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 05:38	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232158	1	11/03/2016 05:38	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	232158	1	11/03/2016 05:38	NP
Surr: Dibromofluoromethane	109		0	70-130	%REC	232158	1	11/03/2016 05:38	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	232158	1	11/03/2016 05:38	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 05:38	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 05:38	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 05:38	NP
Isopropyl ether	BRL		3.9	10	ug/L	232158	1	11/03/2016 05:38	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232158	1	11/03/2016 05:38	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 05:38	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232158	1	11/03/2016 05:38	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 05:38	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-5
Project Name:	Clouds Chevron	**Collection Date:**	10/25/2016 11:15:00 AM
Lab ID:	1610O41-005	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		24	100	ug/L	232158	100	11/02/2016 17:56	NP
Benzene	5700		14	100	ug/L	232158	100	11/02/2016 17:56	NP
Ethylbenzene	460		20	100	ug/L	232158	100	11/02/2016 17:56	NP
Methyl tert-butyl ether	1000		22	100	ug/L	232158	100	11/02/2016 17:56	NP
Naphthalene	200	J	13	500	ug/L	232158	100	11/02/2016 17:56	NP
Toluene	1200		20	100	ug/L	232158	100	11/02/2016 17:56	NP
Xylenes, Total	2800		30	100	ug/L	232158	100	11/02/2016 17:56	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	232158	100	11/02/2016 17:56	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	232158	100	11/02/2016 17:56	NP
Surr: Toluene-d8	92.9		0	70-130	%REC	232158	100	11/02/2016 17:56	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		4400	10000	ug/L	232158	100	11/02/2016 17:56	NP
Ethanol	BRL		2500	10000	ug/L	232158	100	11/02/2016 17:56	NP
Ethyl tert-butyl ether	BRL		350	10000	ug/L	232158	100	11/02/2016 17:56	NP
Isopropyl ether	1400		390	1000	ug/L	232158	100	11/02/2016 17:56	NP
tert-Amyl alcohol	17000		4300	10000	ug/L	232158	100	11/02/2016 17:56	NP
tert-Amyl methyl ether	BRL		350	1000	ug/L	232158	100	11/02/2016 17:56	NP
tert-Butyl Alcohol	BRL		4600	10000	ug/L	232158	100	11/02/2016 17:56	NP
tert-Butyl formate	BRL		3100	10000	ug/L	232158	100	11/02/2016 17:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-6
Project Name:	Clouds Chevron	**Collection Date:**	10/25/2016 11:55:00 AM
Lab ID:	1610O41-006	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 06:02	NP
Benzene	BRL		0.14	1.0	ug/L	232158	1	11/03/2016 06:02	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 06:02	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232158	1	11/03/2016 06:02	NP
Naphthalene	BRL		0.13	5.0	ug/L	232158	1	11/03/2016 06:02	NP
Toluene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 06:02	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232158	1	11/03/2016 06:02	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232158	1	11/03/2016 06:02	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	232158	1	11/03/2016 06:02	NP
Surr: Toluene-d8	95.9		0	70-130	%REC	232158	1	11/03/2016 06:02	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 06:02	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 06:02	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 06:02	NP
Isopropyl ether	BRL		3.9	10	ug/L	232158	1	11/03/2016 06:02	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232158	1	11/03/2016 06:02	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 06:02	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232158	1	11/03/2016 06:02	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 06:02	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-7
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 8:45:00 AM
Lab ID:	1610O41-007	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/03/2016 00:12	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/03/2016 00:12	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/03/2016 00:12	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/03/2016 00:12	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/03/2016 00:12	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/03/2016 00:12	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/03/2016 00:12	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	232138	1	11/03/2016 00:12	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	232138	1	11/03/2016 00:12	NP
Surr: Toluene-d8	95.9		0	70-130	%REC	232138	1	11/03/2016 00:12	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/03/2016 00:12	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/03/2016 00:12	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/03/2016 00:12	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/03/2016 00:12	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/03/2016 00:12	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/03/2016 00:12	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/03/2016 00:12	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/03/2016 00:12	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-9
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 9:00:00 AM
Lab ID:	1610O41-008	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/03/2016 00:36	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/03/2016 00:36	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/03/2016 00:36	NP
Methyl tert-butyl ether	3.1		0.22	1.0	ug/L	232138	1	11/03/2016 00:36	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/03/2016 00:36	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/03/2016 00:36	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/03/2016 00:36	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232138	1	11/03/2016 00:36	NP
Surr: Dibromofluoromethane	112		0	70-130	%REC	232138	1	11/03/2016 00:36	NP
Surr: Toluene-d8	96.1		0	70-130	%REC	232138	1	11/03/2016 00:36	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/03/2016 00:36	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/03/2016 00:36	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/03/2016 00:36	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/03/2016 00:36	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/03/2016 00:36	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/03/2016 00:36	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/03/2016 00:36	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/03/2016 00:36	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	PW-1 PR
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 2:45:00 PM
Lab ID:	1610O41-009	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		4.9	20	ug/L	232158	20	11/02/2016 22:56	NP
Benzene	410		2.7	20	ug/L	232158	20	11/02/2016 22:56	NP
Ethylbenzene	440		4.1	20	ug/L	232158	20	11/02/2016 22:56	NP
Methyl tert-butyl ether	BRL		4.5	20	ug/L	232158	20	11/02/2016 22:56	NP
Naphthalene	320		2.5	100	ug/L	232158	20	11/02/2016 22:56	NP
Toluene	5900		10	50	ug/L	232158	50	11/03/2016 16:52	NP
Xylenes, Total	7200		6.0	20	ug/L	232158	20	11/02/2016 22:56	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232158	20	11/02/2016 22:56	NP
Surr: 4-Bromofluorobenzene	97.6		0	70-130	%REC	232158	50	11/03/2016 16:52	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	232158	20	11/02/2016 22:56	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	232158	50	11/03/2016 16:52	NP
Surr: Toluene-d8	91.7		0	70-130	%REC	232158	50	11/03/2016 16:52	NP
Surr: Toluene-d8	96.4		0	70-130	%REC	232158	20	11/02/2016 22:56	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		890	2000	ug/L	232158	20	11/02/2016 22:56	NP
Ethanol	BRL		500	2000	ug/L	232158	20	11/02/2016 22:56	NP
Ethyl tert-butyl ether	BRL		70	2000	ug/L	232158	20	11/02/2016 22:56	NP
Isopropyl ether	BRL		77	200	ug/L	232158	20	11/02/2016 22:56	NP
tert-Amyl alcohol	1900	J	860	2000	ug/L	232158	20	11/02/2016 22:56	NP
tert-Amyl methyl ether	BRL		71	200	ug/L	232158	20	11/02/2016 22:56	NP
tert-Butyl Alcohol	BRL		910	2000	ug/L	232158	20	11/02/2016 22:56	NP
tert-Butyl formate	BRL		630	2000	ug/L	232158	20	11/02/2016 22:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	5AR
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 2:00:00 PM
Lab ID:	1610O41-010	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		12	50	ug/L	232158	50	11/02/2016 18:46	NP
Benzene	6300		6.8	50	ug/L	232158	50	11/02/2016 18:46	NP
Ethylbenzene	1100		10	50	ug/L	232158	50	11/02/2016 18:46	NP
Methyl tert-butyl ether	BRL		11	50	ug/L	232158	50	11/02/2016 18:46	NP
Naphthalene	1100		6.4	250	ug/L	232158	50	11/02/2016 18:46	NP
Toluene	3000		10	50	ug/L	232158	50	11/02/2016 18:46	NP
Xylenes, Total	7200		15	50	ug/L	232158	50	11/02/2016 18:46	NP
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	232158	50	11/02/2016 18:46	NP
Surr: Dibromofluoromethane	112		0	70-130	%REC	232158	50	11/02/2016 18:46	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	232158	50	11/02/2016 18:46	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		2200	5000	ug/L	232158	50	11/02/2016 18:46	NP
Ethanol	BRL		1300	5000	ug/L	232158	50	11/02/2016 18:46	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	232158	50	11/02/2016 18:46	NP
Isopropyl ether	340	J	190	500	ug/L	232158	50	11/02/2016 18:46	NP
tert-Amyl alcohol	BRL		2100	5000	ug/L	232158	50	11/02/2016 18:46	NP
tert-Amyl methyl ether	BRL		180	500	ug/L	232158	50	11/02/2016 18:46	NP
tert-Butyl Alcohol	BRL		2300	5000	ug/L	232158	50	11/02/2016 18:46	NP
tert-Butyl formate	BRL		1600	5000	ug/L	232158	50	11/02/2016 18:46	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-2
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 10:40:00 AM
Lab ID:	1610O41-011	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 02:17	NP
Benzene	34		0.14	1.0	ug/L	232158	1	11/03/2016 02:17	NP
Ethylbenzene	23		0.20	1.0	ug/L	232158	1	11/03/2016 02:17	NP
Methyl tert-butyl ether	56		0.22	1.0	ug/L	232158	1	11/03/2016 02:17	NP
Naphthalene	18		0.13	5.0	ug/L	232158	1	11/03/2016 02:17	NP
Toluene	4.9		0.20	1.0	ug/L	232158	1	11/03/2016 02:17	NP
Xylenes, Total	60		0.30	1.0	ug/L	232158	1	11/03/2016 02:17	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232158	1	11/03/2016 02:17	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	232158	1	11/03/2016 02:17	NP
Surr: Toluene-d8	95.6		0	70-130	%REC	232158	1	11/03/2016 02:17	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 02:17	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 02:17	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 02:17	NP
Isopropyl ether	9.3	J	3.9	10	ug/L	232158	1	11/03/2016 02:17	NP
tert-Amyl alcohol	68	J	43	100	ug/L	232158	1	11/03/2016 02:17	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 02:17	NP
tert-Butyl Alcohol	47	J	46	100	ug/L	232158	1	11/03/2016 02:17	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 02:17	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-3
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 10:50:00 AM
Lab ID:	1610O41-012	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 13:31	NP
Benzene	480		1.4	10	ug/L	232158	10	11/03/2016 13:55	NP
Ethylbenzene	76		0.20	1.0	ug/L	232158	1	11/03/2016 13:31	NP
Methyl tert-butyl ether	67		0.22	1.0	ug/L	232158	1	11/03/2016 13:31	NP
Naphthalene	61		0.13	5.0	ug/L	232158	1	11/03/2016 13:31	NP
Toluene	1000		2.0	10	ug/L	232158	10	11/03/2016 13:55	NP
Xylenes, Total	2100		3.0	10	ug/L	232158	10	11/03/2016 13:55	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	232158	1	11/03/2016 13:31	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	232158	10	11/03/2016 13:55	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	232158	1	11/03/2016 13:31	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	232158	10	11/03/2016 13:55	NP
Surr: Toluene-d8	95.3		0	70-130	%REC	232158	1	11/03/2016 13:31	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	232158	10	11/03/2016 13:55	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 13:31	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 13:31	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 13:31	NP
Isopropyl ether	25		3.9	10	ug/L	232158	1	11/03/2016 13:31	NP
tert-Amyl alcohol	210		43	100	ug/L	232158	1	11/03/2016 13:31	NP
tert-Amyl methyl ether	29		3.5	10	ug/L	232158	1	11/03/2016 13:31	NP
tert-Butyl Alcohol	330		46	100	ug/L	232158	1	11/03/2016 13:31	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 13:31	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-4
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 11:10:00 AM
Lab ID:	1610O41-013	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 03:32	NP
Benzene	BRL		0.14	1.0	ug/L	232158	1	11/03/2016 03:32	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 03:32	NP
Methyl tert-butyl ether	1.0		0.22	1.0	ug/L	232158	1	11/03/2016 03:32	NP
Naphthalene	BRL		0.13	5.0	ug/L	232158	1	11/03/2016 03:32	NP
Toluene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 03:32	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232158	1	11/03/2016 03:32	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	232158	1	11/03/2016 03:32	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	232158	1	11/03/2016 03:32	NP
Surr: Toluene-d8	95.2		0	70-130	%REC	232158	1	11/03/2016 03:32	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 03:32	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 03:32	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 03:32	NP
Isopropyl ether	BRL		3.9	10	ug/L	232158	1	11/03/2016 03:32	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232158	1	11/03/2016 03:32	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 03:32	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232158	1	11/03/2016 03:32	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 03:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-6
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 11:00:00 AM
Lab ID:	1610O41-014	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 02:42	NP
Benzene	BRL		0.14	1.0	ug/L	232158	1	11/03/2016 02:42	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 02:42	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232158	1	11/03/2016 02:42	NP
Naphthalene	1.9	J	0.13	5.0	ug/L	232158	1	11/03/2016 02:42	NP
Toluene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 02:42	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232158	1	11/03/2016 02:42	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	232158	1	11/03/2016 02:42	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	232158	1	11/03/2016 02:42	NP
Surr: Toluene-d8	98.3		0	70-130	%REC	232158	1	11/03/2016 02:42	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 02:42	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 02:42	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 02:42	NP
Isopropyl ether	BRL		3.9	10	ug/L	232158	1	11/03/2016 02:42	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232158	1	11/03/2016 02:42	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 02:42	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232158	1	11/03/2016 02:42	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 02:42	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-7
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 11:20:00 AM
Lab ID:	1610O41-015	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 03:57	NP
Benzene	BRL		0.14	1.0	ug/L	232158	1	11/03/2016 03:57	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 03:57	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232158	1	11/03/2016 03:57	NP
Naphthalene	BRL		0.13	5.0	ug/L	232158	1	11/03/2016 03:57	NP
Toluene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 03:57	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232158	1	11/03/2016 03:57	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232158	1	11/03/2016 03:57	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	232158	1	11/03/2016 03:57	NP
Surr: Toluene-d8	95.3		0	70-130	%REC	232158	1	11/03/2016 03:57	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 03:57	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 03:57	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 03:57	NP
Isopropyl ether	BRL		3.9	10	ug/L	232158	1	11/03/2016 03:57	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232158	1	11/03/2016 03:57	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 03:57	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232158	1	11/03/2016 03:57	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 03:57	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-8
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 11:30:00 AM
Lab ID:	1610O41-016	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 04:22	NP
Benzene	BRL		0.14	1.0	ug/L	232158	1	11/03/2016 04:22	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 04:22	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232158	1	11/03/2016 04:22	NP
Naphthalene	BRL		0.13	5.0	ug/L	232158	1	11/03/2016 04:22	NP
Toluene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 04:22	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232158	1	11/03/2016 04:22	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	232158	1	11/03/2016 04:22	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	232158	1	11/03/2016 04:22	NP
Surr: Toluene-d8	94.3		0	70-130	%REC	232158	1	11/03/2016 04:22	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 04:22	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 04:22	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 04:22	NP
Isopropyl ether	BRL		3.9	10	ug/L	232158	1	11/03/2016 04:22	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232158	1	11/03/2016 04:22	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 04:22	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232158	1	11/03/2016 04:22	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 04:22	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-9
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 10:30:00 AM
Lab ID:	1610O41-017	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 14:46	NP
Benzene	60		0.14	1.0	ug/L	232158	1	11/03/2016 14:46	NP
Ethylbenzene	730		4.1	20	ug/L	232158	20	11/02/2016 19:36	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232158	1	11/03/2016 14:46	NP
Naphthalene	210		2.5	100	ug/L	232158	20	11/02/2016 19:36	NP
Toluene	1500		4.1	20	ug/L	232158	20	11/02/2016 19:36	NP
Xylenes, Total	3800		6.0	20	ug/L	232158	20	11/02/2016 19:36	NP
Surr: 4-Bromofluorobenzene	111		0	70-130	%REC	232158	20	11/02/2016 19:36	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	232158	1	11/03/2016 14:46	NP
Surr: Dibromofluoromethane	112		0	70-130	%REC	232158	20	11/02/2016 19:36	NP
Surr: Dibromofluoromethane	96.5		0	70-130	%REC	232158	1	11/03/2016 14:46	NP
Surr: Toluene-d8	92.5		0	70-130	%REC	232158	1	11/03/2016 14:46	NP
Surr: Toluene-d8	96.6		0	70-130	%REC	232158	20	11/02/2016 19:36	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 14:46	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 14:46	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 14:46	NP
Isopropyl ether	BRL		3.9	10	ug/L	232158	1	11/03/2016 14:46	NP
tert-Amyl alcohol	550		43	100	ug/L	232158	1	11/03/2016 14:46	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 14:46	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232158	1	11/03/2016 14:46	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 14:46	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-10
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 10:20:00 AM
Lab ID:	1610O41-018	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 12:42	NP
Benzene	27		0.14	1.0	ug/L	232158	1	11/03/2016 12:42	NP
Ethylbenzene	11		0.20	1.0	ug/L	232158	1	11/03/2016 12:42	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232158	1	11/03/2016 12:42	NP
Naphthalene	47		0.13	5.0	ug/L	232158	1	11/03/2016 12:42	NP
Toluene	7.1		0.20	1.0	ug/L	232158	1	11/03/2016 12:42	NP
Xylenes, Total	93		0.30	1.0	ug/L	232158	1	11/03/2016 12:42	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232158	1	11/03/2016 12:42	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	232158	1	11/03/2016 12:42	NP
Surr: Toluene-d8	96.6		0	70-130	%REC	232158	1	11/03/2016 12:42	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 12:42	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 12:42	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 12:42	NP
Isopropyl ether	BRL		3.9	10	ug/L	232158	1	11/03/2016 12:42	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232158	1	11/03/2016 12:42	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 12:42	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232158	1	11/03/2016 12:42	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 12:42	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-11
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 9:50:00 AM
Lab ID:	1610O41-019	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232158	1	11/03/2016 01:52	NP
Benzene	BRL		0.14	1.0	ug/L	232158	1	11/03/2016 01:52	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 01:52	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232158	1	11/03/2016 01:52	NP
Naphthalene	BRL		0.13	5.0	ug/L	232158	1	11/03/2016 01:52	NP
Toluene	BRL		0.20	1.0	ug/L	232158	1	11/03/2016 01:52	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232158	1	11/03/2016 01:52	NP
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	232158	1	11/03/2016 01:52	NP
Surr: Dibromofluoromethane	109		0	70-130	%REC	232158	1	11/03/2016 01:52	NP
Surr: Toluene-d8	94.3		0	70-130	%REC	232158	1	11/03/2016 01:52	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232158	1	11/03/2016 01:52	NP
Ethanol	BRL		25	100	ug/L	232158	1	11/03/2016 01:52	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232158	1	11/03/2016 01:52	NP
Isopropyl ether	BRL		3.9	10	ug/L	232158	1	11/03/2016 01:52	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232158	1	11/03/2016 01:52	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232158	1	11/03/2016 01:52	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232158	1	11/03/2016 01:52	NP
tert-Butyl formate	BRL		31	100	ug/L	232158	1	11/03/2016 01:52	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-12
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 3:20:00 PM
Lab ID:	1610O41-020	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 05:48	NP
Benzene	180		0.14	1.0	ug/L	232138	1	11/02/2016 05:48	NP
Ethylbenzene	420		2.0	10	ug/L	232138	10	11/02/2016 06:11	NP
Methyl tert-butyl ether	13		0.22	1.0	ug/L	232138	1	11/02/2016 05:48	NP
Naphthalene	110		0.13	5.0	ug/L	232138	1	11/02/2016 05:48	NP
Toluene	18		0.20	1.0	ug/L	232138	1	11/02/2016 05:48	NP
Xylenes, Total	300		3.0	10	ug/L	232138	10	11/02/2016 06:11	NP
Surr: 4-Bromofluorobenzene	112		0	70-130	%REC	232138	1	11/02/2016 05:48	NP
Surr: 4-Bromofluorobenzene	111		0	70-130	%REC	232138	10	11/02/2016 06:11	NP
Surr: Dibromofluoromethane	113		0	70-130	%REC	232138	1	11/02/2016 05:48	NP
Surr: Dibromofluoromethane	114		0	70-130	%REC	232138	10	11/02/2016 06:11	NP
Surr: Toluene-d8	94.8		0	70-130	%REC	232138	10	11/02/2016 06:11	NP
Surr: Toluene-d8	97.4		0	70-130	%REC	232138	1	11/02/2016 05:48	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 05:48	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 05:48	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 05:48	NP
Isopropyl ether	63		3.9	10	ug/L	232138	1	11/02/2016 05:48	NP
tert-Amyl alcohol	4000		43	100	ug/L	232138	1	11/02/2016 05:48	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 05:48	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 05:48	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 05:48	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-13
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 2:45:00 PM
Lab ID:	1610O41-021	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 11:13	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 11:13	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 11:13	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/02/2016 11:13	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 11:13	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 11:13	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 11:13	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232138	1	11/02/2016 11:13	NP
Surr: Dibromofluoromethane	113		0	70-130	%REC	232138	1	11/02/2016 11:13	NP
Surr: Toluene-d8	97.2		0	70-130	%REC	232138	1	11/02/2016 11:13	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 11:13	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 11:13	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 11:13	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/02/2016 11:13	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/02/2016 11:13	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 11:13	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 11:13	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 11:13	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-16
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 2:30:00 PM
Lab ID:	1610O41-022	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 04:59	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 04:59	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 04:59	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/02/2016 04:59	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 04:59	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 04:59	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 04:59	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232138	1	11/02/2016 04:59	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	232138	1	11/02/2016 04:59	NP
Surr: Toluene-d8	93.1		0	70-130	%REC	232138	1	11/02/2016 04:59	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 04:59	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 04:59	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 04:59	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/02/2016 04:59	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/02/2016 04:59	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 04:59	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 04:59	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 04:59	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-17
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 2:15:00 PM
Lab ID:	1610O41-023	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		24	100	ug/L	232138	100	11/02/2016 04:35	NP
Benzene	BRL		14	100	ug/L	232138	100	11/02/2016 04:35	NP
Ethylbenzene	510		20	100	ug/L	232138	100	11/02/2016 04:35	NP
Methyl tert-butyl ether	BRL		22	100	ug/L	232138	100	11/02/2016 04:35	NP
Naphthalene	560		13	500	ug/L	232138	100	11/02/2016 04:35	NP
Toluene	5500		20	100	ug/L	232138	100	11/02/2016 04:35	NP
Xylenes, Total	11000		30	100	ug/L	232138	100	11/02/2016 04:35	NP
Surr: 4-Bromofluorobenzene	109		0	70-130	%REC	232138	100	11/02/2016 04:35	NP
Surr: Dibromofluoromethane	113		0	70-130	%REC	232138	100	11/02/2016 04:35	NP
Surr: Toluene-d8	94.5		0	70-130	%REC	232138	100	11/02/2016 04:35	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		4400	10000	ug/L	232138	100	11/02/2016 04:35	NP
Ethanol	BRL		2500	10000	ug/L	232138	100	11/02/2016 04:35	NP
Ethyl tert-butyl ether	BRL		350	10000	ug/L	232138	100	11/02/2016 04:35	NP
Isopropyl ether	BRL		390	1000	ug/L	232138	100	11/02/2016 04:35	NP
tert-Amyl alcohol	BRL		4300	10000	ug/L	232138	100	11/02/2016 04:35	NP
tert-Amyl methyl ether	BRL		350	1000	ug/L	232138	100	11/02/2016 04:35	NP
tert-Butyl Alcohol	BRL		4600	10000	ug/L	232138	100	11/02/2016 04:35	NP
tert-Butyl formate	BRL		3100	10000	ug/L	232138	100	11/02/2016 04:35	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-18
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 1:30:00 PM
Lab ID:	1610O41-024	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 12:54	NP
Benzene	510		6.8	50	ug/L	232138	50	11/02/2016 03:24	NP
Ethylbenzene	230		10	50	ug/L	232138	50	11/02/2016 03:24	NP
Methyl tert-butyl ether	68		0.22	1.0	ug/L	232138	1	11/02/2016 12:54	NP
Naphthalene	120		0.13	5.0	ug/L	232138	1	11/02/2016 12:54	NP
Toluene	2400		10	50	ug/L	232138	50	11/02/2016 03:24	NP
Xylenes, Total	3700		15	50	ug/L	232138	50	11/02/2016 03:24	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232138	50	11/02/2016 03:24	NP
Surr: 4-Bromofluorobenzene	110		0	70-130	%REC	232138	1	11/02/2016 12:54	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	232138	50	11/02/2016 03:24	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	232138	1	11/02/2016 12:54	NP
Surr: Toluene-d8	95		0	70-130	%REC	232138	50	11/02/2016 03:24	NP
Surr: Toluene-d8	95.2		0	70-130	%REC	232138	1	11/02/2016 12:54	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 12:54	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 12:54	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 12:54	NP
Isopropyl ether	80		3.9	10	ug/L	232138	1	11/02/2016 12:54	NP
tert-Amyl alcohol	5500		430	1000	ug/L	232138	10	11/02/2016 18:21	NP
tert-Amyl methyl ether	48		3.5	10	ug/L	232138	1	11/02/2016 12:54	NP
tert-Butyl Alcohol	1100		46	100	ug/L	232138	1	11/02/2016 12:54	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 12:54	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	232138	10	11/02/2016 18:21	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	232138	10	11/02/2016 18:21	NP
Surr: Toluene-d8	96.2		0	70-130	%REC	232138	10	11/02/2016 18:21	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-19
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 2:50:00 PM
Lab ID:	1610O41-025	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		120	500	ug/L	232158	500	11/02/2016 15:52	NP
Benzene	2500		68	500	ug/L	232158	500	11/02/2016 15:52	NP
Ethylbenzene	1200		100	500	ug/L	232158	500	11/02/2016 15:52	NP
Methyl tert-butyl ether	BRL		110	500	ug/L	232158	500	11/02/2016 15:52	NP
Naphthalene	1200	J	64	2500	ug/L	232158	500	11/02/2016 15:52	NP
Toluene	18000		100	500	ug/L	232158	500	11/02/2016 15:52	NP
Xylenes, Total	19000		150	500	ug/L	232158	500	11/02/2016 15:52	NP
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	232158	500	11/02/2016 15:52	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	232158	500	11/02/2016 15:52	NP
Surr: Toluene-d8	95.7		0	70-130	%REC	232158	500	11/02/2016 15:52	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		22000	50000	ug/L	232158	500	11/02/2016 15:52	NP
Ethanol	BRL		13000	50000	ug/L	232158	500	11/02/2016 15:52	NP
Ethyl tert-butyl ether	BRL		1800	50000	ug/L	232158	500	11/02/2016 15:52	NP
Isopropyl ether	BRL		1900	5000	ug/L	232158	500	11/02/2016 15:52	NP
tert-Amyl alcohol	BRL		21000	50000	ug/L	232158	500	11/02/2016 15:52	NP
tert-Amyl methyl ether	BRL		1800	5000	ug/L	232158	500	11/02/2016 15:52	NP
tert-Butyl Alcohol	BRL		23000	50000	ug/L	232158	500	11/02/2016 15:52	NP
tert-Butyl formate	BRL		16000	50000	ug/L	232158	500	11/02/2016 15:52	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-20
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 2:20:00 PM
Lab ID:	1610O41-026	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		12	50	ug/L	232158	50	11/03/2016 13:07	NP
Benzene	490		6.8	50	ug/L	232158	50	11/03/2016 13:07	NP
Ethylbenzene	1600		10	50	ug/L	232158	50	11/03/2016 13:07	NP
Methyl tert-butyl ether	BRL		11	50	ug/L	232158	50	11/03/2016 13:07	NP
Naphthalene	1200		6.4	250	ug/L	232158	50	11/03/2016 13:07	NP
Toluene	7000		10	50	ug/L	232158	50	11/03/2016 13:07	NP
Xylenes, Total	20000		15	50	ug/L	232158	50	11/03/2016 13:07	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	232158	50	11/03/2016 13:07	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	232158	50	11/03/2016 13:07	NP
Surr: Toluene-d8	96.1		0	70-130	%REC	232158	50	11/03/2016 13:07	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		2200	5000	ug/L	232158	50	11/03/2016 13:07	NP
Ethanol	BRL		1300	5000	ug/L	232158	50	11/03/2016 13:07	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	232158	50	11/03/2016 13:07	NP
Isopropyl ether	BRL		190	500	ug/L	232158	50	11/03/2016 13:07	NP
tert-Amyl alcohol	4200	J	2100	5000	ug/L	232158	50	11/03/2016 13:07	NP
tert-Amyl methyl ether	BRL		180	500	ug/L	232158	50	11/03/2016 13:07	NP
tert-Butyl Alcohol	BRL		2300	5000	ug/L	232158	50	11/03/2016 13:07	NP
tert-Butyl formate	BRL		1600	5000	ug/L	232158	50	11/03/2016 13:07	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-22
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 12:50:00 PM
Lab ID:	1610O41-027	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		120	500	ug/L	232158	500	11/02/2016 16:40	NP
Benzene	3400		68	500	ug/L	232158	500	11/02/2016 16:40	NP
Ethylbenzene	1600		100	500	ug/L	232158	500	11/02/2016 16:40	NP
Methyl tert-butyl ether	BRL		110	500	ug/L	232158	500	11/02/2016 16:40	NP
Naphthalene	720	J	64	2500	ug/L	232158	500	11/02/2016 16:40	NP
Toluene	20000		100	500	ug/L	232158	500	11/02/2016 16:40	NP
Xylenes, Total	20000		150	500	ug/L	232158	500	11/02/2016 16:40	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	232158	500	11/02/2016 16:40	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	232158	500	11/02/2016 16:40	NP
Surr: Toluene-d8	96.7		0	70-130	%REC	232158	500	11/02/2016 16:40	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		22000	50000	ug/L	232158	500	11/02/2016 16:40	NP
Ethanol	BRL		13000	50000	ug/L	232158	500	11/02/2016 16:40	NP
Ethyl tert-butyl ether	BRL		1800	50000	ug/L	232158	500	11/02/2016 16:40	NP
Isopropyl ether	BRL		1900	5000	ug/L	232158	500	11/02/2016 16:40	NP
tert-Amyl alcohol	BRL		21000	50000	ug/L	232158	500	11/02/2016 16:40	NP
tert-Amyl methyl ether	BRL		1800	5000	ug/L	232158	500	11/02/2016 16:40	NP
tert-Butyl Alcohol	BRL		23000	50000	ug/L	232158	500	11/02/2016 16:40	NP
tert-Butyl formate	BRL		16000	50000	ug/L	232158	500	11/02/2016 16:40	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-23
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 3:10:00 PM
Lab ID:	1610O41-028	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232159	1	11/03/2016 15:36	NP
Benzene	600		6.8	50	ug/L	232159	50	11/02/2016 19:11	NP
Ethylbenzene	130		10	50	ug/L	232159	50	11/02/2016 19:11	NP
Methyl tert-butyl ether	18		0.22	1.0	ug/L	232159	1	11/03/2016 15:36	NP
Naphthalene	390		6.4	250	ug/L	232159	50	11/02/2016 19:11	NP
Toluene	1900		10	50	ug/L	232159	50	11/02/2016 19:11	NP
Xylenes, Total	4600		15	50	ug/L	232159	50	11/02/2016 19:11	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	232159	50	11/02/2016 19:11	NP
Surr: 4-Bromofluorobenzene	109		0	70-130	%REC	232159	1	11/03/2016 15:36	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	232159	50	11/02/2016 19:11	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	232159	1	11/03/2016 15:36	NP
Surr: Toluene-d8	96.2		0	70-130	%REC	232159	50	11/02/2016 19:11	NP
Surr: Toluene-d8	94.2		0	70-130	%REC	232159	1	11/03/2016 15:36	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232159	1	11/03/2016 15:36	NP
Ethanol	BRL		25	100	ug/L	232159	1	11/03/2016 15:36	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232159	1	11/03/2016 15:36	NP
Isopropyl ether	73		3.9	10	ug/L	232159	1	11/03/2016 15:36	NP
tert-Amyl alcohol	4000		430	1000	ug/L	232159	10	11/03/2016 18:34	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232159	1	11/03/2016 15:36	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232159	1	11/03/2016 15:36	NP
tert-Butyl formate	BRL		31	100	ug/L	232159	1	11/03/2016 15:36	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232159	10	11/03/2016 18:34	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	232159	10	11/03/2016 18:34	NP
Surr: Toluene-d8	93.8		0	70-130	%REC	232159	10	11/03/2016 18:34	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-25
Project Name:	Clouds Chevron	**Collection Date:**	10/19/2016 3:25:00 PM
Lab ID:	1610O41-029	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 11:56	NP
Benzene	8.8		0.14	1.0	ug/L	232049	1	11/01/2016 11:56	NP
Ethylbenzene	230		20	100	ug/L	232049	100	10/31/2016 21:44	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 11:56	NP
Naphthalene	450		13	200	ug/L	232049	100	10/31/2016 21:44	NP
Toluene	120		0.20	1.0	ug/L	232049	1	11/01/2016 11:56	NP
Xylenes, Total	3400		30	100	ug/L	232049	100	10/31/2016 21:44	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	232049	100	10/31/2016 21:44	NP
Surr: 4-Bromofluorobenzene	109		0	70-130	%REC	232049	1	11/01/2016 11:56	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	232049	100	10/31/2016 21:44	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	232049	1	11/01/2016 11:56	NP
Surr: Toluene-d8	95.1		0	70-130	%REC	232049	1	11/01/2016 11:56	NP
Surr: Toluene-d8	95.3		0	70-130	%REC	232049	100	10/31/2016 21:44	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 11:56	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 11:56	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 11:56	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/01/2016 11:56	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/01/2016 11:56	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 11:56	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 11:56	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 11:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-27
Project Name:	Clouds Chevron	**Collection Date:**	10/19/2016 2:05:00 PM
Lab ID:	1610O41-030	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 10:44	NP
Benzene	BRL		0.14	1.0	ug/L	232049	1	11/01/2016 10:44	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 10:44	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 10:44	NP
Naphthalene	BRL		0.13	5.0	ug/L	232049	1	11/01/2016 10:44	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 10:44	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/01/2016 10:44	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	232049	1	11/01/2016 10:44	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	232049	1	11/01/2016 10:44	NP
Surr: Toluene-d8	95.1		0	70-130	%REC	232049	1	11/01/2016 10:44	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 10:44	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 10:44	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 10:44	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/01/2016 10:44	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/01/2016 10:44	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 10:44	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 10:44	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 10:44	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-28
Project Name:	Clouds Chevron	**Collection Date:**	10/19/2016 1:55:00 PM
Lab ID:	1610O41-031	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 10:20	NP
Benzene	BRL		0.14	1.0	ug/L	232049	1	11/01/2016 10:20	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 10:20	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 10:20	NP
Naphthalene	BRL		0.13	5.0	ug/L	232049	1	11/01/2016 10:20	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 10:20	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/01/2016 10:20	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	232049	1	11/01/2016 10:20	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	232049	1	11/01/2016 10:20	NP
Surr: Toluene-d8	95.8		0	70-130	%REC	232049	1	11/01/2016 10:20	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 10:20	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 10:20	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 10:20	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/01/2016 10:20	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/01/2016 10:20	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 10:20	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 10:20	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 10:20	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-29
Project Name:	Clouds Chevron	**Collection Date:**	10/19/2016 1:54:00 PM
Lab ID:	1610O41-032	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 09:56	NP
Benzene	BRL		0.14	1.0	ug/L	232049	1	11/01/2016 09:56	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 09:56	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 09:56	NP
Naphthalene	BRL		0.13	5.0	ug/L	232049	1	11/01/2016 09:56	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 09:56	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/01/2016 09:56	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	232049	1	11/01/2016 09:56	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	232049	1	11/01/2016 09:56	NP
Surr: Toluene-d8	95.2		0	70-130	%REC	232049	1	11/01/2016 09:56	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 09:56	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 09:56	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 09:56	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/01/2016 09:56	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/01/2016 09:56	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 09:56	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 09:56	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 09:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-30
Project Name:	Clouds Chevron	**Collection Date:**	10/19/2016 2:40:00 PM
Lab ID:	1610O41-033	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 11:08	NP
Benzene	BRL		0.14	1.0	ug/L	232049	1	11/01/2016 11:08	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 11:08	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 11:08	NP
Naphthalene	BRL		0.13	5.0	ug/L	232049	1	11/01/2016 11:08	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 11:08	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/01/2016 11:08	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	232049	1	11/01/2016 11:08	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	232049	1	11/01/2016 11:08	NP
Surr: Toluene-d8	96.7		0	70-130	%REC	232049	1	11/01/2016 11:08	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 11:08	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 11:08	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 11:08	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/01/2016 11:08	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/01/2016 11:08	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 11:08	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 11:08	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 11:08	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-31
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 10:00:00 AM
Lab ID:	1610O41-034	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 16:25	NP
Benzene	7.9		0.14	1.0	ug/L	232049	1	11/01/2016 16:25	NP
Ethylbenzene	6.1		0.20	1.0	ug/L	232049	1	11/01/2016 16:25	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 16:25	NP
Naphthalene	130		0.13	5.0	ug/L	232049	1	11/01/2016 16:25	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 16:25	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/01/2016 16:25	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	232049	1	11/01/2016 16:25	NP
Surr: Dibromofluoromethane	98.5		0	70-130	%REC	232049	1	11/01/2016 16:25	NP
Surr: Toluene-d8	108		0	70-130	%REC	232049	1	11/01/2016 16:25	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 14:00	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 14:00	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 14:00	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/01/2016 14:00	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/01/2016 14:00	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 14:00	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 14:00	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 14:00	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-33
Project Name:	Clouds Chevron	**Collection Date:**	10/19/2016 2:20:00 PM
Lab ID:	1610O41-035	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 12:20	NP
Benzene	120		0.14	1.0	ug/L	232049	1	11/01/2016 12:20	NP
Ethylbenzene	480		10	50	ug/L	232049	50	10/31/2016 22:09	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 12:20	NP
Naphthalene	95		0.13	5.0	ug/L	232049	1	11/01/2016 12:20	NP
Toluene	620		10	50	ug/L	232049	50	10/31/2016 22:09	NP
Xylenes, Total	1700		15	50	ug/L	232049	50	10/31/2016 22:09	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	232049	50	10/31/2016 22:09	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232049	1	11/01/2016 12:20	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	232049	50	10/31/2016 22:09	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	232049	1	11/01/2016 12:20	NP
Surr: Toluene-d8	94.2		0	70-130	%REC	232049	50	10/31/2016 22:09	NP
Surr: Toluene-d8	99.2		0	70-130	%REC	232049	1	11/01/2016 12:20	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 12:20	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 12:20	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 12:20	NP
Isopropyl ether	11		3.9	10	ug/L	232049	1	11/01/2016 12:20	NP
tert-Amyl alcohol	980		43	100	ug/L	232049	1	11/01/2016 12:20	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 12:20	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 12:20	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 12:20	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-34
Project Name:	Clouds Chevron	**Collection Date:**	10/19/2016 3:10:00 PM
Lab ID:	1610O41-036	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 11:32	NP
Benzene	BRL		0.14	1.0	ug/L	232049	1	11/01/2016 11:32	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 11:32	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 11:32	NP
Naphthalene	BRL		0.13	5.0	ug/L	232049	1	11/01/2016 11:32	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 11:32	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/01/2016 11:32	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	232049	1	11/01/2016 11:32	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	232049	1	11/01/2016 11:32	NP
Surr: Toluene-d8	96.2		0	70-130	%REC	232049	1	11/01/2016 11:32	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 11:32	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 11:32	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 11:32	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/01/2016 11:32	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/01/2016 11:32	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 11:32	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 11:32	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 11:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-35
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 9:45:00 AM
Lab ID:	1610O41-037	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	60		0.24	1.0	ug/L	232049	1	11/02/2016 07:24	NP
Benzene	2200		6.8	50	ug/L	232049	50	11/02/2016 15:28	NP
Ethylbenzene	1300		10	50	ug/L	232049	50	11/02/2016 15:28	NP
Methyl tert-butyl ether	64		0.22	1.0	ug/L	232049	1	11/02/2016 07:24	NP
Naphthalene	360		6.4	250	ug/L	232049	50	11/02/2016 15:28	NP
Toluene	3300		10	50	ug/L	232049	50	11/02/2016 15:28	NP
Xylenes, Total	4100		15	50	ug/L	232049	50	11/02/2016 15:28	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	232049	50	11/02/2016 15:28	NP
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	232049	1	11/02/2016 07:24	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	232049	50	11/02/2016 15:28	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	232049	1	11/02/2016 07:24	NP
Surr: Toluene-d8	95.5		0	70-130	%REC	232049	50	11/02/2016 15:28	NP
Surr: Toluene-d8	96		0	70-130	%REC	232049	1	11/02/2016 07:24	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/02/2016 07:24	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/02/2016 07:24	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/02/2016 07:24	NP
Isopropyl ether	290		3.9	10	ug/L	232049	1	11/02/2016 07:24	NP
tert-Amyl alcohol	5800		2100	5000	ug/L	232049	50	11/02/2016 15:28	NP
tert-Amyl methyl ether	63		3.5	10	ug/L	232049	1	11/02/2016 07:24	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/02/2016 07:24	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/02/2016 07:24	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-36
Project Name:	Clouds Chevron	**Collection Date:**	10/19/2016 2:45:00 PM
Lab ID:	1610O41-038	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 15:11	NP
Benzene	1.8		0.14	1.0	ug/L	232049	1	11/01/2016 15:11	NP
Ethylbenzene	25		0.20	1.0	ug/L	232049	1	11/01/2016 15:11	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 15:11	NP
Naphthalene	14		0.13	5.0	ug/L	232049	1	11/01/2016 15:11	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 15:11	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/01/2016 15:11	NP
Surr: 4-Bromofluorobenzene	111		0	70-130	%REC	232049	1	11/01/2016 15:11	NP
Surr: Dibromofluoromethane	99.8		0	70-130	%REC	232049	1	11/01/2016 15:11	NP
Surr: Toluene-d8	104		0	70-130	%REC	232049	1	11/01/2016 15:11	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 15:11	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 15:11	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 15:11	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/01/2016 15:11	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/01/2016 15:11	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 15:11	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 15:11	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 15:11	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-37
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 9:30:00 AM
Lab ID:	1610O41-039	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 14:48	NP
Benzene	BRL		0.14	1.0	ug/L	232049	1	11/01/2016 14:48	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 14:48	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 14:48	NP
Naphthalene	1.0	J	0.13	5.0	ug/L	232049	1	11/01/2016 14:48	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 14:48	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/01/2016 14:48	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	232049	1	11/01/2016 14:48	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	232049	1	11/01/2016 14:48	NP
Surr: Toluene-d8	103		0	70-130	%REC	232049	1	11/01/2016 14:48	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 14:48	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 14:48	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 14:48	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/01/2016 14:48	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/01/2016 14:48	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 14:48	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 14:48	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 14:48	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-38
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 10:15:00 AM
Lab ID:	1610O41-040	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 23:47	NP
Benzene	BRL		0.14	1.0	ug/L	232049	1	11/01/2016 23:47	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 23:47	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 23:47	NP
Naphthalene	BRL		0.13	5.0	ug/L	232049	1	11/01/2016 23:47	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 23:47	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/01/2016 23:47	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232049	1	11/01/2016 23:47	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	232049	1	11/01/2016 23:47	NP
Surr: Toluene-d8	93.6		0	70-130	%REC	232049	1	11/01/2016 23:47	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 23:47	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 23:47	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 23:47	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/01/2016 23:47	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/01/2016 23:47	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 23:47	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 23:47	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 23:47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-39
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 10:45:00 AM
Lab ID:	1610O41-041	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/02/2016 13:42	NP
Benzene	1.5		0.14	1.0	ug/L	232049	1	11/02/2016 13:42	NP
Ethylbenzene	780		2.0	10	ug/L	232049	10	11/02/2016 14:06	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/02/2016 13:42	NP
Naphthalene	320		1.3	50	ug/L	232049	10	11/02/2016 14:06	NP
Toluene	390		2.0	10	ug/L	232049	10	11/02/2016 14:06	NP
Xylenes, Total	2300		3.0	10	ug/L	232049	10	11/02/2016 14:06	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232049	1	11/02/2016 13:42	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232049	10	11/02/2016 14:06	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	232049	1	11/02/2016 13:42	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	232049	10	11/02/2016 14:06	NP
Surr: Toluene-d8	95		0	70-130	%REC	232049	1	11/02/2016 13:42	NP
Surr: Toluene-d8	96.4		0	70-130	%REC	232049	10	11/02/2016 14:06	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/02/2016 07:48	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/02/2016 07:48	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/02/2016 07:48	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/02/2016 07:48	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/02/2016 07:48	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/02/2016 07:48	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/02/2016 07:48	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/02/2016 07:48	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-40
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 11:00:00 AM
Lab ID:	1610O41-042	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/02/2016 00:35	NP
Benzene	BRL		0.14	1.0	ug/L	232049	1	11/02/2016 00:35	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232049	1	11/02/2016 00:35	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/02/2016 00:35	NP
Naphthalene	BRL		0.13	5.0	ug/L	232049	1	11/02/2016 00:35	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/02/2016 00:35	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/02/2016 00:35	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232049	1	11/02/2016 00:35	NP
Surr: Dibromofluoromethane	109		0	70-130	%REC	232049	1	11/02/2016 00:35	NP
Surr: Toluene-d8	95.5		0	70-130	%REC	232049	1	11/02/2016 00:35	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/02/2016 00:35	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/02/2016 00:35	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/02/2016 00:35	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/02/2016 00:35	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/02/2016 00:35	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/02/2016 00:35	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/02/2016 00:35	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/02/2016 00:35	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-41
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 11:15:00 AM
Lab ID:	1610O41-043	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/02/2016 07:00	NP
Benzene	26		0.14	1.0	ug/L	232049	1	11/02/2016 07:00	NP
Ethylbenzene	510		2.0	10	ug/L	232049	10	11/02/2016 12:30	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/02/2016 07:00	NP
Naphthalene	340		1.3	50	ug/L	232049	10	11/02/2016 12:30	NP
Toluene	3.2		0.20	1.0	ug/L	232049	1	11/02/2016 07:00	NP
Xylenes, Total	15		0.30	1.0	ug/L	232049	1	11/02/2016 07:00	NP
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	232049	10	11/02/2016 12:30	NP
Surr: 4-Bromofluorobenzene	115		0	70-130	%REC	232049	1	11/02/2016 07:00	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	232049	1	11/02/2016 07:00	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	232049	10	11/02/2016 12:30	NP
Surr: Toluene-d8	95.6		0	70-130	%REC	232049	1	11/02/2016 07:00	NP
Surr: Toluene-d8	96.2		0	70-130	%REC	232049	10	11/02/2016 12:30	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/02/2016 07:00	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/02/2016 07:00	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/02/2016 07:00	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/02/2016 07:00	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/02/2016 07:00	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/02/2016 07:00	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/02/2016 07:00	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/02/2016 07:00	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-42
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 11:30:00 AM
Lab ID:	1610O41-044	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 00:59	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 00:59	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 00:59	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/02/2016 00:59	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 00:59	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 00:59	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 00:59	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232138	1	11/02/2016 00:59	NP
Surr: Dibromofluoromethane	112		0	70-130	%REC	232138	1	11/02/2016 00:59	NP
Surr: Toluene-d8	93.4		0	70-130	%REC	232138	1	11/02/2016 00:59	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 00:59	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 00:59	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 00:59	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/02/2016 00:59	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/02/2016 00:59	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 00:59	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 00:59	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 00:59	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-43
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 1:00:00 PM
Lab ID:	1610O41-045	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 02:35	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 02:35	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 02:35	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/02/2016 02:35	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 02:35	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 02:35	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 02:35	NP
Surr: 4-Bromofluorobenzene	110		0	70-130	%REC	232138	1	11/02/2016 02:35	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	232138	1	11/02/2016 02:35	NP
Surr: Toluene-d8	93.8		0	70-130	%REC	232138	1	11/02/2016 02:35	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 02:35	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 02:35	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 02:35	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/02/2016 02:35	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/02/2016 02:35	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 02:35	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 02:35	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 02:35	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-44
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 1:15:00 PM
Lab ID:	1610O41-046	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 02:59	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 02:59	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 02:59	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/02/2016 02:59	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 02:59	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 02:59	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 02:59	NP
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	232138	1	11/02/2016 02:59	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	232138	1	11/02/2016 02:59	NP
Surr: Toluene-d8	94.5		0	70-130	%REC	232138	1	11/02/2016 02:59	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 02:59	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 02:59	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 02:59	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/02/2016 02:59	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/02/2016 02:59	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 02:59	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 02:59	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 02:59	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-45
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 1:45:00 PM
Lab ID:	1610O41-047	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 03:47	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 03:47	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 03:47	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/02/2016 03:47	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 03:47	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 03:47	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 03:47	NP
Surr: 4-Bromofluorobenzene	110		0	70-130	%REC	232138	1	11/02/2016 03:47	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	232138	1	11/02/2016 03:47	NP
Surr: Toluene-d8	95.7		0	70-130	%REC	232138	1	11/02/2016 03:47	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 03:47	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 03:47	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 03:47	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/02/2016 03:47	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/02/2016 03:47	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 03:47	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 03:47	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 03:47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-46
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 2:00:00 PM
Lab ID:	1610O41-048	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 04:11	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 04:11	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 04:11	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/02/2016 04:11	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 04:11	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 04:11	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 04:11	NP
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	232138	1	11/02/2016 04:11	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	232138	1	11/02/2016 04:11	NP
Surr: Toluene-d8	93.7		0	70-130	%REC	232138	1	11/02/2016 04:11	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 04:11	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 04:11	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 04:11	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/02/2016 04:11	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/02/2016 04:11	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 04:11	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 04:11	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 04:11	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-49
Project Name:	Clouds Chevron	**Collection Date:**	10/25/2016 10:30:00 AM
Lab ID:	1610O41-049	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232159	1	11/03/2016 06:27	NP
Benzene	BRL		0.14	1.0	ug/L	232159	1	11/03/2016 06:27	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232159	1	11/03/2016 06:27	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232159	1	11/03/2016 06:27	NP
Naphthalene	BRL		0.13	5.0	ug/L	232159	1	11/03/2016 06:27	NP
Toluene	BRL		0.20	1.0	ug/L	232159	1	11/03/2016 06:27	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232159	1	11/03/2016 06:27	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	232159	1	11/03/2016 06:27	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	232159	1	11/03/2016 06:27	NP
Surr: Toluene-d8	96.3		0	70-130	%REC	232159	1	11/03/2016 06:27	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232159	1	11/03/2016 06:27	NP
Ethanol	BRL		25	100	ug/L	232159	1	11/03/2016 06:27	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232159	1	11/03/2016 06:27	NP
Isopropyl ether	BRL		3.9	10	ug/L	232159	1	11/03/2016 06:27	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232159	1	11/03/2016 06:27	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232159	1	11/03/2016 06:27	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232159	1	11/03/2016 06:27	NP
tert-Butyl formate	BRL		31	100	ug/L	232159	1	11/03/2016 06:27	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-51
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 10:10:00 AM
Lab ID:	1610O41-050	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 23:23	NP
Benzene	BRL		0.14	1.0	ug/L	232049	1	11/01/2016 23:23	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 23:23	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 23:23	NP
Naphthalene	BRL		0.13	5.0	ug/L	232049	1	11/01/2016 23:23	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/01/2016 23:23	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/01/2016 23:23	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232049	1	11/01/2016 23:23	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	232049	1	11/01/2016 23:23	NP
Surr: Toluene-d8	93.7		0	70-130	%REC	232049	1	11/01/2016 23:23	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 23:23	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 23:23	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 23:23	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/01/2016 23:23	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/01/2016 23:23	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 23:23	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 23:23	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 23:23	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-53
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 9:30:00 AM
Lab ID:	1610O41-051	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232159	1	11/03/2016 01:26	NP
Benzene	BRL		0.14	1.0	ug/L	232159	1	11/03/2016 01:26	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232159	1	11/03/2016 01:26	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232159	1	11/03/2016 01:26	NP
Naphthalene	BRL		0.13	5.0	ug/L	232159	1	11/03/2016 01:26	NP
Toluene	BRL		0.20	1.0	ug/L	232159	1	11/03/2016 01:26	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232159	1	11/03/2016 01:26	NP
Surr: 4-Bromofluorobenzene	109		0	70-130	%REC	232159	1	11/03/2016 01:26	NP
Surr: Dibromofluoromethane	112		0	70-130	%REC	232159	1	11/03/2016 01:26	NP
Surr: Toluene-d8	94.8		0	70-130	%REC	232159	1	11/03/2016 01:26	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232159	1	11/03/2016 01:26	NP
Ethanol	BRL		25	100	ug/L	232159	1	11/03/2016 01:26	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232159	1	11/03/2016 01:26	NP
Isopropyl ether	BRL		3.9	10	ug/L	232159	1	11/03/2016 01:26	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232159	1	11/03/2016 01:26	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232159	1	11/03/2016 01:26	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232159	1	11/03/2016 01:26	NP
tert-Butyl formate	BRL		31	100	ug/L	232159	1	11/03/2016 01:26	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-54
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 3:00:00 PM
Lab ID:	1610O41-052	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 11:37	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 11:37	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 11:37	NP
Methyl tert-butyl ether	2.0		0.22	1.0	ug/L	232138	1	11/02/2016 11:37	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 11:37	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 11:37	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 11:37	NP
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	232138	1	11/02/2016 11:37	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	232138	1	11/02/2016 11:37	NP
Surr: Toluene-d8	96.4		0	70-130	%REC	232138	1	11/02/2016 11:37	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 11:37	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 11:37	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 11:37	NP
Isopropyl ether	18		3.9	10	ug/L	232138	1	11/02/2016 11:37	NP
tert-Amyl alcohol	130		43	100	ug/L	232138	1	11/02/2016 11:37	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 11:37	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 11:37	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 11:37	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-55
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 9:15:00 AM
Lab ID:	1610O41-053	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232159	1	11/03/2016 17:42	NP
Benzene	1500		1.4	10	ug/L	232159	10	11/02/2016 23:21	NP
Ethylbenzene	860		2.0	10	ug/L	232159	10	11/02/2016 23:21	NP
Methyl tert-butyl ether	210		2.2	10	ug/L	232159	10	11/02/2016 23:21	NP
Naphthalene	240		1.3	50	ug/L	232159	10	11/02/2016 23:21	NP
Toluene	310		2.0	10	ug/L	232159	10	11/02/2016 23:21	NP
Xylenes, Total	1100		3.0	10	ug/L	232159	10	11/02/2016 23:21	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	232159	10	11/02/2016 23:21	NP
Surr: 4-Bromofluorobenzene	113		0	70-130	%REC	232159	1	11/03/2016 17:42	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	232159	1	11/03/2016 17:42	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	232159	10	11/02/2016 23:21	NP
Surr: Toluene-d8	94.6		0	70-130	%REC	232159	10	11/02/2016 23:21	NP
Surr: Toluene-d8	96.1		0	70-130	%REC	232159	1	11/03/2016 17:42	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232159	1	11/03/2016 17:42	NP
Ethanol	BRL		25	100	ug/L	232159	1	11/03/2016 17:42	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232159	1	11/03/2016 17:42	NP
Isopropyl ether	190		3.9	10	ug/L	232159	1	11/03/2016 17:42	NP
tert-Amyl alcohol	6000		430	1000	ug/L	232159	10	11/02/2016 23:21	NP
tert-Amyl methyl ether	43		3.5	10	ug/L	232159	1	11/03/2016 17:42	NP
tert-Butyl Alcohol	370		46	100	ug/L	232159	1	11/03/2016 17:42	NP
tert-Butyl formate	BRL		31	100	ug/L	232159	1	11/03/2016 17:42	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-56
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 8:45:00 AM
Lab ID:	1610O41-054	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/03/2016 01:02	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/03/2016 01:02	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/03/2016 01:02	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/03/2016 01:02	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/03/2016 01:02	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/03/2016 01:02	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/03/2016 01:02	NP
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	232138	1	11/03/2016 01:02	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	232138	1	11/03/2016 01:02	NP
Surr: Toluene-d8	95		0	70-130	%REC	232138	1	11/03/2016 01:02	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/03/2016 01:02	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/03/2016 01:02	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/03/2016 01:02	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/03/2016 01:02	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/03/2016 01:02	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/03/2016 01:02	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/03/2016 01:02	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/03/2016 01:02	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-59
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 3:35:00 PM
Lab ID:	1610O41-055	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	58		0.24	1.0	ug/L	232138	1	11/02/2016 12:02	NP
Benzene	2400		2.7	20	ug/L	232138	20	11/02/2016 06:35	NP
Ethylbenzene	1400		4.1	20	ug/L	232138	20	11/02/2016 06:35	NP
Methyl tert-butyl ether	62		0.22	1.0	ug/L	232138	1	11/02/2016 12:02	NP
Naphthalene	390		2.5	100	ug/L	232138	20	11/02/2016 06:35	NP
Toluene	61		0.20	1.0	ug/L	232138	1	11/02/2016 12:02	NP
Xylenes, Total	2300		6.0	20	ug/L	232138	20	11/02/2016 06:35	NP
Surr: 4-Bromofluorobenzene	109		0	70-130	%REC	232138	20	11/02/2016 06:35	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232138	1	11/02/2016 12:02	NP
Surr: Dibromofluoromethane	112		0	70-130	%REC	232138	20	11/02/2016 06:35	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	232138	1	11/02/2016 12:02	NP
Surr: Toluene-d8	95.7		0	70-130	%REC	232138	1	11/02/2016 12:02	NP
Surr: Toluene-d8	95.4		0	70-130	%REC	232138	20	11/02/2016 06:35	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 12:02	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 12:02	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 12:02	NP
Isopropyl ether	410		3.9	10	ug/L	232138	1	11/02/2016 12:02	NP
tert-Amyl alcohol	10000		860	2000	ug/L	232138	20	11/02/2016 06:35	NP
tert-Amyl methyl ether	63		3.5	10	ug/L	232138	1	11/02/2016 12:02	NP
tert-Butyl Alcohol	300		46	100	ug/L	232138	1	11/02/2016 12:02	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 12:02	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-63
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 12:00:00 PM
Lab ID:	1610O41-056	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 01:47	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 01:47	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 01:47	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/02/2016 01:47	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 01:47	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 01:47	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 01:47	NP
Surr: 4-Bromofluorobenzene	109		0	70-130	%REC	232138	1	11/02/2016 01:47	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	232138	1	11/02/2016 01:47	NP
Surr: Toluene-d8	94.2		0	70-130	%REC	232138	1	11/02/2016 01:47	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 01:47	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 01:47	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 01:47	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/02/2016 01:47	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/02/2016 01:47	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 01:47	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 01:47	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 01:47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-67
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 10:30:00 AM
Lab ID:	1610O41-057	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/02/2016 00:11	NP
Benzene	BRL		0.14	1.0	ug/L	232049	1	11/02/2016 00:11	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232049	1	11/02/2016 00:11	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/02/2016 00:11	NP
Naphthalene	BRL		0.13	5.0	ug/L	232049	1	11/02/2016 00:11	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	11/02/2016 00:11	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	11/02/2016 00:11	NP
Surr: 4-Bromofluorobenzene	109		0	70-130	%REC	232049	1	11/02/2016 00:11	NP
Surr: Dibromofluoromethane	114		0	70-130	%REC	232049	1	11/02/2016 00:11	NP
Surr: Toluene-d8	96.3		0	70-130	%REC	232049	1	11/02/2016 00:11	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/02/2016 00:11	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/02/2016 00:11	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/02/2016 00:11	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	11/02/2016 00:11	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	11/02/2016 00:11	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/02/2016 00:11	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/02/2016 00:11	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/02/2016 00:11	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	MW-70
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 11:45:00 AM
Lab ID:	1610O41-058	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 01:23	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 01:23	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 01:23	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/02/2016 01:23	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 01:23	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 01:23	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 01:23	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232138	1	11/02/2016 01:23	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	232138	1	11/02/2016 01:23	NP
Surr: Toluene-d8	94.6		0	70-130	%REC	232138	1	11/02/2016 01:23	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 01:23	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 01:23	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 01:23	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/02/2016 01:23	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/02/2016 01:23	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 01:23	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 01:23	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 01:23	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	FB1
Project Name:	Clouds Chevron	**Collection Date:**	10/19/2016 3:30:00 PM
Lab ID:	1610O41-059	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	10/31/2016 21:19	NP
Benzene	BRL		0.14	1.0	ug/L	232049	1	10/31/2016 21:19	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232049	1	10/31/2016 21:19	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	10/31/2016 21:19	NP
Naphthalene	BRL		0.13	5.0	ug/L	232049	1	10/31/2016 21:19	NP
Toluene	BRL		0.20	1.0	ug/L	232049	1	10/31/2016 21:19	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232049	1	10/31/2016 21:19	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	232049	1	10/31/2016 21:19	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	232049	1	10/31/2016 21:19	NP
Surr: Toluene-d8	91.9		0	70-130	%REC	232049	1	10/31/2016 21:19	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	10/31/2016 21:19	NP
Ethanol	BRL		25	100	ug/L	232049	1	10/31/2016 21:19	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	10/31/2016 21:19	NP
Isopropyl ether	BRL		3.9	10	ug/L	232049	1	10/31/2016 21:19	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232049	1	10/31/2016 21:19	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	10/31/2016 21:19	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	10/31/2016 21:19	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	10/31/2016 21:19	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	FB2
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 3:50:00 PM
Lab ID:	1610O41-060	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/01/2016 22:58	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/01/2016 22:58	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/01/2016 22:58	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/01/2016 22:58	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/01/2016 22:58	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/01/2016 22:58	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/01/2016 22:58	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	232138	1	11/01/2016 22:58	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	232138	1	11/01/2016 22:58	NP
Surr: Toluene-d8	87.3		0	70-130	%REC	232138	1	11/01/2016 22:58	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/01/2016 22:58	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/01/2016 22:58	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/01/2016 22:58	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/01/2016 22:58	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/01/2016 22:58	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/01/2016 22:58	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/01/2016 22:58	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/01/2016 22:58	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	FB3
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 3:30:00 PM
Lab ID:	1610O41-061	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232159	1	11/03/2016 11:30	NP
Benzene	BRL		0.14	1.0	ug/L	232159	1	11/03/2016 11:30	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232159	1	11/03/2016 11:30	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232159	1	11/03/2016 11:30	NP
Naphthalene	BRL		0.13	5.0	ug/L	232159	1	11/03/2016 11:30	NP
Toluene	BRL		0.20	1.0	ug/L	232159	1	11/03/2016 11:30	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232159	1	11/03/2016 11:30	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232159	1	11/03/2016 11:30	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	232159	1	11/03/2016 11:30	NP
Surr: Toluene-d8	91.3		0	70-130	%REC	232159	1	11/03/2016 11:30	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232159	1	11/02/2016 14:40	NP
Ethanol	BRL		25	100	ug/L	232159	1	11/02/2016 14:40	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232159	1	11/02/2016 14:40	NP
Isopropyl ether	BRL		3.9	10	ug/L	232159	1	11/02/2016 14:40	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232159	1	11/02/2016 14:40	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232159	1	11/02/2016 14:40	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232159	1	11/02/2016 14:40	NP
tert-Butyl formate	BRL		31	100	ug/L	232159	1	11/02/2016 14:40	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	FB4
Project Name:	Clouds Chevron	**Collection Date:**	10/25/2016 12:10:00 PM
Lab ID:	1610O41-062	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232159	1	11/02/2016 21:41	NP
Benzene	BRL		0.14	1.0	ug/L	232159	1	11/02/2016 21:41	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232159	1	11/02/2016 21:41	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232159	1	11/02/2016 21:41	NP
Naphthalene	BRL		0.13	5.0	ug/L	232159	1	11/02/2016 21:41	NP
Toluene	BRL		0.20	1.0	ug/L	232159	1	11/02/2016 21:41	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232159	1	11/02/2016 21:41	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232159	1	11/02/2016 21:41	NP
Surr: Dibromofluoromethane	114		0	70-130	%REC	232159	1	11/02/2016 21:41	NP
Surr: Toluene-d8	89.3		0	70-130	%REC	232159	1	11/02/2016 21:41	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232159	1	11/02/2016 21:41	NP
Ethanol	BRL		25	100	ug/L	232159	1	11/02/2016 21:41	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232159	1	11/02/2016 21:41	NP
Isopropyl ether	BRL		3.9	10	ug/L	232159	1	11/02/2016 21:41	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232159	1	11/02/2016 21:41	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232159	1	11/02/2016 21:41	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232159	1	11/02/2016 21:41	NP
tert-Butyl formate	BRL		31	100	ug/L	232159	1	11/02/2016 21:41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP-1
Project Name:	Clouds Chevron	**Collection Date:**	10/19/2016 2:25:00 PM
Lab ID:	1610O41-063	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232049	1	11/01/2016 13:08	NP
Benzene	120		0.14	1.0	ug/L	232049	1	11/01/2016 13:08	NP
Ethylbenzene	510		10	50	ug/L	232049	50	10/31/2016 22:34	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232049	1	11/01/2016 13:08	NP
Naphthalene	78		0.13	5.0	ug/L	232049	1	11/01/2016 13:08	NP
Toluene	640		10	50	ug/L	232049	50	10/31/2016 22:34	NP
Xylenes, Total	1800		15	50	ug/L	232049	50	10/31/2016 22:34	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	232049	50	10/31/2016 22:34	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	232049	1	11/01/2016 13:08	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	232049	50	10/31/2016 22:34	NP
Surr: Dibromofluoromethane	99.3		0	70-130	%REC	232049	1	11/01/2016 13:08	NP
Surr: Toluene-d8	98.1		0	70-130	%REC	232049	50	10/31/2016 22:34	NP
Surr: Toluene-d8	99.3		0	70-130	%REC	232049	1	11/01/2016 13:08	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232049	1	11/01/2016 13:08	NP
Ethanol	BRL		25	100	ug/L	232049	1	11/01/2016 13:08	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232049	1	11/01/2016 13:08	NP
Isopropyl ether	11		3.9	10	ug/L	232049	1	11/01/2016 13:08	NP
tert-Amyl alcohol	680		43	100	ug/L	232049	1	11/01/2016 13:08	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232049	1	11/01/2016 13:08	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232049	1	11/01/2016 13:08	NP
tert-Butyl formate	BRL		31	100	ug/L	232049	1	11/01/2016 13:08	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP-2
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 12:05:00 PM
Lab ID:	1610O41-064	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 02:11	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 02:11	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 02:11	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232138	1	11/02/2016 02:11	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 02:11	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 02:11	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 02:11	NP
Surr: 4-Bromofluorobenzene	110		0	70-130	%REC	232138	1	11/02/2016 02:11	NP
Surr: Dibromofluoromethane	114		0	70-130	%REC	232138	1	11/02/2016 02:11	NP
Surr: Toluene-d8	95.3		0	70-130	%REC	232138	1	11/02/2016 02:11	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 02:11	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 02:11	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 02:11	NP
Isopropyl ether	BRL		3.9	10	ug/L	232138	1	11/02/2016 02:11	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232138	1	11/02/2016 02:11	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 02:11	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 02:11	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 02:11	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP-3
Project Name:	Clouds Chevron	**Collection Date:**	10/20/2016 3:05:00 PM
Lab ID:	1610O41-065	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232138	1	11/02/2016 05:24	NP
Benzene	BRL		0.14	1.0	ug/L	232138	1	11/02/2016 05:24	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 05:24	NP
Methyl tert-butyl ether	2.3		0.22	1.0	ug/L	232138	1	11/02/2016 05:24	NP
Naphthalene	BRL		0.13	5.0	ug/L	232138	1	11/02/2016 05:24	NP
Toluene	BRL		0.20	1.0	ug/L	232138	1	11/02/2016 05:24	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232138	1	11/02/2016 05:24	NP
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	232138	1	11/02/2016 05:24	NP
Surr: Dibromofluoromethane	115		0	70-130	%REC	232138	1	11/02/2016 05:24	NP
Surr: Toluene-d8	96.7		0	70-130	%REC	232138	1	11/02/2016 05:24	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232138	1	11/02/2016 05:24	NP
Ethanol	BRL		25	100	ug/L	232138	1	11/02/2016 05:24	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232138	1	11/02/2016 05:24	NP
Isopropyl ether	19		3.9	10	ug/L	232138	1	11/02/2016 05:24	NP
tert-Amyl alcohol	170		43	100	ug/L	232138	1	11/02/2016 05:24	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232138	1	11/02/2016 05:24	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232138	1	11/02/2016 05:24	NP
tert-Butyl formate	BRL		31	100	ug/L	232138	1	11/02/2016 05:24	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP-4
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 11:05:00 AM
Lab ID:	1610O41-066	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232159	1	11/03/2016 03:06	NP
Benzene	BRL		0.14	1.0	ug/L	232159	1	11/03/2016 03:06	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232159	1	11/03/2016 03:06	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232159	1	11/03/2016 03:06	NP
Naphthalene	BRL		0.13	5.0	ug/L	232159	1	11/03/2016 03:06	NP
Toluene	BRL		0.20	1.0	ug/L	232159	1	11/03/2016 03:06	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232159	1	11/03/2016 03:06	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	232159	1	11/03/2016 03:06	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	232159	1	11/03/2016 03:06	NP
Surr: Toluene-d8	96.5		0	70-130	%REC	232159	1	11/03/2016 03:06	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232159	1	11/03/2016 03:06	NP
Ethanol	BRL		25	100	ug/L	232159	1	11/03/2016 03:06	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232159	1	11/03/2016 03:06	NP
Isopropyl ether	BRL		3.9	10	ug/L	232159	1	11/03/2016 03:06	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232159	1	11/03/2016 03:06	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232159	1	11/03/2016 03:06	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232159	1	11/03/2016 03:06	NP
tert-Butyl formate	BRL		31	100	ug/L	232159	1	11/03/2016 03:06	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP-5
Project Name:	Clouds Chevron	**Collection Date:**	10/21/2016 2:50:00 PM
Lab ID:	1610O41-067	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		120	500	ug/L	232159	500	11/02/2016 17:05	NP
Benzene	2600		68	500	ug/L	232159	500	11/02/2016 17:05	NP
Ethylbenzene	1300		100	500	ug/L	232159	500	11/02/2016 17:05	NP
Methyl tert-butyl ether	BRL		110	500	ug/L	232159	500	11/02/2016 17:05	NP
Naphthalene	1200	J	64	2500	ug/L	232159	500	11/02/2016 17:05	NP
Toluene	20000		100	500	ug/L	232159	500	11/02/2016 17:05	NP
Xylenes, Total	21000		150	500	ug/L	232159	500	11/02/2016 17:05	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	232159	500	11/02/2016 17:05	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	232159	500	11/02/2016 17:05	NP
Surr: Toluene-d8	96.1		0	70-130	%REC	232159	500	11/02/2016 17:05	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		22000	50000	ug/L	232159	500	11/02/2016 17:05	NP
Ethanol	BRL		13000	50000	ug/L	232159	500	11/02/2016 17:05	NP
Ethyl tert-butyl ether	BRL		1800	50000	ug/L	232159	500	11/02/2016 17:05	NP
Isopropyl ether	BRL		1900	5000	ug/L	232159	500	11/02/2016 17:05	NP
tert-Amyl alcohol	BRL		21000	50000	ug/L	232159	500	11/02/2016 17:05	NP
tert-Amyl methyl ether	BRL		1800	5000	ug/L	232159	500	11/02/2016 17:05	NP
tert-Butyl Alcohol	BRL		23000	50000	ug/L	232159	500	11/02/2016 17:05	NP
tert-Butyl formate	BRL		16000	50000	ug/L	232159	500	11/02/2016 17:05	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	TRIP BLANK 1
Project Name:	Clouds Chevron	**Collection Date:**	10/28/2016
Lab ID:	1610O41-068	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232159	1	11/02/2016 22:06	NP
Benzene	BRL		0.14	1.0	ug/L	232159	1	11/02/2016 22:06	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232159	1	11/02/2016 22:06	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232159	1	11/02/2016 22:06	NP
Naphthalene	BRL		0.13	5.0	ug/L	232159	1	11/02/2016 22:06	NP
Toluene	BRL		0.20	1.0	ug/L	232159	1	11/02/2016 22:06	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232159	1	11/02/2016 22:06	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	232159	1	11/02/2016 22:06	NP
Surr: Dibromofluoromethane	113		0	70-130	%REC	232159	1	11/02/2016 22:06	NP
Surr: Toluene-d8	95.3		0	70-130	%REC	232159	1	11/02/2016 22:06	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232159	1	11/02/2016 22:06	NP
Ethanol	BRL		25	100	ug/L	232159	1	11/02/2016 22:06	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232159	1	11/02/2016 22:06	NP
Isopropyl ether	BRL		3.9	10	ug/L	232159	1	11/02/2016 22:06	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232159	1	11/02/2016 22:06	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232159	1	11/02/2016 22:06	NP
tert-Butyl Alcohol	BRL		46	100	ug/L	232159	1	11/02/2016 22:06	NP
tert-Butyl formate	BRL		31	100	ug/L	232159	1	11/02/2016 22:06	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 9-Nov-16

Client:	Crawford Environmental Services	**Client Sample ID:**	TRIP BLANK 2
Project Name:	Clouds Chevron	**Collection Date:**	10/28/2016
Lab ID:	1610O41-069	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.24	1.0	ug/L	232159	1	11/02/2016 22:31	NP
Benzene	BRL		0.14	1.0	ug/L	232159	1	11/02/2016 22:31	NP
Ethylbenzene	BRL		0.20	1.0	ug/L	232159	1	11/02/2016 22:31	NP
Methyl tert-butyl ether	BRL		0.22	1.0	ug/L	232159	1	11/02/2016 22:31	NP
Naphthalene	BRL		0.13	5.0	ug/L	232159	1	11/02/2016 22:31	NP
Toluene	BRL		0.20	1.0	ug/L	232159	1	11/02/2016 22:31	NP
Xylenes, Total	BRL		0.30	1.0	ug/L	232159	1	11/02/2016 22:31	NP
Surr: 4-Bromofluorobenzene	109		0	70-130	%REC	232159	1	11/02/2016 22:31	NP
Surr: Dibromofluoromethane	114		0	70-130	%REC	232159	1	11/02/2016 22:31	NP
Surr: Toluene-d8	96.9		0	70-130	%REC	232159	1	11/02/2016 22:31	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		44	100	ug/L	232159	1	11/02/2016 22:31	NP
Ethanol	BRL		25	100	ug/L	232159	1	11/02/2016 22:31	NP
Ethyl tert-butyl ether	BRL		3.5	100	ug/L	232159	1	11/02/2016 22:31	NP
Isopropyl ether	BRL		3.9	10	ug/L	232159	1	11/02/2016 22:31	NP
tert-Amyl alcohol	BRL		43	100	ug/L	232159	1	11/02/2016 22:31	NP
tert-Amyl methyl ether	BRL		3.5	10	ug/L	232159	1	11/02/2016 22:31	NP
tert-Butyl Alcohol	60	J	46	100	ug/L	232159	1	11/02/2016 22:31	NP
tert-Butyl formate	BRL		31	100	ug/L	232159	1	11/02/2016 22:31	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
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- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Access-Crawford Work Order Number 1610041

Checklist completed by Alexa Hodge 10/20/16
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes ✓ No __ Not Present __

Container/Temp Blank temperature in compliance? (0°≤6°C)* Yes ✓ No __

Cooler #1 3.3°C Cooler #2 2.4°C Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes __ No ✓

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes __ No ✓

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by _____

Sample Condition: Good __ Other(Explain) one of three vials received broken for samples "PW-IPR" and "34"

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No __

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\Aes_server\I\Sample Receipt\My Documents\COCs and pH Adjustment Sheet\Sample_Cooler_Recipt_Checklist_Rev1.rtf

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Lab Order: 1610O41

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1610O41-001A	DW-1	10/21/2016 11:50:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-001A	DW-1	10/21/2016 11:50:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-002A	DW-2	10/21/2016 12:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-002A	DW-2	10/21/2016 12:30:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-003A	DW-3	10/21/2016 2:40:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-003A	DW-3	10/21/2016 2:40:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-004A	DW-4	10/21/2016 1:40:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-004A	DW-4	10/21/2016 1:40:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-005A	DW-5	10/25/2016 11:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-005A	DW-5	10/25/2016 11:15:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-006A	DW-6	10/25/2016 11:55:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-006A	DW-6	10/25/2016 11:55:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-007A	DW-7	10/21/2016 8:45:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/03/2016
1610O41-007A	DW-7	10/21/2016 8:45:00AM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/03/2016
1610O41-008A	DW-9	10/21/2016 9:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/03/2016
1610O41-008A	DW-9	10/21/2016 9:00:00AM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/03/2016
1610O41-009A	PW-1 PR	10/21/2016 2:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-009A	PW-1 PR	10/21/2016 2:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-009A	PW-1 PR	10/21/2016 2:45:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-010A	5AR	10/21/2016 2:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-010A	5AR	10/21/2016 2:00:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-011A	MW-2	10/21/2016 10:40:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-011A	MW-2	10/21/2016 10:40:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-012A	MW-3	10/21/2016 10:50:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-012A	MW-3	10/21/2016 10:50:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-013A	MW-4	10/21/2016 11:10:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-013A	MW-4	10/21/2016 11:10:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-014A	MW-6	10/21/2016 11:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-014A	MW-6	10/21/2016 11:00:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Lab Order: 1610O41

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1610O41-015A	MW-7	10/21/2016 11:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-015A	MW-7	10/21/2016 11:20:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-016A	MW-8	10/21/2016 11:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-016A	MW-8	10/21/2016 11:30:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-017A	MW-9	10/21/2016 10:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-017A	MW-9	10/21/2016 10:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-017A	MW-9	10/21/2016 10:30:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-018A	MW-10	10/21/2016 10:20:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-018A	MW-10	10/21/2016 10:20:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-019A	MW-11	10/21/2016 9:50:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-019A	MW-11	10/21/2016 9:50:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-020A	MW-12	10/20/2016 3:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-020A	MW-12	10/20/2016 3:20:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-021A	MW-13	10/20/2016 2:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-021A	MW-13	10/20/2016 2:45:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-022A	MW-16	10/20/2016 2:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-022A	MW-16	10/20/2016 2:30:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-023A	MW-17	10/20/2016 2:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-023A	MW-17	10/20/2016 2:15:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-024A	MW-18	10/20/2016 1:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-024A	MW-18	10/20/2016 1:30:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-025A	MW-19	10/21/2016 2:50:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-025A	MW-19	10/21/2016 2:50:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-026A	MW-20	10/21/2016 2:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-026A	MW-20	10/21/2016 2:20:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/03/2016
1610O41-027A	MW-22	10/21/2016 12:50:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-027A	MW-22	10/21/2016 12:50:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:24:00AM	11/02/2016
1610O41-028A	MW-23	10/21/2016 3:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/02/2016
1610O41-028A	MW-23	10/21/2016 3:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/03/2016

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Lab Order: 1610O41

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1610O41-028A	MW-23	10/21/2016 3:10:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:48:00AM	11/03/2016
1610O41-029A	MW-25	10/19/2016 3:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	10/31/2016
1610O41-029A	MW-25	10/19/2016 3:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-029A	MW-25	10/19/2016 3:25:00PM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-030A	MW-27	10/19/2016 2:05:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-030A	MW-27	10/19/2016 2:05:00PM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-031A	MW-28	10/19/2016 1:55:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-031A	MW-28	10/19/2016 1:55:00PM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-032A	MW-29	10/19/2016 1:54:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-032A	MW-29	10/19/2016 1:54:00PM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-033A	MW-30	10/19/2016 2:40:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-033A	MW-30	10/19/2016 2:40:00PM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-034A	MW-31	10/20/2016 10:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-034A	MW-31	10/20/2016 10:00:00AM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-035A	MW-33	10/19/2016 2:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	10/31/2016
1610O41-035A	MW-33	10/19/2016 2:20:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-035A	MW-33	10/19/2016 2:20:00PM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-036A	MW-34	10/19/2016 3:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-036A	MW-34	10/19/2016 3:10:00PM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-037A	MW-35	10/20/2016 9:45:00AM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/02/2016
1610O41-037A	MW-35	10/20/2016 9:45:00AM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/02/2016
1610O41-038A	MW-36	10/19/2016 2:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-038A	MW-36	10/19/2016 2:45:00PM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-039A	MW-37	10/20/2016 9:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-039A	MW-37	10/20/2016 9:30:00AM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-040A	MW-38	10/20/2016 10:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-040A	MW-38	10/20/2016 10:15:00AM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-041A	MW-39	10/20/2016 10:45:00AM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/02/2016
1610O41-041A	MW-39	10/20/2016 10:45:00AM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/02/2016

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Lab Order: 1610O41

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1610O41-042A	MW-40	10/20/2016 11:00:00AM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/02/2016
1610O41-042A	MW-40	10/20/2016 11:00:00AM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/02/2016
1610O41-043A	MW-41	10/20/2016 11:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/02/2016
1610O41-043A	MW-41	10/20/2016 11:15:00AM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/02/2016
1610O41-044A	MW-42	10/20/2016 11:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-044A	MW-42	10/20/2016 11:30:00AM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-045A	MW-43	10/20/2016 1:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-045A	MW-43	10/20/2016 1:00:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-046A	MW-44	10/20/2016 1:15:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-046A	MW-44	10/20/2016 1:15:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-047A	MW-45	10/20/2016 1:45:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-047A	MW-45	10/20/2016 1:45:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-048A	MW-46	10/20/2016 2:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-048A	MW-46	10/20/2016 2:00:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-049A	MW-49	10/25/2016 10:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/03/2016
1610O41-049A	MW-49	10/25/2016 10:30:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:48:00AM	11/03/2016
1610O41-050A	MW-51	10/20/2016 10:10:00AM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-050A	MW-51	10/20/2016 10:10:00AM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-051A	MW-53	10/21/2016 9:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/03/2016
1610O41-051A	MW-53	10/21/2016 9:30:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:48:00AM	11/03/2016
1610O41-052A	MW-54	10/20/2016 3:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-052A	MW-54	10/20/2016 3:00:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-053A	MW-55	10/21/2016 9:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/02/2016
1610O41-053A	MW-55	10/21/2016 9:15:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/03/2016
1610O41-053A	MW-55	10/21/2016 9:15:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:48:00AM	11/02/2016
1610O41-053A	MW-55	10/21/2016 9:15:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:48:00AM	11/03/2016
1610O41-054A	MW-56	10/21/2016 8:45:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/03/2016
1610O41-054A	MW-56	10/21/2016 8:45:00AM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/03/2016
1610O41-055A	MW-59	10/20/2016 3:35:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Lab Order: 1610O41

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1610O41-055A	MW-59	10/20/2016 3:35:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-056A	MW-63	10/20/2016 12:00:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-056A	MW-63	10/20/2016 12:00:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-057A	MW-67	10/20/2016 10:30:00AM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/02/2016
1610O41-057A	MW-67	10/20/2016 10:30:00AM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/02/2016
1610O41-058A	MW-70	10/20/2016 11:45:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-058A	MW-70	10/20/2016 11:45:00AM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-059A	FB1	10/19/2016 3:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	10/31/2016
1610O41-059A	FB1	10/19/2016 3:30:00PM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	10/31/2016
1610O41-060A	FB2	10/20/2016 3:50:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/01/2016
1610O41-060A	FB2	10/20/2016 3:50:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/01/2016
1610O41-061A	FB3	10/21/2016 3:30:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/03/2016
1610O41-061A	FB3	10/21/2016 3:30:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:48:00AM	11/02/2016
1610O41-062A	FB4	10/25/2016 12:10:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/02/2016
1610O41-062A	FB4	10/25/2016 12:10:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:48:00AM	11/02/2016
1610O41-063A	DUP-1	10/19/2016 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	10/31/2016
1610O41-063A	DUP-1	10/19/2016 2:25:00PM	Groundwater	Volatile Organic Compounds by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-063A	DUP-1	10/19/2016 2:25:00PM	Groundwater	Oxygenates by GC/MS		10/31/2016 6:50:00PM	11/01/2016
1610O41-064A	DUP-2	10/20/2016 12:05:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-064A	DUP-2	10/20/2016 12:05:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-065A	DUP-3	10/20/2016 3:05:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-065A	DUP-3	10/20/2016 3:05:00PM	Groundwater	Oxygenates by GC/MS		11/1/2016 9:45:00PM	11/02/2016
1610O41-066A	DUP-4	10/21/2016 11:05:00AM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/03/2016
1610O41-066A	DUP-4	10/21/2016 11:05:00AM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:48:00AM	11/03/2016
1610O41-067A	DUP-5	10/21/2016 2:50:00PM	Groundwater	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/02/2016
1610O41-067A	DUP-5	10/21/2016 2:50:00PM	Groundwater	Oxygenates by GC/MS		11/2/2016 10:48:00AM	11/02/2016
1610O41-068A	TRIP BLANK 1	10/28/2016 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/02/2016
1610O41-068A	TRIP BLANK 1	10/28/2016 12:00:00AM	Aqueous	Oxygenates by GC/MS		11/2/2016 10:48:00AM	11/02/2016
1610O41-069A	TRIP BLANK 2	10/28/2016 12:00:00AM	Aqueous	Volatile Organic Compounds by GC/MS		11/2/2016 10:48:00AM	11/02/2016

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Lab Order: 1610O41

Dates Report

Lab Sample ID	Client Sample ID	Collection Date	Matrix	Test Name	TCLP Date	Prep Date	Analysis Date
1610O41-069A	TRIP BLANK 2	10/28/2016 12:00:00AM	Aqueous	Oxygenates by GC/MS		11/2/2016 10:48:00AM	11/02/2016

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232049

Sample ID: **MB-232049** Client ID: Units: **ug/L** Prep Date: **10/31/2016** Run No: **328689**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232049** Analysis Date: **10/31/2016** Seq No: **7133026**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	51.30	0	50.00		103	70	130				
Surr: Dibromofluoromethane	53.03	0	50.00		106	70	130				
Surr: Toluene-d8	47.36	0	50.00		94.7	70	130				

Sample ID: **MB-232049** Client ID: Units: **ug/L** Prep Date: **10/31/2016** Run No: **328689**
SampleType: **MBLK** TestCode: **Oxygenates SW8260B** BatchID: **232049** Analysis Date: **10/31/2016** Seq No: **7133326**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-232049** Client ID: Units: **ug/L** Prep Date: **10/31/2016** Run No: **328689**
SampleType: **LCS** TestCode: **Oxygenates SW8260B** BatchID: **232049** Analysis Date: **10/31/2016** Seq No: **7133323**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232049

Sample ID: **LCS-232049** Client ID: Units: **ug/L** Prep Date: **10/31/2016** Run No: **328689**
SampleType: **LCS** TestCode: **Oxygenates SW8260B** BatchID: **232049** Analysis Date: **10/31/2016** Seq No: **7133323**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	537.2	100	500.0		107	70	130				
Ethanol	622.4	100	500.0		124	70	130				
Ethyl tert-butyl ether	92.30	10	100.0		92.3	70	130				
Isopropyl ether	91.46	10	100.0		91.5	70	130				
tert-Amyl alcohol	609.0	100	500.0		122	70	130				
tert-Amyl methyl ether	89.62	10	100.0		89.6	70	130				
tert-Butyl Alcohol	633.1	100	500.0		127	70	130				
tert-Butyl formate	467.7	100	500.0		93.5	70	130				

Sample ID: **LCS-232049** Client ID: Units: **ug/L** Prep Date: **10/31/2016** Run No: **328735**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232049** Analysis Date: **11/01/2016** Seq No: **7135427**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	57.54	1.0	50.00		115	70	130				
Benzene	57.43	1.0	50.00		115	70	130				
Ethylbenzene	56.34	1.0	50.00		113	70	130				
Naphthalene	59.23	5.0	50.00		118	70	130				
Toluene	58.20	1.0	50.00		116	70	130				
Xylenes, Total	175.4	1.0	150.0		117	70	130				
Surr: 4-Bromofluorobenzene	55.10	0	50.00		110	70	130				
Surr: Dibromofluoromethane	51.88	0	50.00		104	70	130				
Surr: Toluene-d8	52.51	0	50.00		105	70	130				

Sample ID: **1610O41-029AMS** Client ID: **MW-25** Units: **ug/L** Prep Date: **10/31/2016** Run No: **328689**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232049** Analysis Date: **10/31/2016** Seq No: **7133016**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	4886	100	5000		97.7	66.5	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232049

Sample ID: **1610O41-029AMS**	Client ID: **MW-25**			Units: **ug/L**		Prep Date: **10/31/2016**		Run No: **328689**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **232049**		Analysis Date: **10/31/2016**		Seq No: **7133016**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	3877	100	5000		77.5	70.1	132				
Ethylbenzene	4835	100	5000	233.0	92.0	77.8	129				
Naphthalene	4313	500	5000	446.0	77.3	50.2	134				
Toluene	4356	100	5000	108.0	85.0	70.1	133				
Xylenes, Total	17410	100	15000	3358	93.7	74.7	133				
Surr: 4-Bromofluorobenzene	5093	0	5000		102	70	130				
Surr: Dibromofluoromethane	5301	0	5000		106	70	130				
Surr: Toluene-d8	4743	0	5000		94.9	70	130				

Sample ID: **1610O41-029AMS**	Client ID: **MW-25**			Units: **ug/L**		Prep Date: **10/31/2016**		Run No: **328689**	
SampleType: **MS**	TestCode: **Oxygenates SW8260B**			BatchID: **232049**		Analysis Date: **10/31/2016**		Seq No: **7133324**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	50850	10000	50000		102	61.1	139				
Ethanol	56310	10000	50000		113	61.7	144				
Ethyl tert-butyl ether	8997	1000	10000		90.0	69.6	130				
Isopropyl ether	8803	1000	10000		88.0	70.1	134				
tert-Amyl alcohol	57860	10000	50000		116	66.5	145				
tert-Amyl methyl ether	8691	1000	10000		86.9	70.1	127				
tert-Butyl Alcohol	59550	10000	50000		119	70	149				
tert-Butyl formate	46040	10000	50000		92.1	41.5	139				

Sample ID: **1610O41-029AMSD**	Client ID: **MW-25**			Units: **ug/L**		Prep Date: **10/31/2016**		Run No: **328689**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **232049**		Analysis Date: **10/31/2016**		Seq No: **7133021**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	4943	100	5000		98.9	66.5	133	4886	1.16	20	
Benzene	3871	100	5000		77.4	70.1	132	3877	0.155	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232049

Sample ID: **1610O41-029AMSD** Client ID: **MW-25** Units: **ug/L** Prep Date: **10/31/2016** Run No: **328689**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232049** Analysis Date: **10/31/2016** Seq No: **7133021**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	4741	100	5000	233.0	90.2	77.8	129	4835	1.96	20	
Naphthalene	4224	500	5000	446.0	75.6	50.2	134	4313	2.09	32.5	
Toluene	4397	100	5000	108.0	85.8	70.1	133	4356	0.937	20	
Xylenes, Total	17090	100	15000	3358	91.5	74.7	133	17410	1.86	22.7	
Surr: 4-Bromofluorobenzene	5051	0	5000		101	70	130	5093	0	0	
Surr: Dibromofluoromethane	5435	0	5000		109	70	130	5301	0	0	
Surr: Toluene-d8	4837	0	5000		96.7	70	130	4743	0	0	

Sample ID: **1610O41-029AMSD** Client ID: **MW-25** Units: **ug/L** Prep Date: **10/31/2016** Run No: **328689**
SampleType: **MSD** TestCode: **Oxygenates SW8260B** BatchID: **232049** Analysis Date: **10/31/2016** Seq No: **7133325**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	52140	10000	50000		104	61.1	139	50850	2.50	24.9	
Ethanol	59200	10000	50000		118	61.7	144	56310	5.00	27.9	
Ethyl tert-butyl ether	8868	1000	10000		88.7	69.6	130	8997	1.44	20	
Isopropyl ether	8550	1000	10000		85.5	70.1	134	8803	2.92	20	
tert-Amyl alcohol	58650	10000	50000		117	66.5	145	57860	1.37	24.8	
tert-Amyl methyl ether	8610	1000	10000		86.1	70.1	127	8691	0.936	20	
tert-Butyl Alcohol	59760	10000	50000		120	70	149	59550	0.352	29.4	
tert-Butyl formate	44330	10000	50000		88.7	41.5	139	46040	3.78	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232138

Sample ID: **MB-232138** Client ID: Units: **ug/L** Prep Date: **11/01/2016** Run No: **328810**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232138** Analysis Date: **11/01/2016** Seq No: **7135812**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	54.25	0	50.00		108	70	130				
Surr: Dibromofluoromethane	55.55	0	50.00		111	70	130				
Surr: Toluene-d8	47.89	0	50.00		95.8	70	130				

Sample ID: **MB-232138** Client ID: Units: **ug/L** Prep Date: **11/01/2016** Run No: **328810**
SampleType: **MBLK** TestCode: **Oxygenates SW8260B** BatchID: **232138** Analysis Date: **11/01/2016** Seq No: **7136027**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-232138** Client ID: Units: **ug/L** Prep Date: **11/01/2016** Run No: **328810**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232138** Analysis Date: **11/01/2016** Seq No: **7135811**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232138

Sample ID: **LCS-232138** Client ID: Units: **ug/L** Prep Date: **11/01/2016** Run No: **328810**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232138** Analysis Date: **11/01/2016** Seq No: **7135811**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	54.01	1.0	50.00		108	70	130				
Benzene	43.48	1.0	50.00		87.0	70	130				
Ethylbenzene	50.39	1.0	50.00		101	70	130				
Naphthalene	47.54	5.0	50.00		95.1	70	130				
Toluene	46.03	1.0	50.00		92.1	70	130				
Xylenes, Total	158.6	1.0	150.0		106	70	130				
Surr: 4-Bromofluorobenzene	53.42	0	50.00		107	70	130				
Surr: Dibromofluoromethane	56.24	0	50.00		112	70	130				
Surr: Toluene-d8	47.16	0	50.00		94.3	70	130				

Sample ID: **LCS-232138** Client ID: Units: **ug/L** Prep Date: **11/01/2016** Run No: **328810**
SampleType: **LCS** TestCode: **Oxygenates SW8260B** BatchID: **232138** Analysis Date: **11/01/2016** Seq No: **7136026**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	590.9	100	500.0		118	70	130				
Ethanol	509.4	100	500.0		102	70	130				
Ethyl tert-butyl ether	102.4	100	100.0		102	70	130				
Isopropyl ether	98.33	10	100.0		98.3	70	130				
tert-Amyl alcohol	630.4	100	500.0		126	70	130				
tert-Amyl methyl ether	94.82	10	100.0		94.8	70	130				
tert-Butyl Alcohol	633.5	100	500.0		127	70	130				
tert-Butyl formate	434.5	100	500.0		86.9	70	130				

Sample ID: **1610O41-023AMS** Client ID: **MW-17** Units: **ug/L** Prep Date: **11/01/2016** Run No: **328810**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232138** Analysis Date: **11/02/2016** Seq No: **7135840**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	5474	100	5000		109	66.5	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232138

Sample ID: **1610O41-023AMS**	Client ID: **MW-17**			Units: **ug/L**		Prep Date: **11/01/2016**		Run No: **328810**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **232138**		Analysis Date: **11/02/2016**		Seq No: **7135840**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	4575	100	5000		91.5	70.1	132				
Ethylbenzene	5775	100	5000	509.0	105	77.8	129				
Naphthalene	6111	500	5000	564.0	111	50.2	134				
Toluene	10180	100	5000	5478	94.0	70.1	133				
Xylenes, Total	26760	100	15000	10730	107	74.7	133				
Surr: 4-Bromofluorobenzene	5327	0	5000		107	70	130				
Surr: Dibromofluoromethane	5650	0	5000		113	70	130				
Surr: Toluene-d8	4804	0	5000		96.1	70	130				

Sample ID: **1610O41-023AMS**	Client ID: **MW-17**			Units: **ug/L**		Prep Date: **11/01/2016**		Run No: **328810**	
SampleType: **MS**	TestCode: **Oxygenates SW8260B**			BatchID: **232138**		Analysis Date: **11/02/2016**		Seq No: **7136051**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	47880	10000	50000		95.8	61.1	139				
Ethanol	55820	10000	50000		112	61.7	144				
Ethyl tert-butyl ether	10330	10000	10000		103	69.6	130				
Isopropyl ether	10120	1000	10000		101	70.1	134				
tert-Amyl alcohol	56400	10000	50000		113	66.5	145				
tert-Amyl methyl ether	9767	1000	10000		97.7	70.1	127				
tert-Butyl Alcohol	53470	10000	50000		107	70	149				
tert-Butyl formate	45440	10000	50000		90.9	41.5	139				

Sample ID: **1610O41-023AMSD**	Client ID: **MW-17**			Units: **ug/L**		Prep Date: **11/01/2016**		Run No: **328810**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **232138**		Analysis Date: **11/02/2016**		Seq No: **7135841**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	5377	100	5000		108	66.5	133	5474	1.79	20	
Benzene	4500	100	5000		90.0	70.1	132	4575	1.65	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232138

Sample ID: **1610O41-023AMSD**	Client ID: **MW-17**			Units: **ug/L**		Prep Date: **11/01/2016**		Run No: **328810**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **232138**		Analysis Date: **11/02/2016**		Seq No: **7135841**	

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	5509	100	5000	509.0	100	77.8	129	5775	4.71	20	
Naphthalene	5592	500	5000	564.0	101	50.2	134	6111	8.87	32.5	
Toluene	10060	100	5000	5478	91.6	70.1	133	10180	1.17	20	
Xylenes, Total	25930	100	15000	10730	101	74.7	133	26760	3.18	22.7	
Surr: 4-Bromofluorobenzene	5375	0	5000		108	70	130	5327	0	0	
Surr: Dibromofluoromethane	5650	0	5000		113	70	130	5650	0	0	
Surr: Toluene-d8	4784	0	5000		95.7	70	130	4804	0	0	

Sample ID: **1610O41-023AMSD**	Client ID: **MW-17**			Units: **ug/L**		Prep Date: **11/01/2016**		Run No: **328810**	
SampleType: **MSD**	TestCode: **Oxygenates SW8260B**			BatchID: **232138**		Analysis Date: **11/02/2016**		Seq No: **7136052**	

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	55450	10000	50000		111	61.1	139	47880	14.7	24.9	
Ethanol	58110	10000	50000		116	61.7	144	55820	4.01	27.9	
Ethyl tert-butyl ether	10110	10000	10000		101	69.6	130	10330	2.21	20	
Isopropyl ether	9767	1000	10000		97.7	70.1	134	10120	3.56	20	
tert-Amyl alcohol	58740	10000	50000		117	66.5	145	56400	4.05	24.8	
tert-Amyl methyl ether	9611	1000	10000		96.1	70.1	127	9767	1.61	20	
tert-Butyl Alcohol	62610	10000	50000		125	70	149	53470	15.7	29.4	
tert-Butyl formate	43640	10000	50000		87.3	41.5	139	45440	4.03	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232158

Sample ID: **MB-232158**	Client ID:				Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **328857**	
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **232158**		Analysis Date: **11/02/2016**		Seq No: **7137219**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	1.560	5.0									J
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	54.25	0	50.00		108	70	130				
Surr: Dibromofluoromethane	55.80	0	50.00		112	70	130				
Surr: Toluene-d8	48.54	0	50.00		97.1	70	130				

Sample ID: **MB-232158**	Client ID:				Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **328857**	
SampleType: **MBLK**	TestCode: **Oxygenates SW8260B**				BatchID: **232158**		Analysis Date: **11/02/2016**		Seq No: **7137320**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-232158**	Client ID:				Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **328938**	
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**				BatchID: **232158**		Analysis Date: **11/03/2016**		Seq No: **7141923**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232158

Sample ID: **LCS-232158** Client ID: Units: **ug/L** Prep Date: **11/02/2016** Run No: **328938**
SampleType: **LCS** TestCode: **Oxygenates SW8260B** BatchID: **232158** Analysis Date: **11/03/2016** Seq No: **7141923**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	422.8	100	500.0		84.6	70	130				
Ethanol	400.9	100	500.0		80.2	70	130				
Ethyl tert-butyl ether	95.75	10	100.0		95.8	70	130				
Isopropyl ether	91.43	10	100.0		91.4	70	130				
tert-Amyl alcohol	587.4	100	500.0		117	70	130				
tert-Amyl methyl ether	90.64	10	100.0		90.6	70	130				
tert-Butyl Alcohol	507.4	100	500.0		101	70	130				
tert-Butyl formate	430.6	100	500.0		86.1	70	130				

Sample ID: **LCS-232158** Client ID: Units: **ug/L** Prep Date: **11/02/2016** Run No: **329027**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232158** Analysis Date: **11/04/2016** Seq No: **7142203**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	60.50	1.0	50.00		121	70	130				
Benzene	47.85	1.0	50.00		95.7	70	130				
Ethylbenzene	54.77	1.0	50.00		110	70	130				
Naphthalene	47.67	5.0	50.00	1.560	92.2	70	130				
Toluene	50.20	1.0	50.00		100	70	130				
Xylenes, Total	171.9	1.0	150.0		115	70	130				
Surr: 4-Bromofluorobenzene	52.36	0	50.00		105	70	130				
Surr: Dibromofluoromethane	57.08	0	50.00		114	70	130				
Surr: Toluene-d8	46.73	0	50.00		93.5	70	130				

Sample ID: **1610O41-026AMS** Client ID: **MW-20** Units: **ug/L** Prep Date: **11/02/2016** Run No: **329027**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232158** Analysis Date: **11/04/2016** Seq No: **7142389**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	29750	500	25000		119	66.5	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232158

Sample ID: **1610O41-026AMS**	Client ID: **MW-20**			Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **329027**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **232158**		Analysis Date: **11/04/2016**		Seq No: **7142389**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	24490	500	25000	450.0	96.2	70.1	132				
Ethylbenzene	29220	500	25000	1600	110	77.8	129				
Naphthalene	23570	2500	25000	935.0	90.5	50.2	134				
Toluene	31600	500	25000	6585	100	70.1	133				
Xylenes, Total	106000	500	75000	20050	115	74.7	133				
Surr: 4-Bromofluorobenzene	25740	0	25000		103	70	130				
Surr: Dibromofluoromethane	28430	0	25000		114	70	130				
Surr: Toluene-d8	23250	0	25000		93.0	70	130				

Sample ID: **1610O41-026AMS**	Client ID: **MW-20**			Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **329027**	
SampleType: **MS**	TestCode: **Oxygenates SW8260B**			BatchID: **232158**		Analysis Date: **11/04/2016**		Seq No: **7142413**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	223100	50000	250000		89.2	61.1	139				
Ethanol	194300	50000	250000		77.7	61.7	144				
Ethyl tert-butyl ether	45960	5000	50000		91.9	69.6	130				
Isopropyl ether	44190	5000	50000		88.4	70.1	134				
tert-Amyl alcohol	178600	50000	250000		71.4	66.5	145				
tert-Amyl methyl ether	47220	5000	50000		94.4	70.1	127				
tert-Butyl Alcohol	192600	50000	250000		77.0	70	149				
tert-Butyl formate	203600	50000	250000		81.4	41.5	139				

Sample ID: **1610O41-026AMSD**	Client ID: **MW-20**			Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **329027**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **232158**		Analysis Date: **11/04/2016**		Seq No: **7142391**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	29970	500	25000		120	66.5	133	29750	0.754	20	
Benzene	23920	500	25000	450.0	93.9	70.1	132	24490	2.35	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232158

Sample ID: **1610O41-026AMSD** Client ID: **MW-20** Units: **ug/L** Prep Date: **11/02/2016** Run No: **329027**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232158** Analysis Date: **11/04/2016** Seq No: **7142391**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	28100	500	25000	1600	106	77.8	129	29220	3.89	20	
Naphthalene	23190	2500	25000	935.0	89.0	50.2	134	23570	1.63	32.5	
Toluene	31390	500	25000	6585	99.2	70.1	133	31600	0.667	20	
Xylenes, Total	102200	500	75000	20050	110	74.7	133	106000	3.66	22.7	
Surr: 4-Bromofluorobenzene	26190	0	25000		105	70	130	25740	0	0	
Surr: Dibromofluoromethane	28550	0	25000		114	70	130	28430	0	0	
Surr: Toluene-d8	23550	0	25000		94.2	70	130	23250	0	0	

Sample ID: **1610O41-026AMSD** Client ID: **MW-20** Units: **ug/L** Prep Date: **11/02/2016** Run No: **329027**
SampleType: **MSD** TestCode: **Oxygenates SW8260B** BatchID: **232158** Analysis Date: **11/04/2016** Seq No: **7142414**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	272600	50000	250000		109	61.1	139	223100	20.0	24.9	
Ethanol	158700	50000	250000		63.5	61.7	144	194300	20.2	27.9	
Ethyl tert-butyl ether	47540	5000	50000		95.1	69.6	130	45960	3.38	20	
Isopropyl ether	44620	5000	50000		89.2	70.1	134	44190	0.968	20	
tert-Amyl alcohol	224400	50000	250000		89.8	66.5	145	178600	22.7	24.8	
tert-Amyl methyl ether	48890	5000	50000		97.8	70.1	127	47220	3.46	20	
tert-Butyl Alcohol	233000	50000	250000		93.2	70	149	192600	19.0	29.4	
tert-Butyl formate	219400	50000	250000		87.8	41.5	139	203600	7.49	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232159

Sample ID: **MB-232159** Client ID: Units: **ug/L** Prep Date: **11/02/2016** Run No: **328857**
SampleType: **MBLK** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232159** Analysis Date: **11/02/2016** Seq No: **7137220**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	55.35	0	50.00		111	70	130				
Surr: Dibromofluoromethane	58.42	0	50.00		117	70	130				
Surr: Toluene-d8	48.29	0	50.00		96.6	70	130				

Sample ID: **MB-232159** Client ID: Units: **ug/L** Prep Date: **11/02/2016** Run No: **328857**
SampleType: **MBLK** TestCode: **Oxygenates SW8260B** BatchID: **232159** Analysis Date: **11/02/2016** Seq No: **7137321**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-232159** Client ID: Units: **ug/L** Prep Date: **11/02/2016** Run No: **328938**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232159** Analysis Date: **11/03/2016** Seq No: **7141912**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232159

Sample ID: **LCS-232159**	Client ID:			Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **328938**	
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **232159**		Analysis Date: **11/03/2016**		Seq No: **7141912**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	50.79	1.0	50.00		102	70	130				
Benzene	42.68	1.0	50.00		85.4	70	130				
Ethylbenzene	48.47	1.0	50.00		96.9	70	130				
Naphthalene	46.01	5.0	50.00		92.0	70	130				
Toluene	44.58	1.0	50.00		89.2	70	130				
Xylenes, Total	151.7	1.0	150.0		101	70	130				
Surr: 4-Bromofluorobenzene	53.26	0	50.00		107	70	130				
Surr: Dibromofluoromethane	55.87	0	50.00		112	70	130				
Surr: Toluene-d8	48.57	0	50.00		97.1	70	130				

Sample ID: **LCS-232159**	Client ID:			Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **328938**	
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**			BatchID: **232159**		Analysis Date: **11/03/2016**		Seq No: **7141924**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	635.8	100	500.0		127	70	130				
Ethanol	525.9	100	500.0		105	70	130				
Ethyl tert-butyl ether	96.66	10	100.0		96.7	70	130				
Isopropyl ether	89.80	10	100.0		89.8	70	130				
tert-Amyl alcohol	647.8	100	500.0		130	70	130				
tert-Amyl methyl ether	92.87	10	100.0		92.9	70	130				
tert-Butyl Alcohol	646.6	100	500.0		129	70	130				
tert-Butyl formate	457.3	100	500.0		91.5	70	130				

Sample ID: **1610O41-067AMS**	Client ID: **DUP-5**			Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **328938**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **232159**		Analysis Date: **11/03/2016**		Seq No: **7141915**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	29440	500	25000		118	66.5	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 9-Nov-16

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232159

Sample ID: **1610O41-067AMS**	Client ID: **DUP-5**				Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **328938**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **232159**		Analysis Date: **11/03/2016**		Seq No: **7141915**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	26480	500	25000	2585	95.6	70.1	132				
Ethylbenzene	28460	500	25000	1315	109	77.8	129				
Naphthalene	22580	2500	25000	1215	85.4	50.2	134				
Toluene	44030	500	25000	19510	98.1	70.1	133				
Xylenes, Total	103500	500	75000	21450	109	74.7	133				
Surr: 4-Bromofluorobenzene	26680	0	25000		107	70	130				
Surr: Dibromofluoromethane	28770	0	25000		115	70	130				
Surr: Toluene-d8	23610	0	25000		94.4	70	130				

Sample ID: **1610O41-067AMS**	Client ID: **DUP-5**				Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **328938**	
SampleType: **MS**	TestCode: **Oxygenates SW8260B**				BatchID: **232159**		Analysis Date: **11/03/2016**		Seq No: **7142124**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	315200	50000	250000		126	61.1	139				
Ethanol	238600	50000	250000		95.5	61.7	144				
Ethyl tert-butyl ether	50790	5000	50000		102	69.6	130				
Isopropyl ether	47550	5000	50000		95.1	70.1	134				
tert-Amyl alcohol	342800	50000	250000		137	66.5	145				
tert-Amyl methyl ether	48480	5000	50000		97.0	70.1	127				
tert-Butyl Alcohol	264500	50000	250000		106	70	149				
tert-Butyl formate	236200	50000	250000		94.5	41.5	139				

Sample ID: **1610O41-067AMSD**	Client ID: **DUP-5**				Units: **ug/L**		Prep Date: **11/02/2016**		Run No: **328938**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **232159**		Analysis Date: **11/03/2016**		Seq No: **7141916**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	29760	500	25000		119	66.5	133	29440	1.08	20	
Benzene	26880	500	25000	2585	97.2	70.1	132	26480	1.48	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1610O41

ANALYTICAL QC SUMMARY REPORT

BatchID: 232159

Sample ID: **1610O41-067AMSD** Client ID: **DUP-5** Units: **ug/L** Prep Date: **11/02/2016** Run No: **328938**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **232159** Analysis Date: **11/03/2016** Seq No: **7141916**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	28580	500	25000	1315	109	77.8	129	28460	0.421	20	
Naphthalene	25420	2500	25000	1215	96.8	50.2	134	22580	11.9	32.5	
Toluene	44320	500	25000	19510	99.3	70.1	133	44030	0.656	20	
Xylenes, Total	103100	500	75000	21450	109	74.7	133	103500	0.319	22.7	
Surr: 4-Bromofluorobenzene	25590	0	25000		102	70	130	26680	0	0	
Surr: Dibromofluoromethane	27350	0	25000		109	70	130	28770	0	0	
Surr: Toluene-d8	23350	0	25000		93.4	70	130	23610	0	0	

Sample ID: **1610O41-067AMSD** Client ID: **DUP-5** Units: **ug/L** Prep Date: **11/02/2016** Run No: **328938**
SampleType: **MSD** TestCode: **Oxygenates SW8260B** BatchID: **232159** Analysis Date: **11/03/2016** Seq No: **7142125**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	305100	50000	250000		122	61.1	139	315200	3.25	24.9	
Ethanol	307400	50000	250000		123	61.7	144	238600	25.2	27.9	
Ethyl tert-butyl ether	49650	5000	50000		99.3	69.6	130	50790	2.27	20	
Isopropyl ether	47290	5000	50000		94.6	70.1	134	47550	0.548	20	
tert-Amyl alcohol	309900	50000	250000		124	66.5	145	342800	10.1	24.8	
tert-Amyl methyl ether	46960	5000	50000		93.9	70.1	127	48480	3.20	20	
tert-Butyl Alcohol	321300	50000	250000		129	70	149	264500	19.4	29.4	
tert-Butyl formate	232500	50000	250000		93.0	41.5	139	236200	1.58	21.6	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

APPENDIX D

Injection Well Installation Summary

CRAWFORD
ENVIRONMENTAL
SERVICES

August 24, 2016

Mr. Christopher A. Wargo
State of South Carolina
Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

RE: Injection Well Installation Summary
Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352
UIC Permit: SCHE03020184M

Dear Mr. Wargo:

In accordance with Underground Injection Control Permit SCHE03020184M, CES installed four injection wells at the subject site between July 26, 2016 and July 27, 2016. CES has included the following documents pertaining to the injection well installation:
Appendix A – Injection Well Location Map
Appendix B – Executed SCDHEC 1903 Forms
Appendix C – Well Development Logs / Manifests
Appendix D – Photo-Documentation of the Completed Injection Wells

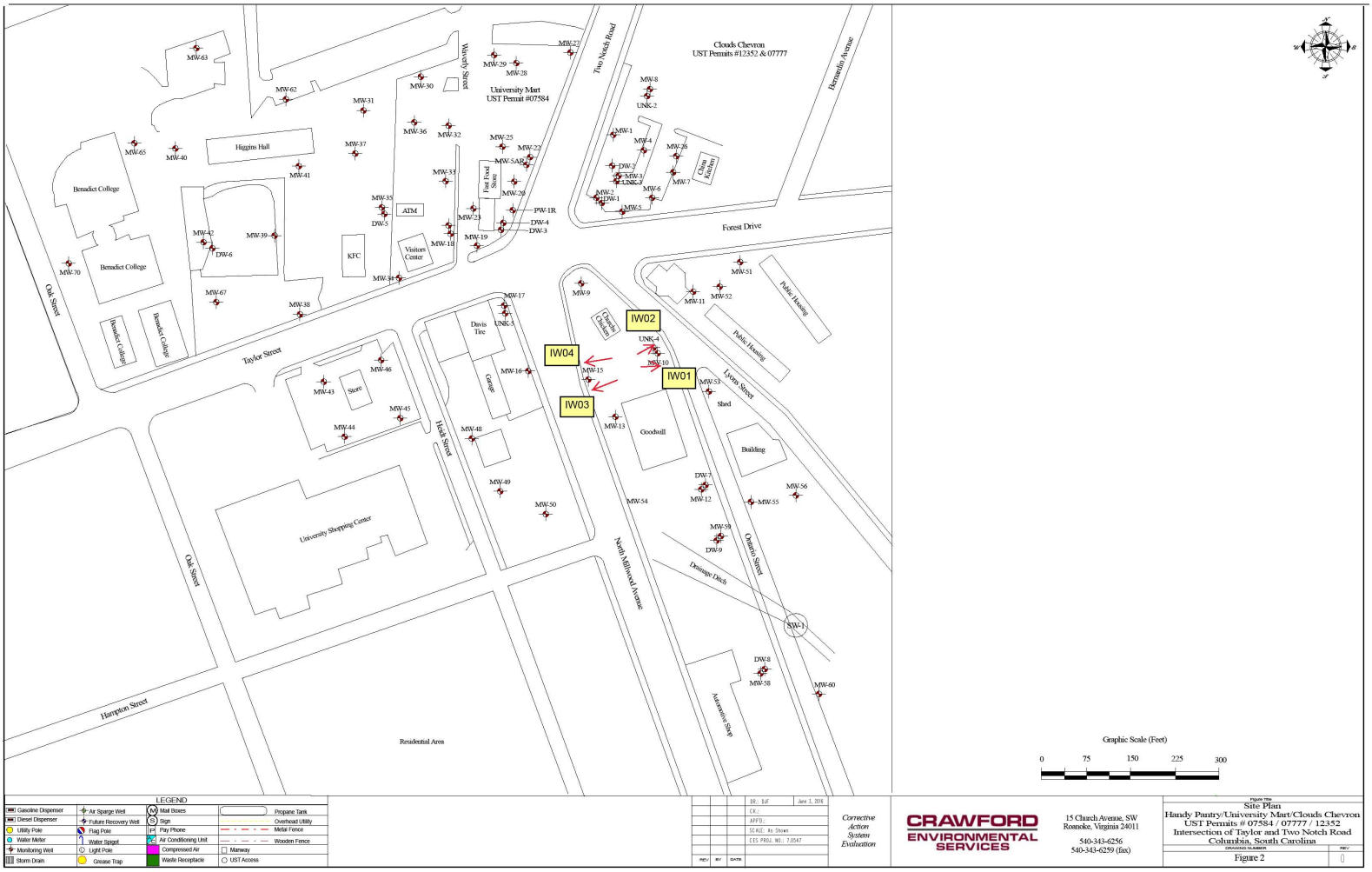
Should you have any comments or questions please feel free to contact me at 540.798.5068. Thank you.

Best Regards,

Daniel J. Fisher
Division Manager

Appendix A

Injection Well Location Map



LEGEND

Gasoline Dispenser	Air Sparge Well	Mail Boxes	Propane Tank
Diesel Dispenser	Future Recovery Well	Sign	Overhead Utility
Utility Pole	Flag Pole	Pay Phone	Metal Fence
Water Meter	Water Spigot	Air Conditioning Unit	Wooden Fence
Monitoring Well	Light Pole	Compressed Air	Manway
Storm Drain	Grease Trap	Waste Receptacle	UST Access

REV.	BY	DATE

DR.: BJF June 3, 2016
CK.:
APP'D.:
SCALE: As Shown
CES PROJ. NO.: 7.0547

Corrective Action System Evaluation

CRAWFORD ENVIRONMENTAL SERVICES

15 Church Avenue, SW
Roanoke, Virginia 24011
540-343-6256
540-343-6259 (fax)

Figure Title
Site Plan
Handy Pantry/University Mart/Clouds Chevron
UST Permits # 07584 / 07777 / 12352
Intersection of Taylor and Two Notch Road
Columbia, South Carolina

DRAWING NUMBER
Figure 2

REV.
0

Appendix B

Executed SCDHEC 1903 Forms

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDHEC
(last) (first)
Address: 2600 Bull Street
City: Columbia State: SC Zip:
Phone:

2. LOCATION OF WELL: COUNTY: Lexington
Name: Clouds Chevron Et Al
Address: Intersection of Taylors Street & Two Notch Road
City: Columbia, South Carolina

3. PUBLIC SYSTEM NAME: IW01

4. ABANDONMENT:
Grouted Depth: from to ft.

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum	
Grass/topsoil/fill	0.5	0	0.5
Blackish red (5R 2/2), dry, clayey, silty, m/c sand. PID = 0.4 ppm	4.5	0.5	5
Moderate reddish orange (10R 6/6), dry to slightly moist, clayey, silty, f/m sand. Slight petroleum odor noted. PID = 1.8 ppm	5	5	10
Pale yellowish orange (10YR 8/6), slightly moist to moist, clayey, f/m sand. Slight petroleum odor noted. PID = 4.8 ppm	5	10	15
Grayish orange (5Y 8/4), moist to wet, m/c sand. Slight to moderate petroleum odor noted. PID = 9.4 ppm	5	15	20

5. REMARKS:
Bentonite Seal 5-8 feet BGS

6. TYPE: Mud Rotary Jetted Bored
Dug Air Rotary Driven
Cable tool (Auger) Other

7. PERMIT NUMBER: Site ID 07584/07777/12352

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well (Monitor Well) Replacement

9. WELL DEPTH (completed)
20.00 ft. Date Started: 7/26/2016
Date Completed: 7/27/2016

10. CASING: (Threaded) Welded
Diameter: 4"
Type: PVC
4.0 in. to 10.00 ft. depth
in. to ft. depth
Height: Below
Surface: ft. Weight: lb./ft.
Drive Shoe:

11. SCREEN:
Type: PVC Diameter: 4"
Slot/Gauge: 0.010" Length: 10'
Set Between: 10.00 ft. and 20.00 ft.
ft. and ft.
Sieve Analysis: Y/N

12. STATIC WATER LEVEL 14.00 ft. below land surface after 24 hours.

13. PUMPING LEVEL Below Land Surface.
ft. after hrs Pumping GPM
Pumping Test:
Yield:

14. WATER QUALITY
Chemical Analysis: Bacterial Analysis:

15. ARTIFICIAL FILTER (filter pack) #2 - Sand
Installed from: 8.0 ft. to 20.0
Effective Size: Uniformity Coefficient:

16. WELL GROUTED?
Neat Cement Bentonite (Bentonite/Cement) Other
Depth: From 0.0 ft. to 5.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type:
Well Disinfected: Type: Amount:

18. PUMP: Date installed:
Mfr. Name: Model no.:
H.P.: Volts: Length of pipe: ft.
Capacity: gpm
TYPE:
Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Michael Carey **CERT NO.: 1920**
Address: Petra-Tech Environmental Level: A B C (D)
2435 East North St, Ste 1108-202 (circle one)
Greenville, SC 29615
Telephone: 864.631.2490 Fax:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:
Date: 7/27/16

If D Level Driller, provide supervising driller's name.
Robyn Barkley 934-A

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDHEC
(last) (first)
Address: 2600 Bull Street
City: Columbia State: SC Zip:
Phone:

2. LOCATION OF WELL: COUNTY: Lexington
Name: Clouds Chevron Et Al
Address: Intersection of Taylors Street & Two Notch Road
City: Columbia, South Carolina

3. PUBLIC SYSTEM NAME: IW02

4. ABANDONMENT:
Grouted Depth: from to ft.

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum	
Asphalt	0.5	0	0.5
Very dusky red (10R 2/2), dry, silty, f/m sand. PID = 0.2 ppm	4.5	0.5	5
Grayish orange (10YR 7/4), slightly moist, clayey, silty, f/m sand. Slight petroleum odor noted. PID = 0.7 ppm	5	5	10
Moderate yellowish brown (10YR 5/4), slightly moist to moist, clayey, silty, f/m sand. Moderate to strong petroleum odor noted. PID = 8.3 ppm	5	10	15
Dark yellowishj orange (10YR 6/6), moist to wet, slightly clayey, m/c sand. Strong petroleum odor noted. PID = 25.3 ppm	5	15	20

5. REMARKS:
Bentonite Seal 5-8 feet BGS

6. TYPE: Mud Rotary Jetted Bored
Dug Air Rotary Driven
Cable tool (Auger) Other

7. PERMIT NUMBER: Site ID 07584/07777/12352

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well (Monitor Well) Replacement

9. WELL DEPTH (completed)
20.00 ft.
Date Started: 7/26/2016
Date Completed: 7/27/2016

10. CASING: (Threaded) Welded
Diameter: 4"
Type: PVC
4.0 in. to 10.00 ft. depth
in. to ft. depth
Height: Below
Surface: ft. Weight: lb./ft.
Drive Shoe:

11. SCREEN:
Type: PVC Diameter: 4"
Slot/Gauge: 0.010" Length: 10'
Set Between: 10.00 ft. and 20.00 ft.
ft. and ft.
Sieve Analysis: Y/N

12. STATIC WATER LEVEL 14.00 ft. below land surface after 24 hours.

13. PUMPING LEVEL Below Land Surface.
ft. after hrs Pumping GPM
Pumping Test:
Yield:

14. WATER QUALITY
Chemical Analysis: Bacterial Analysis:

15. ARTIFICIAL FILTER (filter pack) #2 - Sand
Installed from: 8.0 ft. to 20.0
Effective Size: Uniformity Coefficient:

16. WELL GROUTED?
Neat Cement Bentonite (Bentonite/Cement) Other
Depth: From 0.0 ft. to 5.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type:
Well Disinfected: Type: Amount:

18. PUMP: Date installed:
Mfr. Name: Model no.:
H.P.: Volts: Length of pipe: ft.
Capacity: gpm
TYPE:
Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Michael Carey **CERT NO.: 1920**
Address: Petra-Tech Environmental Level: A B C (D)
2435 East North St, Ste 1108-202 (circle one)
Greenville, SC 29615
Telephone: 864.631.2490 Fax:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:
Date: 7/27/16

If D Level Driller, provide supervising driller's name.
Robyn Barkley 934-A

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDHEC
(last) (first)
Address: 2600 Bull Street
City: Columbia State: SC Zip:
Phone:

2. LOCATION OF WELL: COUNTY: Lexington
Name: Clouds Chevron Et Al
Address: Intersection of Taylors Street & Two Notch Road
City: Columbia, South Carolina

3. PUBLIC SYSTEM NAME: IW03

4. ABANDONMENT:
Grouted Depth: from to ft.

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum	
Mulch/Grass/topsoil/fill	0.5	0	0.5
Grayish brown (5Y 3/2), dry, silty, f/m sand. PID = 0.5 ppm	4.5	0.5	5
Moderate brown (5YR 4/4), slightly moist, silty, f/m sand. Slight petroleum odor noted. PID = 2.5 ppm	5	5	10
Moderate reddish brown (10R 4/6), moist, silty, clayey, f/m sand. Moderate petroleum odor noted. PID = 8.1 ppm	5	10	15
Moderate reddish brown (10R 4/6), wet, clayey, silty, f/m and. Moderate petroleum odor noted. PID = 7.6 ppm	5	15	20

5. REMARKS:
Bentonite Seal 5-8 feet BGS

6. TYPE: Mud Rotary Jetted Bored
Dug Air Rotary Driven
Cable tool (Auger) Other

7. PERMIT NUMBER: Site ID 07584/07777/12352

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well (Monitor Well) Replacement

9. WELL DEPTH (completed)
20.00 ft. Date Started: 7/26/2016
Date Completed: 7/27/2016

10. CASING: (Threaded) Welded
Diameter: 4"
Type: PVC
4.0 in. to 10.00 ft. depth
in. to ft. depth
Height: Below
Surface: ft. Weight: lb./ft.
Drive Shoe:

11. SCREEN:
Type: PVC Diameter: 4"
Slot/Gauge: 0.010" Length: 10'
Set Between: 10.00 ft. and 20.00 ft.
ft. and ft.
Sieve Analysis: Y/N

12. STATIC WATER LEVEL 14.00 ft. below land surface after 24 hours.

13. PUMPING LEVEL Below Land Surface.
ft. after hrs Pumping GPM
Pumping Test:
Yield:

14. WATER QUALITY
Chemical Analysis: Bacterial Analysis:

15. ARTIFICIAL FILTER (filter pack) #2 - Sand
Installed from: 8.0 ft. to 20.0
Effective Size: Uniformity Coefficient:

16. WELL GROUTED?
Neat Cement Bentonite (Bentonite/Cement) Other
Depth: From 0.0 ft. to 5.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type:
Well Disinfected: Type: Amount:

18. PUMP: Date installed:
Mfr. Name: Model no.:
H.P.: Volts: Length of pipe: ft.
Capacity: gpm
TYPE:
Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Michael Carey **CERT NO.: 1920**
Address: Petra-Tech Environmental Level: A B C (D)
2435 East North St, Ste 1108-202 (circle one)
Greenville, SC 29615
Telephone: 864.631.2490 Fax:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:
Date: 7/27/16

If D Level Driller, provide supervising driller's name.
Robyn Barkley 934-A

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

1. WELL OWNER INFORMATION:
Name: SCDHEC
(last) (first)
Address: 2600 Bull Street
City: Columbia State: SC Zip:
Phone:

2. LOCATION OF WELL: COUNTY: Lexington
Name: Clouds Chevron Et Al
Address: Intersection of Taylors Street & Two Notch Road
City: Columbia, South Carolina

3. PUBLIC SYSTEM NAME: IW04

4. ABANDONMENT:
Grouted Depth: from to ft.

Formation Description	Thickness of Stratum	Depth to Bottom of Stratum	
Asphalt	0.5	0	0.5
Moderate reddish orange (10R 6/6), dry, clayey, silty, f/m sand. PID = 0.0 ppm	4.5	0.5	5
Moderate brown (5YR 3/4), slightly moist, slightly clayey, silty, f/m sand. Slight petroleum odor noted. PID = 1.5 ppm	5	5	10
Moderate reddish brown (10R 4/6), moist, silty, clayey, f/m sand. Moderate to stonrg petroleum odor noted. PID = 9.8 ppm	5	10	15
Moderate reddish brown (10R 4/6), wet, silty, clayey, m/c sand. Strong petroleum odor noted. PID = 18.4 ppm	5	15	20

5. REMARKS:
Bentonite Seal 5-8 feet BGS

6. TYPE: Mud Rotary Jetted Bored
Dug Air Rotary Driven
Cable tool (Auger) Other

7. PERMIT NUMBER: Site ID 07584/07777/12352

8. USE:
Residential Public Supply Process
Irrigation Air Conditioning Emergency
Test Well (Monitor Well) Replacement

9. WELL DEPTH (completed)
20.00 ft. Date Started: 7/26/2016
Date Completed: 7/27/2016

10. CASING: (Threaded) Welded
Diameter: 4"
Type: PVC
4.0 in. to 10.00 ft. depth
in. to ft. depth
Height: Below
Surface: ft. Weight: lb./ft.
Drive Shoe:

11. SCREEN:
Type: PVC Diameter: 4"
Slot/Gauge: 0.010" Length: 10'
Set Between: 10.00 ft. and 20.00 ft.
ft. and ft.
Sieve Analysis: Y/N

12. STATIC WATER LEVEL 14.00 ft. below land surface after 24 hours.

13. PUMPING LEVEL Below Land Surface.
ft. after hrs Pumping GPM
Pumping Test:
Yield:

14. WATER QUALITY
Chemical Analysis: Bacterial Analysis:

15. ARTIFICIAL FILTER (filter pack) #2 - Sand
Installed from: 8.0 ft. to 20.0
Effective Size: Uniformity Coefficient:

16. WELL GROUTED?
Neat Cement Bentonite (Bentonite/Cement) Other
Depth: From 0.0 ft. to 5.0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type:
Well Disinfected: Type: Amount:

18. PUMP: Date installed:
Mfr. Name: Model no.:
H.P.: Volts: Length of pipe: ft.
Capacity: gpm
TYPE:
Submersible Jet (shallow) Turbine
Jet (deep) Reciprocating Centrifugal

19. WELL DRILLER: Michael Carey **CERT NO.: 1920**
Address: Petra-Tech Environmental Level: A B C (D)
2435 East North St, Ste 1108-202 (circle one)
Greenville, SC 29615
Telephone: 864.631.2490 Fax:

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed:
Date: 7/27/16

If D Level Driller, provide supervising driller's name.
Robyn Barkley 934-A

DHEC 1903 (07/2003) COPY 1 MAIL TO: S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL (ADDRESS ABOVE)

Appendix C

Well Development Logs / Manifests

D H E C
PROMOTE PROTECT PROSPER

Well Development Data Verfication Form
Underground Storage Tank Management Division

Facility Name: Clouds Chevron et al.
Site ID#: 07584/07777/12352
Date: 8/1/16
Field Personnel: T. Slack/M. Caray/R. Barkley/D. Smith/Ryan M,
Drilling Company: Petra-Tech Env.
Driller's Name: R. Barkley / M. Caray
Driller's Certification Number: 934-A / 1920D
Weather Conditions: cldy / Hot

Well Development Method

Surge Block X Submersible Pump X Air Lifting ○
* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter
serial no. 2435570
pH=4.0 ✓
pH=7.0 ____
pH=10.0 ____

Conductivity meter
serial no. 2413677
standard 1413

Temperature meter
serial no. 2413677

Turbidity meter
serial no. AG3883
NTU=0.0 ✓
NTU=1.0 ____
NTU=10.0 ✓

Drilling Method

Hollow Stem Augers X Solid Flight Augers ○ Direct Push ○
Air Rotary ○ Mud Rotary ○ Sonic ○

Monitoring Well ID# IW-1 Well Casing Diameter 4 inches Borehole Diameter 8.25 inches
Depth to Ground Water (DGW) 15.09 ft. BTOC Screen Length/Slot Size 10 ft./ .01 in.
Total Well Depth (TWD) 20.00 ft. BTOC Screen Interval 10 ft. to 20 ft.
Length of water column (LWC=TWD-DGW) 4.91 ft. Type of Drilling Fluids used: N/A
Total Gallons of Water Removed: 30 gals. Drilling Fluids recovered N/A gals.

Time (military)	1300	1320	1330	1340	1350		
pH (s.u.)*	6.87	6.26	6.17	6.20	6.19		
Specific Conductivity (mmhos/cm)*	340	290	310	300	300		
Water Temperature °F	89.8	84.1	83.9	83.8	83.9		
Turbidity (NTU) *	>1000	62	[illegible]53	33.5	9.8		
Physical Characteristics (color/odor)	strong	strong	Str	Str	Slight		
Water Level Measurement (ft) from TOC	—	—	—	—	—		
Total Well Depth (ft) from TOC	—	—	—	—	—		
Cumulative Gallons Removed	0 gals	15 gals	20 gals	25 gals	30 gals	gals	gals

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surged w/ surge block equipped with check valve allowing recovery of water/sediment through attached tubing. Followed by overpumping.

Driller Signature: [signature] Date: 8/1/16

DHEC 2099 (04/2015) SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

7/24/16 Bent 5-8 Sand 8-20 Grout 0-5

D H E C
PROMOTE PROTECT PROSPER

Well Development Data Verfication Form
Underground Storage Tank Management Division

Facility Name: Clonds Chevron et. al. Site ID#: 07584/07777/12352

Date: 8/1/16 Field Personnel: T. Slack / M. Carey / R. Barkley / D. Brock Rymer

Drilling Company: Petra-Tech Env. Driller's Name: R. Barkley / M. Carey

Driller's Certification Number: 934-A / 1920 D Weather Conditions: day / Hot

Well Development Method

Surge Block Ø Submersible Pump ⊗ Air Lifting ○

* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. 2435570	serial no. 2413677	serial no. 2413677	serial no. A631883
pH=4.0 ✓	standard 1413		NTU=0.0
pH=7.0			NTU=1.0
pH=10.0			NTU=10.0 ✓

Drilling Method

Hollow Stem Augers ⊗ Solid Flight Augers ○ Direct Push ○

Air Rotary ○ Mud Rotary ○ Sonic ○

Monitoring Well ID# IW-2 Well Casing Diameter 4 inches Borehole Diameter 8.25 inches

Depth to Ground Water (DGW) 15.70 ft. BTOC Screen Length/Slot Size 10 ft./ .01 in.

Total Well Depth (TWD) 20.06 ft. BTOC Screen Interval 10 ft. to 20 ft.

Length of water column (LWC=TWD-DGW) 4.36 ft. Type of Drilling Fluids used: N/A

Total Gallons of Water Removed: 25 gals. Drilling Fluids recovered N/A gals.

Time (military)	1415	1425	1430	1440	1455		
pH (s.u.)*	5.80	5.91	5.92	5.92	5.92		
Specific Conductivity (mmhos/cm)*	450	390	380	380	370		
Water Temperature (°C)* °F	87.0	85.2	84.2	85.1	82.7		
Turbidity (NTU) *	+1000	204	62	47	9.68		
Physical Characteristics (color/odor)	Strong	Strong	Strong	Strong	Str		
Water Level Measurement (ft) from TOC	—	—	—	—	—		
Total Well Depth (ft) from TOC	—	—	—	—	—		
Cumulative Gallons Removed	0 gals	10 gals	15 gals	20 gals	25 gals	gals	gals

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surged w/ surge blocks equipped with check valve allowing recovery of water / sediment through attached tubing. Followed by overpumping.

Driller Signature: [signature] Date: 8/1/16

7-26-16 Bent 5-8 Sand 8-20 Grout 0-5

D H E C
PROMOTE PROTECT PROSPER

Well Development Data Verfication Form
Underground Storage Tank Management Division

Facility Name: Clouds Chevron etal. Site ID#: 07584/07777/12352

Date: 8/1/16 Field Personnel: T. Slack / M. Carey / R. Burtly / D. Burtly / Ryan M1

Drilling Company: Petra-Tech Env. Driller's Name: R. Bartley / M. Carey

Driller's Certification Number: 934-A/1920D Weather Conditions: day / Hot

Well Development Method

Surge Block ⊘ Submersible Pump ⊘ Air Lifting ○

* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. 2435570	serial no. 2413677	serial no. 2413677	serial no. A631883
pH=4.0 ✓	standard ✓		NTU=0.0 ✓
pH=7.0			NTU=1.0
pH=10.0			NTU=10.0 ✓

Drilling Method

Hollow Stem Augers ⊘ Solid Flight Augers ○ Direct Push ○

Air Rotary ○ Mud Rotary ○ Sonic ○

Monitoring Well ID# IW-3 Well Casing Diameter 4 inches Borehole Diameter 8.25 inches

Depth to Ground Water (DGW) 15.59 ft. BTOC Screen Length/Slot Size 10 ft./ .01 in.

Total Well Depth (TWD) 19.71 ft. BTOC Screen Interval 10 ft. to 20 ft.

Length of water column (LWC=TWD-DGW) 4.12 ft. Type of Drilling Fluids used: N/A

Total Gallons of Water Removed: 30 gals. Drilling Fluids recovered N/A, gals.

Time (military)	1510	1525	1535	1550	1600	1610	
pH (s.u.)*	6.31	6.4	6.38	6.4	6.41	6.39	
Specific Conductivity (mmhos/cm)*	480	520	540	538	544	540	
Water Temperature (C)*	89.6	80.8	82.2	81.8	82.0	82.1	
Turbidity (NTU) *	+1000	320	192	63	39	9.4	
Physical Characteristics (~~color~~/odor)	Strong	Strong	Strong	Strong	Strong	Strong	
Water Level Measurement (ft) from TOC	—	—	—	—	—	—	
Total Well Depth (ft) from TOC	—	—	—	—	—	—	
Cumulative Gallons Removed	5 gals	10 gals	15 gals	20 gals	25 gals	30 gals	gals

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surged w/ surge block equipped with check valve allowing recovery of water/sediment through tubing. Followed by overpumping.

Driller Signature: Date: 8/1/16

7-26-16 Ben 5-8 Sand 8-20 Grout 0-5

Well Development Data Verfication Form
Underground Storage Tank Management Division

Facility Name: Clonds Chevron et al Site ID#: 07584/07777/12352

Date: 8/1/16 Field Personnel: T. Slack/R. Barkley/M. Carey/D. Bush/Ryan M.

Drilling Company: Petra-Tech Env. Driller's Name: R. Backly/M. Carey

Driller's Certification Number: 934-A/1920D Weather Conditions: day/Hot

Well Development Method

Surge Block Ø Submersible Pump Ø Air Lifting ○

* Bailing can be combined with any of the above methods, but not utilized alone for development.

Quality Assurance

pH meter	Conductivity meter	Temperature meter	Turbidity meter
serial no. 2435570	serial no. 2413677	serial no. 24/3677	serial no. A631883
pH=4.0 V	standard √		NTU=0.0 V
pH=7.0			NTU=1.0
pH=10.0			NTU=10.0 V

Drilling Method

Hollow Stem Augers Ø Solid Flight Augers ○ Direct Push ○

Air Rotary ○ Mud Rotary ○ Sonic ○

Monitoring Well ID# IW-4 Well Casing Diameter 4 inches Borehole Diameter 8.25 inches

Depth to Ground Water (DGW) 15.79 ft. BTOC Screen Length/Slot Size 10 ft./.01 in.

Total Well Depth (TWD) 19.58 ft. BTOC Screen Interval 10 ft. to 20 ft.

Length of water column (LWC=TWD-DGW) 3.79 ft. Type of Drilling Fluids used: N/A

Total Gallons of Water Removed: 20 gals. Drilling Fluids recovered N/A gals.

Time (military)	1615	1625	1635	1650	1705		
pH (s.u.)*	6.26	6.18	6.05	5.99	5.98		
Specific Conductivity (mmhos/cm)*	390	344	295	297	295		
Water Temperature °F	88.9	85.6	84.2	84.0	83.9		
Turbidity (NTU) *	1000+	154	60.	35.44	9.23		
Physical Characteristics (color/odor)	Str	Str	Str	Str	Str		
Water Level Measurement (ft) from TOC	—	—	—	—	—		
Total Well Depth (ft) from TOC	—	—	—	—	—		
Cumulative Gallons Removed	0 gals	5 gals	10 gals	15 gals	20 gals	gals	gals

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Surged w/ surge block equipped with check valve allowing recovery of water/sediment through attached tubing. Followed by overpumping

Driller Signature: Date: 8/1/16

7-26-16 Ben 5-8 Sand 8-20 Grout 0-5

VLS recovery services, llc

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of

3. Emergency Response Phone

4. Waste Tracking Number WTN 020489

GENERATOR

5. Generator's Name and Mailing Address

PETRA - TECH ENVIRONMENTAL
2435 E NORTH STREET, SUITE 1106-202
GREENVILLE, SC 29615

Generator's Phone: 803-606-2944

Generator's Site Address (if different than mailing address)

2600 Bull St SCDHEC
Columbia, SC

6. Transporter 1 Company Name

U.S. EPA ID Number

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

VLS RECOVERY SERVICES, LLC
305 S. MAIN STREET
MAULDIN, SC 29662

Facility's Phone: 864-962-9953

U.S. EPA ID Number SCR000762468

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON HAZ NON REGULATED WELL WATER #16374	1	PVC TANK	500	gal	
2.	Clouds Chevron dev. water ~105 gallons. Clouds Chevron misc decon water ~10 gallons.					
3.	UST #07584/07777/12352					
4.						

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offeror's Printed/Typed Name: Ryan McCormack | Signature: Ryan McCormack | Month: 8 | Day: 2 | Year: 16

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Ryan McCormack | Signature: Ryan McCormack | Month: 8 | Day: 2 | Year: 16

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Lane Whitmire | Signature | Month: 8 | Day: 2 | Year: 16

Appendix D

Photo-Documentation

PHOTO-DOCUMENTATION

Client: SCDHEC **Project Name:** Injection Well Installation

Site Name: Clouds Chevron **Site Location:** Columbia, South Carolina

Photographer:
William Ewing

Date:
2 August 2016

Comments:
IW-01



Photographer:
William Ewing

Date:
2 August 2016

Comments:
IW-03



PHOTO-DOCUMENTATION

Client: SCDHEC **Project Name:** Injection Well Installation

Site Name: Clouds Chevron **Site Location:** Columbia, South Carolina

Photographer:
William Ewing

Date:
2 August 2016

Comments:
IW-03 & IW-04



Photographer:
William Ewing

Date:
2 August 2016

Comments:
IW-01 & IW-02



APPENDIX E

Data Verification Checklist

UST Programmatic QAPP Contractor Checklist				
Item #:	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	Yes		
2	Is UST Owner/Operator name, address, provided?			n/a
3	Is name, address, & phone number of current property owner provided?	Yes		
4	Is the SCDHEC Certified UST Site Rehabilitation Contractor's name, address, phone number, and certification number provided?	Yes		
5	Is the name, address ,telephone number, and certification number of the well driller that installed the boring/monitoring wells provided?			n/a
6	Is the name, address, telephone number, and certification number of the certified laboratories performing analytical analyses provided	Yes		
7	Has the facility history be summarized?			n/a
8	Has the regional geology and hydrogeology been summarized?			n/a
9	Are the receptor survey results provided as required?			n/a
10	Has the current use of the site and adjacent land been described?	Yes		
11	Has the site specific geology been described?			n/a
12	Has the primary soil type been described?			n/a
13	Have the field screening results been described?			n/a
14	Has a description of the soil sample collection and preservation been detailed?			n/a
15	Has the field screening methodology been detailed?			n/a
16	Has the monitoring well installation and development dates been provided?			n/a
17	Has the method of well development been detailed? (Table 2)			n/a
18	Has the justification been provided for the locations of the monitoring wells?			n/a
19	Have the monitoring wells been labeled in accordance with the UST QAPP guidelines?	Yes		
20	Has the groundwater sampling methodology been detailed?	Yes		
21	Have the groundwater sampling dates and groundwater measurements been provided?	Yes		
22	Has the purging methodology been detailed?	Yes		
23	Has the volume of water purged from each well been provided along with the measurements to verify purging is complete?	Yes		
24	If free-product is present, has the thickness been provided?			n/a
25	Does the report include a brief discussion of the assessment done and the results?			n/a

UST Programmatic QAPP Contractor Checklist				
26	Does the report include a brief discussion of the aquifer evaluation and the results?	Yes		
27	Does the report include a brief discussion of the fate & transport models used?			n/a
28	Are the site-conceptual tables included (Tier 1 risk evaluation)			n/a
29	Have the exposure pathways been analyzed (Tier 2 risk evauluation)			n/a
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 risk evaluation)	Yes		
31	Have recommendations for further action been provided and explained?			n/a
32	Has the soil analytical data for the site been provided in tabular format? (Table 5)			n/a
33	Has the potentiometric data for the site been provided in tabular format?	Yes		
34	Has the current and historical laboratory data been provided in tabular format	Yes		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			n/a
36	Have the Site conceptual model tables been included (Tier 1 risk evaluation)			n/a
37	Has the topographic map been provided with all the required elements?	Yes		
38	Has the site base map been provided with all the required elements?	Yes		
39	Have the CoC maps been provided?	Yes		
40	Have the potentiometric maps been provided?	Yes		
41	Have the geologic cross-sections been provided			n/a
42	Have maps showing the predicted migration of the CoCs through time been provided?			n/a
43	Has the site survey been provided and include all necessary elements? (Appendix A)			n/a
44	Have the sampling logs, chain of custody forms and analytical data package been included with all elements? (Appendix B)	Yes		
45	Is the laboratory performing the analyses properly certified? (Appendix B)	Yes		
46	Has the tax map been included with all necessary elements? (Appendix C)			n/a
47	Have the soil/boring field screening logs been provided? (Appendix D)			n/a
48	Have the well completion logs been provided? (Appendix E)			n/a
49	Have the aquifer evaluation forms,data, graphs, equations,etc. been provided? (Appendix F)			n/a
50	Have the disposal manifests been provided? (Appendix G)	Yes		
51	Has a copy of the local zoning regulations been provided? (Appendix H)			n/a

UST Programmatic QAPP Contractor Checklist				
52	Has all fate and transport modeling been provided? (Appendix I)			n/a
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			n/a
54	Has a copy of this form been attached to the final report and are explainations for any missing or incomplete data been provided?	Yes		
Comments:				

dhec
Healthy People Healthy Communities



JAN 0 4 2017

MR CHARLES F CRAWFORD III
CRAWFORD ENVIRONMENTAL SERVICES
15 CHURCH AVENUE SW
ROANOKE VA 24011

Re: **Corrective Action System Evaluation (CASE) Report Review**
UST Permit# 07584, University Mart, 2367 Taylor St., Columbia, SC
Release #1 reported January 30, 1991; CA# 47811
Release #2 reported April 17, 1998; CA# 47812
UST Permit # 07777, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 31, 1991; CA# 47813
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 30, 1991; CA# 47814
Contract #IFB-5400007095-1/30/2014-EMW; PO# 4600322226
CASE report received November 23, 2016
Richland County

Dear Mr. Crawford:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the CASE report documenting the corrective action activities and the May 2016 groundwater sampling event. DHEC has noted a 75.62% reduction.

The semi-annual CASE 6 report is due on or before **June 15, 2017.**

On all correspondence regarding this site, please reference UST Permit #07584, #07777, & #12352. If you have any questions regarding this correspondence, please contact me by telephone at (803) 898-0634, by fax at (803) 898-0673, or by e-mail at kuhnkm@dhec.sc.gov.

Sincerely,

Kimberly M. Kuhn, Hydrogeologist
Corrective Action Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

cc: Sylvan Food Systems, Inc., 1245 Boston Ave, West Columbia, SC 29170
Gilbert Walker, Public Housing Authority, Gonzales Gardens, P.O. Box 4307, Columbia, SC 29240
1500 Millwood Ave, LLC, 1330 Devonshire Drive, Columbia, SC 29204
John M. Suddeth, 1410 N Millwood Ave, Columbia, SC 29204
Fung Lau, 2300 Taylor St, Suite D, Columbia, SC 29204
Technical File

Document Receipt Information

☐ Hard Copy ☒ CD ☐ Email

Date Received 9.12.2017

Permit Number 07584 - 07777 - 12352

Project Manager Kim Kuhn

Name of Contractor Crawford Env. Services

UST Certification Number CASE Report

Docket Number 261T, 196T, 131T

Scanned _____

07584 - 261 Tech

07777 - 196 Tech

12352 - 131 Tech

CRAWFORD ENVIRONMENTAL SERVICES

August 31, 2017

Ms. Kimberly Kuhn
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

RE: Corrective Action System Evaluation – June 2017 (Sampling Date)
Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352

Dear Ms. Kuhn:

Enclosed please find one copy of the June 2017 Corrective Action System Evaluation (CASE) report prepared by Crawford Environmental Services, Inc. (CES) for the referenced site. Should you have any questions regarding the enclosed material, or if additional information is required, please feel free to contact Charlie Crawford or myself at 540.343.6256.

Best Regards,

Daniel Fisher
Division Manager

cc:

CRAWFORD ENVIRONMENTAL SERVICES

Corrective Action System Evaluation Report
June 2017
Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352
August 31, 2017
Revision 0

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
York County
UST Permit #: 07584/07777/12352
CES Job #: 7.0547

PREPARED BY:
Crawford Environmental Services, Inc.
1701 Shenandoah Avenue, NW
Roanoke, Virginia 24017
Phone: 540-343-6256; Fax: 540-343-6259
dfisher@crawfordenvironmental.com

PREPARED FOR:
South Carolina Department of Health & Environmental Control
Ms. Kimberly Kuhn
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

SUBMITTED TO:
South Carolina Department of Health & Environmental Control
Ms. Kimberly Kuhn
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

CRAWFORD ENVIRONMENTAL SERVICES

Title: *Corrective Action System Evaluation Report, Handy Pantry/University Mart and Cloud's Chevron, Site (Site No. 07584/07777/12352), Columbia, South Carolina, June 2017.*

Written By:

Daniel J. Fisher
Senior Project Manager/Technical Reviewer

29 August 2017
Date Reviewed

Reviewed By:

B. Thomas Houghton, P.G.
Senior Project Geologist/Technical Reviewer
Registered South Carolina P.G. No. 2343

30 August 2017
Date Reviewed

Approved By:

Charles F. Crawford
President/Chief Executive Officer, Technical Reviewer

31 August 2017
Date Reviewed

CRAWFORD ENVIRONMENTAL SERVICES

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Figure 4: Groundwater Elevation Data Map

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Appendix A: Groundwater Laboratory Analytical Report & Chain-of-Custody Documentation
Appendix B: Groundwater Sampling Data Sheets
Appendix C: Purge Water Disposal Manifest
Appendix D: QAPP Addendum Contractor Checklist

1.0 Project Information

1.1 Introduction

Crawford Environmental Services Inc., (CES) has completed a Corrective Action System Evaluation (CASE) report for the Handy Pantry #65/University Mart and former Cloud's Chevron site. The report describes assessment activities conducted at the site in general accordance with the scope of work as defined in the QAPP Addendum Approval, dated March 20, 2014. The subject property is in a primarily commercial area of Columbia, South Carolina (*Figure 1*). The subject sites, operating as Handy Pantry #65/University Mart and former Cloud's Chevron, is bordered by light commercial properties in all directions. A site plan depicting pertinent features of the subject property is provided as *Figure 2*.

1.2 Facility Information

1.2.1 Site Address

Handy Pantry #65 / University Mart / Clouds Chevron
2367 Taylor Street
Columbia, South Carolina

1.2.2 Property Owner Information

Mr. Mahesh Patel
2367 Taylor Street
Columbia, South Carolina

Mr. Andrew Diggins
1600 Block Two Notch Road
Columbia, South Carolina

1.2.3 Contractor Information

Crawford Environmental Services
1701 Shenandoah Avenue, NW
Roanoke, Virginia 24017
1 (540) 343-6256
Contractor Number: UCC-0388

1.2.4 Laboratory Information

Access Analytical, Inc. (AA)
7478 Carlisle Street
Irmo, SC 29063
1 (803) 781-4243
SC Certification: 32575001

Analytical Environmental Services Inc. (AES)
3785 Presidential Pkwy.
Atlanta, GA 30340
1 (770) 457-8177
SC Certification: 98016003

2.0 Corrective Action Activities

Corrective Action activities at the facility for this phase of work included the following:

-Semi-Annual Sampling Event

2.1 Groundwater Sampling Event

A comprehensive groundwater sampling event, including; recording equilibrated static water levels, product thicknesses, and the collection of chemical samples was completed by CES personnel between June 26 - 28, 2017. CES personnel utilized an electronic water level indicator for water level measurements and an oil/water interface probe for free phase product measurements. Samples for the shallow wells were collected utilizing disposable polyethylene bailers. Shallow wells that exhibited groundwater above the screened bracket were purged of at least three well volumes or purged till dry before sample collection. Deep and intermediate wells exhibiting groundwater above the screened bracket were purged utilizing submersible pumps with dedicated tubing. For sample collection, disposable polyethylene bailers were lowered slowly to the top of the water column (after purging in some cases) allowed to fill one volume, then removed. Disposal records for the 109-gallons of purge water generated are included as Appendix A. Groundwater was then transferred to the appropriate sampling containers and was then placed in coolers, maintaining 4˚C, and delivered to an independent laboratory. Groundwater chemical samples were submitted to Access Analytical, Inc., {SC Certification: 32575001} for analysis.

2.1.1 Groundwater Sampling

Equilibrated static water levels and free-product thicknesses were recorded for monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-10, MW-11, MW-15, MW-16, MW-17, MW-19, MW-20, MW-22, MW-23, MW-26, MW-27, MW-28, MW-29, MW-30, MW-31, MW-32, MW-33, MW-34, MW-35, MW-36, MW-37, MW-38, MW-39, MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, MW-51, MW-53, MW-55, MW-56, MW-59, MW-62, MW-63,

MW-67, MW-70, MW-5AR, PW-1R, DW-1, DW-2, DW-3, DW-4, DW-5, DW-6, and DW-9. Groundwater sampling data sheets are included as Appendix B.

During the referenced sampling event, CES was unable to access monitoring wells MW-48, MW-49 and MW-50 due to a locked gate and monitoring wells MW-9, MW-25, MW-57, MW-60, MW-61, MW-65, MW-66 and MW-68 were unable to be located. CES also utilized a metal detector to locate the wells, however, the overgrown site conditions did not permit the location of the aforementioned monitoring wells. Monitoring well MW-1, MW-5, and MW-52 did not maintain sufficient water columns to collect groundwater samples. Due to obstructions (vehicle) covering the wells, monitoring wells MW-58 and DW-8 were not able to be sampled. Monitoring wells MW-12, MW-13, MW-54, and DW-7 have been paved over following recent construction and presumed destroyed.

CES sampled the monitoring wells, as part of the June 2017 sampling event, for the following chemical analyses:
Benzene/Toluene/Ethylbenzene/Xylenes (BTEX), naphthalene, Methyl Tert-Butyl Ether (MTBE), Tert-Amyl Methyl Ether (TAME), Tert-Butyl Alcohol (TBA), and Tert-Amyl Alcohol (TAA).

During the sampling event CES collected duplicate samples of monitoring wells MW-23, MW-35, MW-45, MW-55, and PW-1R. Review of the duplicate samples collected from aforementioned monitoring well samples did not yield significant data gaps.

In addition to duplicate samples, CES also collected daily field blank samples at the conclusion of the sample events. The samples were collected at the conclusion of the day to be representative of all samples that were collected during that day. Sealed trip blank samples were also stored with samples during each day of the sampling event.

Table 2 presents the laboratory data for the submitted groundwater samples collected as part of this assessment. The groundwater concentration maps are included as *Figure 3.* The groundwater elevation map is included as *Figure 4*.

3.0 Summary

During the corrective action activities performed at the subject property, CES conducted a comprehensive groundwater monitoring event, to determine the effectiveness of the current corrective action plan. The qualitative and quantitative data collected from recent assessment activities indicates the following regarding current site conditions;

1. During this sampling event, groundwater from monitoring wells MW-2, MW-3, MW-4, MW-10, MW-15, MW-17, MW-18, MW-19, MW-20, MW-22, MW-23, MW-33, MW-35, MW-5AR, PW-1R, and DW-3 exhibited hydrocarbon constituent concentrations above the SSTLs for the chemicals of concern.

2. CES calculated a COC reduction of 56.86 percent during this phase of work.

3. Free-phase petroleum was not observed during the June 2017 sampling event.

4. Review of the analytical data collected since corrective action was implemented in 2013 indicates the dissolved-phase contaminant plume is stable and migration has not been observed. As a result, CES requests the semi-annual sampling events be reduced to only include SSTL wells.

4.0 Conclusion

Based on the results of the comprehensive sampling event, CES estimates that the historical remedial injects have been successful in targeting source area and contaminants. CES estimates that decreases in the COC reduction percentage observed during this period are based upon a significant number of wells being unable to be sampled and the reduction of free-phase petroleum during sampling event. This reduction should continue to increase as CES pursues continued remedial biological injections. CES recommends continuing a course of biological injections until the goal of 100 % COC reduction is met. The next biological injection event is scheduled for October 2017. CES will focus injections in four recently-installed injection wells, installed July 2016. The next Case Report will be submitted prior to November 15, 2017 and will be comprised of Water Supply Wells Only. Based on the results of the current and historical sampling events, CES requests a reduction in sampling locations to include only SS

5.0 Limitations

This report is based upon a specific scope of work requested by SCDHEC. This report is intended only for the use of CES's client and anyone else specifically listed on this report. Some data contained within this report was previously collected by other consultants and is assumed to be correct. CES will not and cannot be liable for the unauthorized release by any third party. Other than as contained in this paragraph, CES makes no expressed or implied warranty as to the contents of this report.

Tables

Table 1: Well Construction and Historical Groundwater Elevation Summary
Table 2: Groundwater Laboratory Analytical Result Summary
Table 3: Site Specific Target Levels

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-1	27	17	27	93.89	6/26/2017	NA	DRY	NA	NA	DRY
					10/19/2016	NA	DRY	NA	NA	DRY
					5/15/2016	NA	DRY	NA	NA	DRY
					11/3/2015	NA	DRY	NA	NA	DRY
					5/29/2015	NA	DRY	NA	NA	DRY
					11/11/2014	NA	DRY	NA	NA	DRY
					4/2/2014	NA	DRY	NA	NA	DRY
MW-2	30	20	30	94.70	6/27/2017	NA	21.51	NA	NA	73.19
					10/19/2016	NA	21.17	NA	NA	73.53
					5/16/2016	NA	20.08	NA	NA	74.62
					11/3/2015	NA	20.32	NA	NA	74.38
					5/29/2015	22.56	22.57	0.01	72.14	72.13
					11/4/2014	NA	23.03	NA	NA	71.67
					4/2/2014	NA	21.12	NA	NA	73.58
MW-3	29	19	29	94.45	6/27/2017	NA	20.98	NA	NA	73.47
					10/19/2016	NA	20.18	NA	NA	74.27
					5/16/2016	NA	19.84	NA	NA	74.61
					11/3/2015	NA	23.29	NA	NA	71.16
					5/29/2015	23.2	23.29	0.09	71.25	71.16
					4/2/2014	NA	21.40	NA	NA	73.05
					11/12/2014	NA	23.16	NA	NA	71.29
MW-4	28	18	28	94.85	6/27/2017	NA	20.55	NA	NA	74.30
					10/19/2016	NA	20.42	NA	NA	74.43
					5/16/2016	NA	19.20	NA	NA	75.65
					11/3/2015	NA	20.35	NA	NA	74.50
					5/29/2015	NA	21.52	NA	NA	73.33
					11/11/2014	NA	21.76	NA	NA	73.09
					4/2/2014	NA	21.31	NA	NA	73.54
MW-5	26	16	26	95.26	6/26/2017	NA	DRY	NA	NA	DRY
					10/19/2016	NA	DRY	NA	NA	DRY
					5/16/2016	NA	19.75	NA	NA	75.51
					11/3/2015	NA	DRY	NA	NA	DRY
					5/29/2015	NA	DRY	NA	NA	DRY
					11/11/2014	NA	DRY	NA	NA	DRY
					4/2/2014	NA	DRY	NA	NA	DRY
MW-6	30	20	30	94.96	6/27/2017	NA	22.91	NA	NA	72.05
					10/19/2016	NA	22.04	NA	NA	72.92
					5/17/2016	NA	20.59	NA	NA	74.37
					11/3/2015	NA	21.21	NA	NA	73.75
					5/29/2015	NA	22.38	NA	NA	72.58
					11/11/2014	NA	23.98	NA	NA	70.98
					4/3/2014	NA	22.61	NA	NA	72.35
MW-7	30	20	30	95.93	6/27/2017	NA	22.32	NA	NA	73.61
					10/19/2016	NA	22.20	NA	NA	73.73
					5/16/2016	NA	20.98	NA	NA	74.95
					11/3/2015	NA	21.79	NA	NA	74.14
					5/29/2015	NA	23.48	NA	NA	72.45
					11/11/2014	NA	24.12	NA	NA	71.81
					4/3/2014	NA	23.02	NA	NA	72.91
MW-8	28	18.5	28	94.79	6/27/2017	NA	19.65	NA	NA	75.14
					10/19/2016	NA	19.70	NA	NA	75.09
					5/17/2016	NA	18.75	NA	NA	76.04
					11/3/2015	NA	19.19	NA	NA	75.60
					5/29/2015	NA	20.08	NA	NA	74.71
					11/11/2014	NA	21.43	NA	NA	73.36
					4/3/2014	NA	19.95	NA	NA	74.84
MW-9	30	20	30	92.30	6/26/2017	Unable to Locate				
					10/19/2016	NA	20.30	NA	NA	72.00
					5/16/2016	NA	18.78	NA	NA	73.52
					11/3/2015	NA	20.04	NA	NA	72.26
					5/28/2015	NA	21.19	NA	NA	71.11
					11/11/2014	NA	21.69	NA	NA	70.61
					4/2/2014	NA	20.60	NA	NA	71.70
MW-10	28	18	28	85.98	6/28/2017	NA	15.33	NA	NA	70.65
					10/19/2016	NA	15.75	NA	NA	70.23
					5/18/2016	NA	14.52	NA	NA	71.46
					11/3/2015	NA	14.58	NA	NA	71.40
					5/28/2015	NA	16.64	NA	NA	69.34
					11/11/2014	Interface Probe Failure - 1.25-Feet of Product Observed in Bailer				
					4/1/2014	NA	17.69	NA	NA	68.29

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-11	30	Unknown		88.46	6/27/2017	NA	17.75	NA	NA	70.71
					10/19/2016	NA	18.19	NA	NA	70.27
					5/18/2016	NA	16.66	NA	NA	71.80
					11/3/2015	NA	17.16	NA	NA	71.30
					5/29/2015	NA	18.93	NA	NA	69.53
					11/11/2014	NA	19.38	NA	NA	69.08
					4/2/2014	NA	18.61	NA	NA	69.85
MW-12	24.65	Unknown		72.80	6/26/2017	Destroyed - Paved Over				
					10/19/2016	NA	3.32	NA	NA	69.48
					5/18/2016	NA	2.73	NA	NA	70.07
					11/3/2015	NA	3.15	NA	NA	69.65
					5/28/2015	NA	4.38	NA	NA	68.42
					11/11/2014	NA	4.63	NA	NA	68.17
					4/2/2014	NA	4.20	NA	NA	68.60
MW-13	30.1	Unknown		80.44	6/26/2017	Destroyed - Paved Over				
					10/19/2016	NA	10.83	NA	NA	69.61
					5/16/2016	NA	9.71	NA	NA	70.73
					11/3/2015	NA	9.82	NA	NA	70.62
					5/28/2015	NA	11.71	NA	NA	68.73
					11/11/2014	NA	12.15	NA	NA	68.29
					4/1/2014	NA	11.13	NA	NA	69.31
MW-15	25	15	25	86.44	6/28/2017	NA	15.36	NA	NA	71.08
					10/19/2016	15.70	15.82	0.12	70.74	70.62
					5/18/2016	14.58	15.02	0.13	71.86	71.42
					11/3/2015	14.51	14.64	0.13	71.93	71.80
					5/29/2015	16.45	16.61	0.16	69.99	69.83
					11/11/2014	Interface Probe Failure - 0.25-Feet of Product Observed in Bailer				
					4/1/2014	16.60	16.00	0.60	69.84	70.88*
MW-16	25	15	25	88.19	6/27/2017	NA	17.21	NA	NA	70.98
					10/19/2016	NA	17.55	NA	NA	68.89
					5/18/2016	NA	16.29	NA	NA	71.90
					11/3/2015	NA	16.29	NA	NA	70.15
					5/29/2015	Unable to Locate				
					11/12/2014	NA	18.98	NA	NA	69.21
					4/2/2014	NA	17.54	NA	NA	70.65
MW-17	22	20	30	92.45	6/27/2017	NA	21.62	NA	NA	70.83
					10/19/2016	NA	21.58	NA	NA	70.87
					5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	NA	20.47	NA	NA	71.98
					5/28/2015	NA	22.70	NA	NA	69.75
					11/12/2014	NA	23.45	NA	NA	69.00
					4/2/2014	NA	22.00	NA	NA	70.45
MW-18	30	20	30	94.81	6/26/2017	NA	23.16	NA	NA	71.35
					10/19/2016	NA	23.46	NA	NA	71.35
					5/15/2016	NA	22.04	NA	NA	72.77
					11/3/2015	NA	22.28	NA	NA	72.53
					5/28/2015	NA	24.41	NA	NA	70.40
					11/12/2014	NA	25.08	NA	NA	69.73
					4/2/2014	NA	23.68	NA	NA	71.13
MW-19	30	20	30	93.96	6/27/2017	NA	22.80	NA	NA	71.16
					10/19/2016	NA	23.70	NA	NA	70.26
					5/18/2016	NA	21.76	NA	NA	72.20
					11/3/2015	NA	21.81	NA	NA	72.15
					5/28/2015	NA	24.00	NA	NA	69.96
					11/13/2014	NA	24.56	NA	NA	69.40
					4/3/2014	NA	23.33	NA	NA	70.63
MW-20	25	15	25	94.12	6/27/2017	NA	21.50	NA	NA	72.62
					10/19/2016	NA	21.89	NA	NA	72.23
					5/15/2016	NA	20.41	NA	NA	73.71
					11/3/2015	NA	20.18	NA	NA	73.94
					5/28/2015	22.67	22.61	0.06	71.45	71.51
					11/13/2014	NA	23.28	NA	NA	70.84
					4/3/2014	NA	21.95	NA	NA	72.17
MW-22	30	20	30	94.25	6/27/2017	NA	20.77	NA	NA	73.48
					10/19/2016	NA	21.16	NA	NA	73.09
					5/15/2016	NA	19.61	NA	NA	74.64
					11/3/2015	NA	19.01	NA	NA	75.24
					5/28/2015	NA	21.85	NA	NA	72.40
					11/11/2014	NA	22.68	NA	NA	71.57
					4/3/2014	NA	21.11	NA	NA	73.14

Table 1

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Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-23	30	20	30	94.43	6/27/2017	NA	23.60	NA	NA	70.83
					10/19/2016	NA	23.06	NA	NA	71.37
					5/18/2016	NA	21.95	NA	NA	72.48
					11/3/2015	NA	21.95	NA	NA	72.48
					5/28/2015	NA	24.25	NA	NA	70.18
					11/13/2014	NA	24.98	NA	NA	69.45
					4/3/2014	NA	23.65	NA	NA	70.78
MW-25	25.6	Unknown		93.09	6/26/2017	Unable to Locate				
					10/19/2016	NA	19.96	NA	NA	73.13
					5/15/2016	Unable to Locate				
					11/3/2015	NA	17.73	NA	NA	75.36
					5/28/2015	NA	20.65	NA	NA	72.44
					11/10/2014	NA	21.60	NA	NA	71.49
					4/1/2014	NA	19.71	NA	NA	73.38
MW-26	30	Unknown		95.96	6/28/2017	NA	21.44	NA	NA	74.52
					10/19/2016	Not Sampled due to Obstruction				
					5/17/2016	NA	20.24	NA	NA	75.72
					11/3/2015	NA	21.06	NA	NA	74.90
					6/5/2015	NA	22.49	NA	NA	73.47
					11/11/2014	NA	22.95	NA	NA	73.01
					4/3/2014	NA	20.01	NA	NA	75.95
MW-27	30	15	30	91.40	6/27/2017	NA	17.31	NA	NA	74.09
					10/19/2016	NA	17.46	NA	NA	73.94
					5/17/2016	NA	15.62	NA	NA	75.78
					11/3/2015	NA	11.21	NA	NA	80.19
					5/28/2015	NA	17.75	NA	NA	73.65
					11/13/2014	NA	18.85	NA	NA	72.55
					4/1/2014	NA	14.65	NA	NA	76.75
MW-28	30	15	30	91.46	6/27/2017	NA	16.97	NA	NA	74.49
					10/19/2016	NA	17.53	NA	NA	73.93
					5/17/2016	NA	15.90	NA	NA	75.56
					11/3/2015	NA	13.08	NA	NA	78.38
					5/28/2015	NA	17.97	NA	NA	73.49
					11/13/2014	NA	19.75	NA	NA	71.71
					4/1/2014	NA	15.63	NA	NA	75.83
MW-29	30	15	30	91.09	6/27/2017	NA	16.95	NA	NA	74.14
					10/19/2016	NA	17.76	NA	NA	73.33
					5/17/2016	NA	15.88	NA	NA	75.21
					11/3/2015	NA	13.19	NA	NA	77.90
					5/28/2015	17.91	17.92	0.01	73.18	73.17
					11/13/2014	NA	19.92	NA	NA	71.17
					4/1/2014	NA	15.51	NA	NA	75.58
MW-30	30	15	30	92.77	6/27/2017	NA	20.46	NA	NA	72.31
					10/19/2016	NA	29.20	NA	NA	63.57
					5/15/2016	NA	19.27	NA	NA	73.50
					11/3/2015	NA	17.43	NA	NA	75.34
					5/28/2015	NA	26.70	NA	NA	66.07
					11/10/2014	NA	22.90	NA	NA	69.87
					4/1/2014	NA	20.50	NA	NA	72.27
MW-31	35	20	35	95.20	6/27/2017	NA	24.12	NA	NA	71.08
					10/19/2016	NA	24.41	NA	NA	70.79
					5/17/2016	NA	22.98	NA	NA	72.22
					11/3/2015	NA	22.53	NA	NA	72.67
					5/28/2015	25.61	25.62	0.01	69.59	69.58
					11/12/2014	NA	26.36	NA	NA	68.84
					4/2/2014	NA	24.41	NA	NA	70.79
MW-32	30	15	30	92.87	6/27/2017	NA	20.01	NA	NA	72.86
					10/19/2016	Not Sampled due to Obstruction				
					5/17/2016	NA	19.75	NA	NA	73.12
					11/3/2015	NA	19.12	NA	NA	73.75
					5/28/2015	NA	22.00	NA	NA	70.87
					11/12/2014	NA	23.16	NA	NA	69.71
					4/2/2014	NA	21.28	NA	NA	71.59
MW-33	35	20	35	93.84	6/27/2017	NA	22.70	NA	NA	71.14
					10/19/2016	NA	23.00	NA	NA	70.84
					5/15/2016	NA	21.57	NA	NA	72.27
					11/3/2015	NA	21.48	NA	NA	72.36
					5/28/2015	NA	23.83	NA	NA	70.01
					11/12/2014	NA	24.65	NA	NA	69.19
					4/1/2014	NA	23.18	NA	NA	70.66

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Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-34	35	20	35	94.77	6/27/2017	NA	25.52	NA	NA	69.25
					10/19/2016	NA	23.81	NA	NA	70.96
					5/15/2016	NA	22.38	NA	NA	72.39
					11/3/2015	NA	21.52	NA	NA	73.25
					5/28/2015	NA	24.72	NA	NA	70.05
					11/12/2014	NA	25.49	NA	NA	69.28
					4/1/2014	NA	24.06	NA	NA	70.71
MW-35	35	20	35	93.71	6/27/2017	NA	22.65	NA	NA	71.06
					10/19/2016	NA	22.89	NA	NA	70.82
					5/16/2016	NA	21.48	NA	NA	72.23
					11/3/2015	NA	21.37	NA	NA	72.34
					5/28/2015	NA	23.80	NA	NA	69.91
					11/12/2014	NA	24.66	NA	NA	69.05
					4/1/2014	NA	21.35	NA	NA	72.36
MW-36	35	20	35	93.89	6/27/2017	NA	22.52	NA	NA	71.37
					10/19/2016	NA	22.91	NA	NA	70.98
					5/15/2016	NA	21.36	NA	NA	72.53
					11/3/2015	NA	21.36	NA	NA	72.53
					5/28/2015	NA	23.63	NA	NA	70.26
					11/12/2014	NA	24.72	NA	NA	69.17
					4/1/2014	NA	22.84	NA	NA	71.05
MW-37	35	20	35	93.78	6/27/2017	NA	22.76	NA	NA	71.02
					10/19/2016	NA	23.04	NA	NA	70.74
					5/16/2016	NA	21.61	NA	NA	72.17
					11/3/2015	NA	21.36	NA	NA	72.42
					5/28/2015	NA	23.98	NA	NA	69.80
					11/12/2014	NA	24.87	NA	NA	68.91
					4/1/2014	NA	22.24	NA	NA	71.54
MW-38	35	20	35	95.53	6/27/2017	NA	24.06	NA	NA	71.47
					10/19/2016	NA	24.32	NA	NA	71.21
					5/18/2016	NA	24.83	NA	NA	70.70
					11/3/2015	NA	22.89	NA	NA	72.64
					6/2/2015	NA	25.26	NA	NA	70.27
					11/12/2014	NA	26.17	NA	NA	69.36
					4/1/2014	NA	24.61	NA	NA	70.92
MW-39	35	20	35	96.19	6/27/2017	NA	25.15	NA	NA	71.04
					10/19/2016	NA	25.37	NA	NA	70.82
					5/18/2016	NA	24.02	NA	NA	72.17
					11/3/2015	NA	23.79	NA	NA	72.40
					6/2/2015	NA	26.45	NA	NA	69.74
					11/12/2014	NA	27.36	NA	NA	68.83
					4/2/2014	NA	25.59	NA	NA	70.60
MW-40	35	20	35	95.69	6/27/2017	NA	24.47	NA	NA	71.22
					10/19/2016	NA	25.04	NA	NA	70.65
					5/18/2016	NA	25.25	NA	NA	70.44
					11/3/2015	NA	23.43	NA	NA	72.26
					6/2/2015	NA	26.12	NA	NA	69.57
					11/12/2014	NA	27.01	NA	NA	68.68
					4/2/2014	NA	25.29	NA	NA	70.40
MW-41	35	20	35	94.85	6/27/2017	NA	24.91	NA	NA	69.94
					10/19/2016	NA	24.45	NA	NA	70.40
					5/18/2016	NA	23.71	NA	NA	71.14
					11/3/2015	NA	22.77	NA	NA	72.08
					6/2/2015	NA	25.69	NA	NA	69.16
					11/11/2014	NA	26.99	NA	NA	67.86
					4/1/2014	NA	24.70	NA	NA	70.15
MW-42	35	20	35	95.81	6/27/2017	NA	25.00	NA	NA	70.81
					10/19/2016	NA	25.08	NA	NA	70.73
					5/18/2016	NA	23.73	NA	NA	72.08
					11/3/2015	NA	23.46	NA	NA	72.35
					6/2/2015	NA	26.25	NA	NA	69.56
					11/12/2014	NA	27.22	NA	NA	68.59
					4/1/2014	NA	25.35	NA	NA	70.46
MW-43	40	20	40	95.15	6/27/2017	NA	23.32	NA	NA	71.83
					10/19/2016	NA	23.70	NA	NA	71.45
					5/18/2016	NA	22.04	NA	NA	73.11
					11/3/2015	NA	22.21	NA	NA	72.94
					5/28/2015	NA	24.66	NA	NA	70.49
					11/11/2014	NA	25.61	NA	NA	69.54
					4/2/2014	NA	24.00	NA	NA	71.15

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-44	31	16	31	94.57	6/27/2017	NA	21.57	NA	NA	73.00
					10/19/2016	NA	22.16	NA	NA	72.41
					5/18/2016	NA	20.11	NA	NA	74.46
					11/3/2015	NA	20.33	NA	NA	74.24
					5/28/2015	NA	22.70	NA	NA	71.87
					11/11/2014	NA	24.23	NA	NA	70.34
					4/1/2014	NA	24.42	NA	NA	70.15
MW-45	30	15	30	92.51	6/27/2017	NA	20.56	NA	NA	71.95
					10/19/2016	NA	20.99	NA	NA	71.52
					5/18/2016	NA	19.43	NA	NA	73.08
					11/3/2015	NA	19.45	NA	NA	73.06
					5/28/2015	NA	21.75	NA	NA	70.76
					11/11/2014	NA	22.63	NA	NA	69.88
					4/1/2014	NA	21.22	NA	NA	71.29
MW-46	35	20	35	94.50	6/27/2017	NA	22.82	NA	NA	71.68
					10/19/2016	NA	23.25	NA	NA	71.25
					5/16/2016	NA	21.70	NA	NA	72.80
					11/3/2015	NA	21.84	NA	NA	72.66
					5/28/2015	NA	24.19	NA	NA	70.31
					11/11/2014	NA	24.95	NA	NA	69.55
					4/1/2014	NA	23.55	NA	NA	70.95
MW-48	30	15	30	89.95	6/26/2017	Unable to Access - Locked Gate				
					10/19/2016	Unable to Access - Locked Gate				
					5/18/2016	NA	18.21	NA	NA	71.74
					11/3/2015	Unable to Access - Locked Gate				
					5/29/2015	NA	19.63	NA	NA	70.32
					11/11/2014	Unable to Access - Locked Gate				
					4/2/2014	NA	19.70	NA	NA	70.25
MW-49	30	15	30	88.18	6/26/2017	Unable to Access - Locked Gate				
					10/19/2016					
					5/15/2016					
					11/3/2015					
					5/29/2015					
					11/11/2014					
					4/2/2014					
MW-50	30	15	30	84.09	6/26/2017	Unable to Access - Locked Gate				
					10/19/2016					
					5/15/2016					
					11/3/2015					
					5/29/2015					
					11/11/2014					
					4/2/2014					
MW-51	35	20	35	93.91	6/27/2017	NA	22.51	NA	NA	71.40
					10/19/2016	NA	22.78	NA	NA	71.13
					5/18/2016	NA	20.76	NA	NA	73.15
					11/3/2015	NA	21.87	NA	NA	72.04
					5/29/2015	NA	23.72	NA	NA	70.19
					11/11/2014	NA	24.29	NA	NA	69.62
					4/2/2014	NA	21.23	NA	NA	72.68
MW-53	20	5	20	79.60	6/27/2017	NA	9.49	NA	NA	70.11
					10/19/2016	Unable to Locate- Overgrown Field				
					5/15/2016	Unable to Locate- Overgrown Field				
					11/3/2015	NA	8.49	NA	NA	71.11
					5/28/2015	NA	10.50	NA	NA	69.10
					11/11/2014	NA	11.02	NA	NA	68.58
					4/3/2014	NA	9.60	NA	NA	70.00
MW-54	20	5	20	77.58	6/26/2017	Destroyed - Paved Over				
					10/19/2016	NA	10.66	NA	NA	66.92
					5/18/2016	NA	10.15	NA	NA	67.43
					11/3/2015	NA	9.83	NA	NA	67.75
					5/28/2015	NA	11.27	NA	NA	66.31
					11/11/2014	Unable to Locate - Overgrown Field				
					4/1/2014	NA	11.31	NA	NA	66.27
MW-55	14	4	14	71.22	6/27/2017	NA	2.10	NA	NA	69.12
					10/19/2016	NA	4.26	NA	NA	66.96
					5/18/2016	NA	1.55	NA	NA	69.67
					11/3/2015	NA	1.19	NA	NA	70.03
					5/28/2015	NA	3.83	NA	NA	67.39
					11/11/2014	Unable to Locate - Overgrown Field				
					4/3/2014	NA	2.51	NA	NA	68.71

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-56	20	5	20	76.39	6/27/2017	NA	7.20	NA	NA	69.19
					10/19/2016	NA	7.45	NA	NA	68.94
					5/18/2016	NA	6.76	NA	NA	69.63
					11/3/2015	NA	6.40	NA	NA	69.99
					5/28/2015	NA	8.22	NA	NA	68.17
					11/11/2014	Unable to Locate - Overgrown Field				
					4/3/2014	NA	5.12	NA	NA	71.27
MW-58	19	4	19	76.37	6/26/2017	Not Sampled due to Obstruction				
					10/19/2016					
					5/18/2016					
					11/3/2015	NA	4.52	NA	NA	71.85
					5/29/2015	NA	6.85	NA	NA	69.52
					11/11/2014	Abandoned				
					4/2/2014					
MW-59	17	2	17	68.02	6/28/2017	NA	5.65	NA	NA	62.37
					10/19/2016	NA	5.84	NA	NA	62.18
					5/18/2016	NA	5.46	NA	NA	62.56
					11/3/2015	NA	5.04	NA	NA	62.98
					5/28/2015	NA	6.46	NA	NA	61.56
					11/11/2014	NA	6.69	NA	NA	61.33
					4/2/2014	NA	6.05	NA	NA	61.97
MW-60	14	4	14	67.94	6/26/2017	Unable to Locate				
					10/19/2016					
					5/18/2016					
					11/3/2015					
					5/28/2015					
					11/11/2014					
					4/2/2014					
MW-62	35	20	35	94.05	6/27/2017	NA	22.44	NA	NA	71.61
					10/19/2016	NA	22.64	NA	NA	71.41
					5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	22.15	22.67	0.52	71.90	71.38
					5/28/2015	22.21	23.71	1.5	71.84	70.34
					11/12/2014	NA	24.75	NA	NA	69.30
					4/1/2014	NA	22.32	NA	NA	71.73
MW-63	35	20	35	94.65	6/27/2017	NA	22.81	NA	NA	71.84
					10/19/2016	NA	22.84	NA	NA	71.81
					5/18/2016	NA	21.66	NA	NA	72.99
					11/3/2015	NA	24.05	NA	NA	70.60
					5/28/2015	24.04	24.05	0.01	70.61	70.60
					11/12/2015	Unable to Locate				
					4/2/2014	NA	23.07	NA	NA	71.58
MW-65	35	20	35	94.04	6/26/2017	Unable to Locate - Paved over				
					10/19/2016					
					5/15/2016					
					11/3/2015					
					5/28/2015					
					11/11/2014					
					4/2/2014					
MW-67	35	20	35	96.10	6/27/2017	NA	25.42	NA	NA	70.68
					10/19/2016	NA	25.18	NA	NA	70.92
					5/18/2016	NA	23.73	NA	NA	72.37
					11/3/2015	NA	23.52	NA	NA	72.58
					6/2/2015	NA	26.29	NA	NA	69.81
					11/12/2014	NA	27.28	NA	NA	68.82
					4/1/2014	NA	24.44	NA	NA	71.66
MW-70	35	20	35	95.49	6/27/2017	NA	24.51	NA	NA	70.98
					10/19/2016	NA	24.43	NA	NA	71.06
					5/18/2016	NA	23.11	NA	NA	72.38
					11/3/2015	NA	22.89	NA	NA	72.60
					5/28/2015	NA	25.60	NA	NA	69.89
					11/11/2014	NA	26.22	NA	NA	69.27
					4/2/2014	NA	24.70	NA	NA	70.79
MW-5AR	28	18	28	94.18	6/27/2017	NA	21.61	NA	NA	72.57
					10/19/2016	NA	21.04	NA	NA	73.14
					5/15/2016	NA	19.59	NA	NA	74.59
					11/3/2015	NA	16.39	NA	NA	77.79
					5/28/2015	NA	20.91	NA	NA	73.27
					11/13/2014	NA	22.64	NA	NA	71.54
					4/1/2014	NA	21.24	NA	NA	72.94

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
PW-1R	50	45	50	93.75	6/28/2017	NA	22.16	NA	NA	71.59
					10/19/2016	NA	22.36	NA	NA	71.39
					5/18/2016	NA	21.03	NA	NA	72.72
					11/3/2015	NA	21.43	NA	NA	72.32
					5/29/2015	23.19	23.20	0.01	70.56	70.55
					11/13/2014	NA	23.92	NA	NA	69.83
					4/3/2014	NA	23.11	NA	NA	70.64
DW-1	70	65	70	94.66	6/28/2017	NA	42.91	NA	NA	51.75
					10/19/2016	NA	42.32	NA	NA	52.34
					5/16/2016	NA	42.71	NA	NA	51.95
					11/3/2015	NA	46.28	NA	NA	48.38
					5/29/2015	NA	46.28	NA	NA	48.38
					11/10/2014	NA	45.42	NA	NA	49.24
					4/2/2014	NA	45.00	NA	NA	49.66
DW-2	75	70	75	94.02	6/28/2017	NA	42.21	NA	NA	51.81
					10/19/2016	NA	43.05	NA	NA	50.97
					5/16/2016	NA	41.99	NA	NA	52.03
					11/3/2015	NA	43.07	NA	NA	50.95
					11/11/2014	NA	44.88	NA	NA	49.14
					4/2/2014	NA	44.34	NA	NA	49.68
DW-3	52	47	52	93.75	6/28/2017	NA	22.85	NA	NA	70.90
					10/19/2016	NA	23.07	NA	NA	70.68
					5/18/2016	NA	21.70	NA	NA	72.05
					11/3/2015	NA	21.29	NA	NA	72.46
					5/28/2015	NA	23.93	NA	NA	69.82
					11/13/2014	NA	24.42	NA	NA	69.33
					4/3/2014	NA	24.40	NA	NA	69.35
DW-4	110	105	110	93.79	6/28/2017	NA	38.96	NA	NA	54.83
					10/19/2016	NA	42.79	NA	NA	51.00
					5/18/2016	NA	42.31	NA	NA	51.48
					11/3/2015	NA	43.34	NA	NA	50.45
					5/28/2015	NA	44.51	NA	NA	49.28
					11/13/2014	NA	3.45	NA	NA	90.34
					4/3/2014	NA	44.60	NA	NA	49.19
DW-5	70	65	70	93.74	6/28/2017	NA	42.34	NA	NA	51.40
					10/19/2016	NA	42.51	NA	NA	51.23
					5/16/2016	NA	42.12	NA	NA	51.62
					11/3/2015	NA	42.89	NA	NA	50.85
					5/28/2015	NA	44.45	NA	NA	49.29
					11/12/2014	NA	44.75	NA	NA	48.99
					4/1/2014	NA	44.22	NA	NA	49.52
DW-6	70	65	70	95.90	6/28/2017	NA	44.31	NA	NA	51.59
					10/19/2016	NA	44.54	NA	NA	51.36
					5/18/2016	NA	44.10	NA	NA	51.80
					11/3/2015	NA	44.59	NA	NA	51.31
					6/2/2015	NA	46.16	NA	NA	49.74
					11/12/2014	NA	46.64	NA	NA	49.26
					4/1/2014	NA	45.86	NA	NA	50.04
DW-7	55	50	55	72.79	6/26/2017	Destroyed - Paved Over				
					10/19/2016	NA	22.24	NA	NA	50.55
					5/18/2016	NA	21.82	NA	NA	50.97
					11/3/2015	NA	22.97	NA	NA	49.82
					5/28/2015	NA	24.32	NA	NA	48.47
					11/11/2014	NA	24.75	NA	NA	48.04
					4/3/2014	NA	24.00	NA	NA	48.79
DW-8	55	50	55	68.63	6/26/2017	Not Sampled due to Obstruction				
					10/19/2016					
					5/18/2016					
					11/3/2015	NA	19.43	NA	NA	49.20
					5/29/2015	NA	5.37	NA	NA	63.26
					11/11/2014	Abandoned				
					4/2/2014					
DW-9	65	60	65	76.47	6/28/2017	NA	22.73	NA	NA	53.74
					10/19/2016	NA	22.87	NA	NA	53.60
					5/18/2016	NA	22.42	NA	NA	54.05
					11/3/2015	NA	23.62	NA	NA	52.85
					5/28/2015	NA	24.90	NA	NA	51.57
					11/11/2014	NA	24.44	NA	NA	52.03
					4/2/2014	NA	25.00	NA	NA	51.47

INA = Information not available

* = GW Elevation Corrected for The Presence of Free Product

n/a = not applicable

CRAWFORD ENVIRONMENTAL SERVICES

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron | UST | 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina | Crawford Project No. | 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-1	4/2/2014	Dry								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/16/2016									
	6/26/2017									
MW-2	4/2/2014	170	41	200	960	320	150	230	1	6.8
	11/4/2014	140	300	220	1300	410	160	210	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/4/2015	0.61	0.48	1.4	5.5	<1	2.6	<100	<10	<100
	5/16/2016	11	0.83 J	0.98 J	49	18	12	<100	<10	<100
	10/21/2016	34	4.9	23	60	56	18	68 J	<10	47 J
	6/27/2017	190	5.6	140	640	370	140	190	14	<100
MW-3	4/2/2014	6900	18000	1200	16000	1800	600	980	560.000	340
	11/12/2014	4600	11000	620	8700	1300	280	<5000	310.000	<5000
	5/29/2015	0.09-Feet of Free Product								
	11/4/2015	3000	8700	600	7200	720	360	<2000	140	<2000
	5/16/2016	7800	22000	1800	21000	2500	870	<5000	410 J	<5000
	10/21/2016	480	1000	76	2100	67	61	210	29	330
	6/27/2017	3900	13000	1100	10000	370	560	<1000	210	<1000
MW-4	4/2/2014	<1	<1	<1	<1	3.5	<5	<100	10.000	<100
	11/11/2014	<1	<1	<1	<1	1.6	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	0.87 J	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	0.73 J	<5	<100	<10	<100
MW-5	4/2/2014	Dry								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/16/2016	0.29 J	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	Dry								
	6/26/2017	Dry								
MW-6	4/3/2014	2.6	<1	2.4	10	2.5	4.2	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	0.8	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	1.7	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	1.9 J	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	1.9	<5	<100	<10	<100
MW-7	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	0.71	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	1.3 J	<100	<10	<100
MW-8	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-9	4/2/2014	830	7500	1700	14000	50	590	1700	5000	5000
	11/11/2014	380	11000	1900	13000	5	650	1100	<10	<100
	5/28/2015	250	5700	1200	8200	<50	480	<5000	<500	<5000
	11/4/2015	520	6200	1100	8600	<50	470	3000	<500	<5000
	5/16/2016	78	1900	1000	4300	<1	440	200	<10	<100
	10/21/2016	60	1500	730	3800	<1	210	550	<10	<100
	6/26/2017	Unable to Locate								

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-10	4/1/2014	1800	5700	350	8500	50	690	5000	500	5000
	11/11/2014	1.25-Feet of Free Product								
	5/28/2015	66	76	67	860	<1	370	<100	<10	<100
	11/4/2015	10	18	4.5	120	<1	46	<100	<10	<100
	5/18/2016	88	11	22	97	<1	170	<100	<10	<100
	10/21/2016	27	7.1	11	93	<1	47	<100	<10	<100
	6/28/2017	27	3.3	17	59	<1	120	<100	<10	<100
MW-11	4/2/2014	2.3	4.1	11	4.1	<1	4.4	120	<10	<100
	11/11/2014	0.53	<1	<1	<1	<1	<5	80	<10	58
	5/29/2015	0.51	<1	<1	3.8	<1	6.6	50	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-12	4/2/2014	2.9	0.67	1.6	0.91	18	4.7	630	9	<100
	11/11/2014	990	19	910	140	21	180	3600	14	<100
	5/28/2015	53	2.7	430	14	22	44	2300	<10	<100
	11/4/2015	110	2	53	25	<1	10	1800	8	<100
	5/18/2016	260	83	710	330	17	190	1300	<10	<100
	10/20/2016	180	18	420	300	13	110	4000	<10	<100
	6/26/2017	Destroyed - Paved Over								
MW-13	4/1/2014	0.62	8.8	4.5	86	<1	31	10	<10	<100
	11/11/2014	<1	<1	<	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<1	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/26/2017	Destroyed - Paved Over								
MW-15	4/1/2014	0.60-Feet of Free Product								
	11/11/2014	0.25-Feet of Free Product								
	5/29/2015	0.16-Feet of Free Product								
	11/3/2015	0.14-Feet of Free Product								
	5/15/2016	0.44-Feet of Free Product								
	10/19/2016	0.60-Feet of Free Product								
	6/28/2017	<1	300	320	7,500	<1	880	<100	<10	<100
MW-16	4/2/2014	<1	<1	<1	<1	<1	3.4	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	Unable to Locate								
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-17	4/2/2014	280	5100	450	13000	50	850	2200	500	5000
	11/12/2014	32	3000	450	8300	<10	690	270	<100	<1000
	5/28/2015	210	7500	480	12000	<50	830	2200	<500	<5000
	11/4/2015	280	10000	660	13000	<100	720	<10000	<1000	<10000
	5/15/2016	Not Sampled due to Obstruction								
	10/20/2016	<100	5500	510	11000	<100	560	<10000	<1000	<10000
	6/27/2017	10	5.8	190	26	<1	190	<100	<10	<100
MW-18	4/2/2014	1900	7200	630	8300	340	370	4900	70	5000
	11/12/2014	3100	11000	560	8700	510	290	12000	<1000	<10000
	5/28/2015	970	2500	180	4100	230	180	3000	33	<100
	11/3/2015	990	5800	600	8900	93	260	<10000	<1000	<10000
	5/15/2016	260	1900	220	4900	20	220	690	<10	<100
	10/20/2016	510	2400	230	3700	68	120	5500	48	1100
	6/27/2017	310	1800	300	4100	6.3	140	190	<10	<100
MW-19	4/3/2014	300	1800	490	12000	50	900	610	500	5000
	11/13/2014	1400	2800	1600	24000	<50	1400	1300	<50	<5000
	5/28/2015	2100	17000	330	16000	<50	1200	6200	<500	<5000
	11/3/2015	2900	19000	720	17000	<100	1100	5400	<1000	<10000
	5/18/2016	2900	19000	1100	22000	200	1400	4300 J	<500	<5000
	10/21/2016	2500	18000	1200	19000	<500	1200 J	<50000	<5000	<50000
	6/27/2017	3200	21000	1100	20000	130	950	6700 J	<1000	<10000

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron | UST | 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina | Crawford Project No. | 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-20	4/3/2014	1800	11000	460	11000	50	960	3100	65	5000
	11/13/2014	1400	12000	500	14000	120	1100	<10000	<1000	<10000
	5/29/2015	0.06-Feet of Free Product								
	11/3/2015	930	11000	1000	17000	<50	1400	<5000	<500	<5000
	5/15/2016	690	10000	2100	23000	<50	1600	<5000	<500	<5000
	10/21/2016	490	7000	1600	20000	<50	1200	4200 J	<500	<5000
	6/27/2017	390	10000	2000	26000	<50	1500	2500 J	<500	<5000
MW-22	4/3/2014	5700	12000	880	23000	50	990	3600	500	5000
	11/11/2014	6300	23000	700	21000	<20	1200	9600	<20	<140
	6/5/2015	4800	16000	760	26000	<100	840	<10000	<1000	<10000
	11/3/2015	6400	20000	740	24000	<100	1000	3900	<1000	<10000
	5/15/2016	1900	11000	1500	28000	<50	1400	<5000	<500	<5000
	10/21/2016	3400	20000	1600	20000	<500	720 J	<50000	<5000	<50000
	6/27/2017	2100	13000	1100	15000	<500	<2500	<50000	<5000	<50000
MW-23	4/3/2014	4200	16000	880	19000	120	1100	5900	500.000	5000
	11/13/2014	890	3600	450	16000	<50	1200	1500	<50	<340
	5/28/2015	570	1500	89	8300	<50	660	<5000	<500	<5000
	11/3/2015	2.9	8.5	1.5	190	<1	52	<100	<10	<100
	5/18/2016	280	990	110	4200	7.3	470	520	<10	<100
	10/21/2016	600	1900	130	4600	18	390	4000	<10	<100
	6/27/2017	400	1500	120	3800	6.3	370	1000	<10	<100
MW-25	4/1/2014	5.5	200	320	4400	<1	1300	170	<10	<100
	11/10/2014	38	140	200	2600	1.9	490	2800	<10	<100
	5/28/2015	29	140	190	3000	<1	560	430	<10	<100
	11/3/2015	14	150	200	2600	<1	340	390	<10	<100
	5/15/2016	Unable to Locate								
	10/19/2016	8.8	120	230	3400	<1	450	<100	<10	<100
	6/26/2017	Unable to Locate								
MW-26	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	Not Sampled due to Obstruction								
	6/28/2017	<1	<1	<1	<1	<1	1.1 J	<100	<10	<100
MW-27	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-28	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-29	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-30	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/10/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-31	4/2/2014	0.9	<1	<1	<1	2.7	<5	59	<10	<100
	11/12/2014	30	9.8	310	9.3	4.1	160	460	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	7.9	<1	6.1	<1	<1	130	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-32	4/2/2014	0.94	<1	1.9	2.4	<1	6.6	170	<10	<100
	11/12/2014	4	13	72	10	<1	45	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	2.8 J	<100	<10	<100
	10/19/2016	Not Sampled due to Obstruction								
	6/27/2017	<1	<1	<1	<1	<1	1.4 J	<100	<10	<100
MW-33	4/1/2014	560	5200	2500	6900	50	670	4100	500.000	5000
	11/12/2014	130	410	210	550	1.2	71	1000	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	29	<10	<100
	11/3/2015	240	7500	1600	11000	<50	430	<5000	<500	<5000
	5/15/2016	260	3200	1400	4700	4.3	390	210	<10	<100
	10/19/2016	120	620	480	1700	<1	95	980	<10	<100
	6/27/2017	80	250	100	1400	<1	210	860	<10	<100
MW-34	4/1/2014	<1	<1	<1	<1	<1	<5	39	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	39	<10	<100
	5/28/2015	<1	1.1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-35	4/1/2014	3700	4300	2000	6200	160	550	5600	54	5000
	11/12/2014	6000	7200	2800	7400	330	700	4700	76	<100
	5/28/2015	3300	5100	1500	4700	<50	640	4400	<500	<5000
	11/3/2015	1900	2200	1100	3300	84	530	2300	28	<100
	5/16/2016	130	130	23	490	4.6	46	120	<10	<100
	10/20/2016	2200	3300	1300	4100	64	360	5800	63	<100
	6/27/2017	3100	3800	2400	4700	56	780	3000	29	<100
MW-36	4/1/2014	5.1	<1	38	<1	<1	55	96	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	1.3	<1	2.3	<1	<5	<100	<10	<100
	11/3/2015	0.74	<1	1.6	<1	<1	16	<100	<10	<100
	5/15/2016	1	<1	14	0.47 J	<1	54	<100	<10	<100
	10/19/2016	1.8	<1	25	<1	<1	14	<100	<10	<100
	6/27/2017	1	<1	<1	<1	<1	47	<100	<10	<100
MW-37	4/1/2014	<1	<1	<1	<1	<1	3.7	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	3.5	<1	<1	5.4	<1	5.5	77	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	0.95 J	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	1.0 J	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-38	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-39	4/2/2014	<1	3.2	2.2	14	<1	3.3	<100	<10	<100
	11/12/2014	11	1500	1000	3700	<1	340	220	<10	<100
	6/2/2015	1.3	160	140	1100	<1	160	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	1.2	1.9	4.9	<1	<5	<100	<10	<100
	10/20/2016	1.5	390	780	2300	<1	320	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron | UST | 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina | Crawford Project No. | 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-40	4/2/2014	5.8	14	2	580	<1	24	<100	<10	<100
	11/12/2014	140	970	300	2900	12	150	600	<10	<100
	6/2/2015	5.2	47	3.9	590	<1	38	<100	<10	<100
	11/4/2015	0.51	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	1.4	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	1.4	<1	<1	<5	<100	<10	<100
	6/27/2017	22	5.1	600	98	<1	480	<100	<10	<100
MW-41	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	26	3.2	510	15	<1	340	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-42	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	0.31 J	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	3.8	5.4	<1	4.9	<100	<10	<100
MW-43	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-44	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-45	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-46	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-48	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	Unable to Access - Locked Gate								
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	Unable to Access - Locked Gate								
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/25/2016	Unable to Access - Locked Gate								
	6/26/2017	Unable to Access - Locked Gate								
MW-49	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
	6/26/2017									

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron | UST | 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina | Crawford Project No. | 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-50	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
	6/26/2017									
MW-51	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-53	4/3/2014	<1	<1	<1	<1	<1	4.1	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	4.1	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-54	4/1/2014	<1	<1	<1	<1	9.6	<5	<100	6.700	<100
	11/11/2014	Unable to Locate								
	5/28/2015	<1	<1	<1	<1	6.4	<5	140	<10	<100
	11/4/2015	<1	<1	<1	<1	1.5	<5	<100	<10	<100
	5/18/2016	0.60 J	<1	<1	<1	5.0	<5	60 J	<10	<100
	10/20/2016	<1	<1	<1	<1	2.0	<5	130	<10	<100
	6/26/2017	Destroyed - Paved Over								
MW-55	4/3/2014	10	1	3.5	<1	24	3.9	98	6.400	<100
	11/11/2014	Unable to Locate								
	5/28/2015	1000	40	410	260	190	180	1700	15	<100
	11/4/2015	640	64	200	230	160	120	1200	11	56
	5/18/2016	950	44	320	210	220	130	2600	15	<100
	10/21/2016	1500	310	860	1100	210	240	6000	43	370
	6/27/2017	200	2.9	53	20	100	50	2000	15	<100
MW-56	4/3/2014	<1	<1	<1	<1	<1	<5	50	<10	<100
	11/11/2014	Unable to Locate								
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-58	4/2/2014	Abandoned								
	11/11/2014									
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	Not Sampled due to Obstruction								
	10/19/2016									
	6/27/2017									
MW-59	4/2/2014	28	2.8	300	6.4	130	45	2600	42	160
	11/11/2014	81	3.6	730	14	91	96	4500	27	<100
	5/28/2015	1400	23	1100	620	89	290	3900	34	<100
	11/4/2015	1300	48	440	850	58	250	2800	19	<100
	5/18/2016	1900	51	950	760	96	260	4300	28	<100
	10/20/2016	2400	61	1400	2300	62	390	10000	63	300
	6/28/2017	2400	77	2000	3400	43	490	3600	32	<100
MW-60	4/2/2014	Unable to Locate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
	6/26/2017									

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-62	4/1/2014	0.86	<1	<1	<1	3	3.3	260	<10	<100
	11/12/2014	51	<1	<1	0.93	2.6	65	730	<10	<100
	5/29/2015	1.50-Feet of Free Product								
	12/17/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	Not Sampled due to Obstruction								
	10/19/2016	Not Sampled due to Obstruction								
	6/27/2017	1.6	<1	<1	<1	0.69 J	2.4 J	93 J	<10	<100
MW-63	4/2/2014	<1	<1	<1	<1	<1	5	120	<10	<100
	11/12/2014	Unable to Locate								
	5/29/2001	0.01-Feet of Free Product								
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-65	4/2/2014	Unable to Locate - Paved over								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
	6/26/2017									
MW-67	4/1/2014	<1	<1	<1	<1	<1	5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-70	4/2/2014	<1	<1	<1	<1	<1	5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	1.5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	0.44 J	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-5AR	4/1/2014	12000	13000	2400	13000	70	1000	<5000	160.000	<5000
	11/13/2014	830	180	98	670	13	130	<100	13.000	<100
	5/28/2015	2500	1200	280	1300	43	460	650	52.000	<100
	11/3/2015	5200	10000	810	5300	<100	580	<10000	<1000	<10000
	5/15/2016	7000	6400	1200	8000	<100	890	<10000	<1000	<10000
	10/21/2016	6300	3000	1100	7200	<50	1100	<5000	<500	<5000
	6/27/2017	1900	92	330	1400	2.3	390	220	13	<100
PW-1R	4/3/2014	460	3400	320	9200	<50	<250	710	<500	<5000
	11/13/2014	850	6900	580	18000	<50	1300	<5000	<500	<5000
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	830	20000	1200	14000	<500	600	<50000	<5000	<50000
	5/18/2016	210	1200	170	3200	6.8	200	380	<10	<100
	10/21/2016	410	5900	440	7200	<20	320	1900 J	<200	<2000
	6/28/2017	380	7900	510	9100	<50	320	<5000	<500	<5000
DW-1	4/2/2014	0.45	1.2	1.7	7.2	<1.0	<5.0	<100	<10	<100
	11/10/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/28/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-2	4/2/2014	<1.0	<1.0	<1.0	<1.0	7.1	4.1	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	10	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	8.7	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	2.9	<5	<100	<10	<100
	6/28/2017	<1	<1	<1	<1	2.4	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
DW-3	4/3/2014	9800	22000	3700	17000	990	780	10000	190	<5000
	11/13/2014	2000	20000	2800	10000	23	650	2700	<20	<140
	5/28/2015	310	4000	79	3100	6.5	130	750	<10	<100
	11/3/2015	4300	16000	2300	11000	230	800	2600	50	<2000
	5/18/2016	2600	10000	1400	8200	160	410	<5000	<500	<5000
	10/21/2016	4200	8300	1800	5200	240	450 J	8200 J	<1000	<10000
	6/28/2017	3400	8600	1600	5200	120	310	3400 J	370 J	<5000
DW-4	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/28/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-5	4/1/2014	3300	68	37	1000	940	81	4300	83	<100
	11/12/2014	6700	380	240	3100	1400	190	5300	110	<100
	5/28/2015	6900	660	420	3800	1200	290	6300	<500	<5000
	11/4/2015	5900	490	200	1800	1100	170	4800	89	<100
	5/16/2016	9200	1600	750	5300	1400	470	4300	95 J	<100
	10/25/2016	5700	1200	460	2800	1000	200 J	17000	<1000	<10000
	6/28/2017	5200	1400	380	2400	890	130 J	7200	390 J	<5000
DW-6	4/1/2014	8.5	1.2	1.6	7.2	3	5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/25/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/28/2017	<1	<1	0.37 J	<1	<1	<5	<100	<10	<100
DW-7	4/3/2014	0.52	0.46	<1.0	1.4	2.6	4.2	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	1.2	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/26/2017	Destroyed - Paved Over								
DW-8	4/2/2014	Abandoned								
	11/11/2014									
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	Not Sampled due to Obstruction								
	10/21/2016	Not Sampled due to Obstruction								
	6/26/2017	Not Sampled due to Obstruction								
DW-9	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	2.8	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	42	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	3.1	<5	<100	<10	<100
	6/28/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
SW-1	4/2/2014	180	8.4	30	53	42	6.5	350	9.500	100
	11/12/2014	Unable to Access - Overgrown Brush								
	5/28/2015	230	18	89	160	30	24	590	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	44	<10	<100
	5/18/2016	130	18	53	92	12	16	430	<10	<100
	10/19/2016	Unable to Access - Overgrown Brush								
QUALITY CONTROL DATA										
MW-35 (Dup 1)	6/27/2017	3000	3600	2400	4600	59	800	3000	35	<100
MW-23 (Dup 2)	6/27/2017	400	1700	76	4100	6.2	370	980	9.9 J	<100
MW-45 (Dup 3)	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-55 (Dup 4)	6/27/2017	310	4.7	87	28	110	69	2000	15	<100
PW-1R (Dup 5)	6/28/2017	400	9800	650	11000	<50	370	<5000	<500	<5000
Trip Blank	6/29/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100

BDL= Below Detectable Limit
RBSL= Risk Based Screening Levels
NE= Not Established

CRAWFORD ENVIRONMENTAL SERVICES

1,2 DCA = 1,2 Dichloroethane
J = Estimated value detected below reporting limit

Table 3

Facility Name:	Handy Pantry #65 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address:	2367 Taylor Street Columbia, South Carolina	Crawford Project No.	7.0647

Site Specific Target Level Summary

Well ID	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	Notes
MW-2	Initial	140.0	280.0	56.0	460.0	380.0	54.0	200.0	9.2	140.0	1719.2	
	SSTL	77.0	280.0	56.0	460.0	380.0	64.0	200.0	9.2	140.0	1656.2	
	Initial > SSTL	63.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.0	
	Subsequent	190.00	5.60	140.00	840.0	370.0	140.0	190.0	14.0	100.0	1789.6	
	SSTL	77.0	280.0	56.0	460.0	380.0	64.0	200.0	9.2	140.0	1656.2	
	Subsequent > SSTL	113.0	0.0	84.0	180.0	0.0	86.0	0.0	4.8	0.0	467.8	
MW-3	Initial	3000.0	7400.0	260.0	4500.0	3300.0	260.0	2000.0	340.0	1300.0	22360.0	
	SSTL	111.0	7400.0	260.0	4500.0	1976.0	108.0	2000.0	340.0	1300.0	17995.0	
	Initial > SSTL	2889.0	0.0	0.0	0.0	1324.0	152.0	0.0	0.0	0.0	4365.0	
	Subsequent	3900.0	13000.0	1100.0	10000.0	370.0	560.0	1600.0	210.0	1000.0	31140.0	
	SSTL	111.0	7400.0	260.0	4500.0	1976.0	108.0	2000.0	340.0	1300.0	17995.0	
	Subsequent > SSTL	3789.0	5600.0	840.0	5500.0	0.0	452.0	0.0	0.0	0.0	18181.0	
MW-5	Initial	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	
	SSTL	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Dry 6/26/2017 - Results from 5/16/2018
	Subsequent	0.28	1.0	1.0	1.0	1.0	5.0	100.0	10.0	100.0	219.3	
	SSTL	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-9	Initial	4100.0	27000.0	2500.0	19000.0	150.0	980.0	1600.0	2000.0	20000.0	77330.0	
	SSTL	35.0	7134.0	2500.0	19000.0	150.0	68.0	809.0	270.0	15628.0	45594.0	
	Initial > SSTL	4065.0	19866.0	0.0	0.0	0.0	892.0	791.0	1730.0	4372.0	31716.0	NS June 2017 - Results from 10/21/2016
	Subsequent	60	1800	730	3800	1	210	550	10	100	6961.0	
	SSTL	35.0	7134.0	2500.0	19000.0	150.0	68.0	809.0	270.0	15628.0	45594.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	142.0	0.0	0.0	0.0	142.0	
MW-10	Initial	740.0	7800.0	2500.0	15000.0	2500.0	950.0	50000.0	5000.0	50000.0	134490.0	
	SSTL	24.0	7800.0	2500.0	15000.0	264.0	63.0	793.0	707.0	11042.0	38213.0	
	Initial > SSTL	716.0	0.0	0.0	0.0	2236.0	887.0	49207.0	4293.0	38958.0	96277.0	
	Subsequent	27	3.3	17	69	1	120	100	10	100	437.3	
	SSTL	24.0	7800.0	2500.0	15000.0	264.0	63.0	793.0	707.0	11042.0	38213.0	
	Subsequent > SSTL	3.0	0.0	0.0	0.0	0.0	57.0	0.0	0.0	0.0	70.0	
MW-12	Initial	1.7	5.0	11.0	5.0	5.8	4.7	370.0	1.5	19.0	423.5	
	SSTL	1.7	5.0	11.0	5.0	5.8	4.7	370.0	1.5	19.0	423.5	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	NS June 2017 - Results from 10/20/2016
	Subsequent	180	18	420	300	13	110	4000	10	100	5151.0	
	SSTL	1.7	5.0	11.0	5.0	5.8	4.7	370.0	1.5	19.0	423.5	
	Subsequent > SSTL	178.3	13.0	409.0	295.0	7.4	105.3	3630.0	8.5	81.0	4727.5	
MW-16	Initial	Free Product										
	SSTL	16.0	3196.0	3700.0	21680.0	730.0	45.0	492.0	199.0	5838.0	35896.0	
	Initial > SSTL											
	Subsequent	1.0	300.0	320.0	7600.0	1.0	880.0	100.0	10.0	100.0	9212.0	
	SSTL	16.0	3196.0	3700.0	21680.0	730.0	45.0	492.0	199.0	5838.0	35896.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	835.0	0.0	0.0	0.0	835.0	

Table 3

Facility Name:	Handy Pantry #65 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address:	2367 Taylor Street Columbia, South Carolina	Crawford Project No.	7.0647

Site Specific Target Level Summary

Well ID:	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-17	Initial	1400.0	28000.0	2500.0	23000.0	1000.0	1000.0	9400.0	2000.0	20000.0	88300.0	
	SSTL	32.0	6631.0	2600.0	21680.0	1000.0	66.0	773.0	263.0	14286.0	47231.0	
	Initial > SSTL	1368.0	19369.0	0.0	1320.0	0.0	934.0	8627.0	1737.0	5714.0	39069.0	
	Subsequent	10	5.8	190	26	1	190	100	10.0	100	632.9	
	SSTL	32.0	6631.0	2600.0	21680.0	1000.0	66.0	773.0	263.0	14286.0	47231.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	124.0	0.0	0.0	0.0	124.0	
MW-18	Initial	1900.0	7200.0	630.0	8300.0	340.0	370.0	4900.0	70.0	5000.0	28710.0	
	SSTL	40.0	19326.0	3700.0	21680.0	4280.0	348.0	938.0	4869.0	54462.0	109743.0	
	Initial > SSTL	1860.0	0.0	0.0	0.0	0.0	22.0	3962.0	0.0	0.0	5844.0	
	Subsequent	310	1800	300	4100	6.3	140	190	10.00	100	6956.3	
	SSTL	40.0	19326.0	3700.0	21680.0	4280.0	348.0	938.0	4869.0	54462.0	109743.0	
	Subsequent > SSTL	270.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	270.0	
MW-19	Initial	300.0	1800.0	490.0	12000.0	60.0	900.0	610.0	600.0	5000.0	21860.0	
	SSTL	54.0	11081.0	3700.0	21680.0	16080.0	86.0	1066.0	320.0	26814.0	80880.0	
	Initial > SSTL	246.0	0.0	0.0	0.0	0.0	814.0	0.0	180.0	0.0	1240.0	
	Subsequent	3200	21000	1100	20000	130	950	6700	1000.00	10000	64080.0	
	SSTL	54.0	11081.0	3700.0	21680.0	16080.0	86.0	1066.0	320.0	26814.0	80880.0	
	Subsequent > SSTL	3146.0	9919.0	0.0	0.0	0.0	864.0	5635.0	680.0	0.0	20244.0	
MW-20	Initial	412.0	2930.0	728.0	8820.0	88.7	917.0	2850.0	200.0	2000.0	18945.7	
	SSTL	83.0	2930.0	728.0	8820.0	88.7	106.0	1403.0	200.0	2000.0	16360.7	
	Initial > SSTL	329.0	0.0	0.0	0.0	0.0	709.0	1447.0	0.0	0.0	2485.0	
	Subsequent	390.0	10000.0	2000.0	26000.0	80.0	1500.0	2500.0	500.0	5000.0	47970.0	
	SSTL	83.0	2930.0	728.0	8820.0	88.7	106.0	1403.0	200.0	2000.0	16360.7	
	Subsequent > SSTL	307.0	7070.0	1272.0	17180.0	0.0	1392.0	1097.0	300.0	3000.0	31618.0	
MW-22	Initial	3300.0	17000.0	2900.0	20000.0	1000.0	840.0	6200.0	130.0	20000.0	71170.0	
	SSTL	95.0	17000.0	2900.0	20000.0	1000.0	112.0	1468.0	130.0	20000.0	62701.0	
	Initial > SSTL	3210.0	0.0	0.0	0.0	0.0	728.0	4731.0	0.0	0.0	8469.0	
	Subsequent	2100	13000	1100	19000	900	2500	50000	9000.00	90000	186200.0	
	SSTL	95.0	17000.0	2900.0	20000.0	1000.0	112.0	1468.0	130.0	20000.0	62701.0	
	Subsequent > SSTL	2010.0	0.0	0.0	0.0	0.0	2388.0	48531.0	4870.0	30000.0	87799.0	
MW-23	Initial	4200.0	19000.0	680.0	19000.0	120.0	1100.0	5900.0	500.0	5000.0	52700.0	
	SSTL	72.0	14880.0	3700.0	21680.0	33368.0	100.0	1279.0	359.0	38475.0	113913.0	
	Initial > SSTL	4128.0	1120.0	0.0	0.0	0.0	1000.0	4621.0	141.0	0.0	11010.0	
	Subsequent	400	1500	120	3800	6.3	370	1000	10	100	7306.3	
	SSTL	72.0	14880.0	3700.0	21680.0	33368.0	100.0	1279.0	359.0	38475.0	113913.0	
	Subsequent > SSTL	328.0	0.0	0.0	0.0	0.0	270.0	0.0	0.0	0.0	598.0	
MW-25	Initial	5000.0	3000.0	1900.0	23000.0	5000.0	5000.0	100000.0	10000.0	100000.0	252900.0	
	SSTL	104.0	3000.0	1900.0	23000.0	5000.0	121.0	1612.0	415.0	60494.0	95646.0	
	Initial > SSTL	4896.0	0.0	0.0	0.0	0.0	4879.0	98388.0	9585.0	39506.0	157254.0	NS June 2017 - Results from 10/19/2016
	Subsequent	8.8	120	230	3400	1	450	100	10	100	4419.8	
	SSTL	104.0	3000.0	1900.0	23000.0	5000.0	121.0	1612.0	415.0	60494.0	95646.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	329.0	0.0	0.0	0.0	329.0	

Facility Name:	Handy Pantry #65 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address:	2367 Taylor Street Columbia, South Carolina	Crawford Project No.	7.0647

Site Specific Target Level Summary

Well ID	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-31	Initial	57.0	90.0	520.0	250.0	12.0	210.0	510.0	50.0	500.0	2199.0	
	SSTL	51.0	90.0	520.0	250.0	12.0	210.0	510.0	50.0	500.0	2193.0	
	Initial > SSTL	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0	
	Subsequent	1.0	1.0	1.0	1.0	1.0	5.0	100.0	10.0	100.0	220.0	
	SSTL	51.0	90.0	520.0	250.0	12.0	210.0	510.0	50.0	500.0	2193.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-33	Initial	520.0	7200.0	1500.0	7200.0	500.0	410.0	3200.0	1000.0	10000.0	31530.0	
	SSTL	53.0	7200.0	1500.0	7200.0	500.0	410.0	1138.0	1000.0	10000.0	28999.0	
	Initial > SSTL	467.0	0.0	0.0	0.0	0.0	0.0	2064.0	0.0	0.0	2531.0	
	Subsequent	60	250	100	1450	1	210	860	10.00	100	3011.0	
	SSTL	53.0	7200.0	1500.0	7200.0	500.0	410.0	1138.0	1000.0	10000.0	28868.0	
	Subsequent > SSTL	27.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.0	
MW-35	Initial	4400.0	2000.0	1700.0	3600.0	300.0	590.0	5300.0	51.0	5000.0	22831.0	
	SSTL	56.0	2000.0	1700.0	3600.0	300.0	542.0	1181.0	51.0	5000.0	14330.0	
	Initial > SSTL	4344.0	0.0	0.0	0.0	0.0	38.0	4119.0	0.0	0.0	8501.0	
	Subsequent	3100	3600	2400	4700	58	790	3000	29	100	17665.0	
	SSTL	56.0	2000.0	1700.0	3600.0	300.0	542.0	1181.0	51.0	5000.0	14330.0	
	Subsequent > SSTL	3044.0	1600.0	700.0	1200.0	0.0	238.0	1819.0	0.0	0.0	8801.0	
MW-37	Initial	240.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1959.0	
	SSTL	90.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1809.0	
	Initial > SSTL	150.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0	
	Subsequent	1	1	1	1	1	5	100	10	100	220.0	
	SSTL	90.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1809.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-39	Initial	13.0	1300.0	460.0	4200.0	250.0	330.0	5000.0	500.0	5000.0	17053.0	
	SSTL	13.0	1300.0	460.0	4200.0	250.0	330.0	1607.0	500.0	5000.0	13660.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	3393.0	0.0	0.0	3393.0	
	Subsequent	1	1	1	1	1	5	100	10	100	220.0	
	SSTL	13.0	1300.0	460.0	4200.0	250.0	330.0	1607.0	500.0	5000.0	13660.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-40	Initial	290.0	2900.0	650.0	7100.0	500.0	530.0	10000.0	1000.0	10000.0	32970.0	
	SSTL	113.0	2900.0	650.0	7100.0	500.0	530.0	1875.0	1000.0	10000.0	24668.0	
	Initial > SSTL	177.0	0.0	0.0	0.0	0.0	0.0	8124.0	0.0	0.0	8301.0	
	Subsequent	22	5.1	600	98	1	480	100	10	100	1416.1	
	SSTL	113.0	2900.0	650.0	7100.0	500.0	530.0	1878.0	1000.0	10000.0	24669.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-41	Initial	260.0	1000.0	1100.0	1000.0	1000.0	420.0	20000.0	2000.0	20000.0	46780.0	
	SSTL	257.0	1000.0	1100.0	1000.0	1000.0	420.0	3234.0	2000.0	20000.0	30011.0	
	Initial > SSTL	3.0	0.0	0.0	0.0	0.0	0.0	16766.0	0.0	0.0	16769.0	
	Subsequent	1	1	1	1	1	5	100	10	100	220.0	
	SSTL	257.0	1000.0	1100.0	1000.0	1000.0	420.0	3234.0	2000.0	20000.0	30011.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

Table 3

Facility Name:	Handy Pantry #65 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address:	2367 Taylor Street Columbia, South Carolina	Crawford Project No.	7.0647

Site Specific Target Level Summary

Well ID	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-54	Initial	5.0	5.0	5.0	5.0	5.0	5.0	100.0	10.0	100.0	240.0	NS June 2017 - Results from 10/20/2016
	SSTL	5.0	5.0	5.0	5.0	5.0	5.0	110.0	2.0	14.0	156.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	86.0	94.0	
	Subsequent	1	1	1	1	2	5	130	10	100	251.0	
	SSTL	5.0	5.0	5.0	5.0	5.0	5.0	110.0	2.0	14.0	156.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	20.0	8.0	86.0	114.0	
MW-88	Initial	4.8	25.0	20.0	25.0	93.0	11.0	1800.0	15.0	100.0	2093.8	NS June 2017 - Results from 11/4/2015
	SSTL	4.8	25.0	20.0	25.0	51.0	11.0	279.0	15.0	100.0	530.8	
	Initial > SSTL	0.0	0.0	0.0	0.0	42.0	0.0	1521.0	0.0	0.0	0.0	
	Subsequent	1	1	1	1	1	5	100	10	100	220.0	
	SSTL	1.0	1.0	1.0	1.0	1.0	5.0	100.0	10.0	100.0	220.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-85	Initial	420.0	398.0	234.0	262.0	16.4	168.0	648.0	50.0	500.0	2698.4	Unable to Locate - Paved Over
	SSTL	326.0	398.0	234.0	262.0	16.4	168.0	648.0	50.0	500.0	2602.4	
	Initial > SSTL	94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Subsequent	Unable to Locate - Paved Over										
	SSTL	326.0	398.0	234.0	262.0	16.4	168.0	648.0	50.0	500.0	2602.4	
	Subsequent > SSTL	Unable to Locate - Paved Over										
MW-5AR	Initial	9200.0	1000.0	1400.0	4400.0	160.0	810.0	1300.0	1000.0	10000.0	29270.0	
	SSTL	83.0	1000.0	1400.0	4400.0	160.0	108.0	1300.0	381.0	10000.0	18832.0	
	Initial > SSTL	9117.0	0.0	0.0	0.0	0.0	702.0	0.0	619.0	0.0	10438.0	
	Subsequent	1900	92	330	3400	2.3	390	220	13.00	100	6447.3	
	SSTL	83.0	1000.0	1400.0	4400.0	160.0	108.0	1300.0	381.0	10000.0	18832.0	
	Subsequent > SSTL	1817.0	0.0	0.0	0.0	0.0	282.0	0.0	0.0	0.0	2099.0	
PW-1R	Initial	480.0	3400.0	320.0	9200.0	50.0	250.0	710.0	500.0	5000.0	19890.0	
	SSTL	58.0	11928.0	3700.0	21699.0	290.0	19288.0	1114.0	330.0	29344.0	87742.0	
	Initial > SSTL	422.0	0.0	0.0	0.0	0.0	0.0	0.0	170.0	0.0	592.0	
	Subsequent	380.0	7900.0	810.0	9100.0	80.0	320.0	5000.0	500.0	5000.0	28780.0	
	SSTL	58.0	11928.0	3700.0	21699.0	290.0	19288.0	1114.0	330.0	29344.0	87742.0	
	Subsequent > SSTL	322.0	0.0	0.0	0.0	0.0	0.0	3886.0	170.0	0.0	4378.0	
DW-3	Initial	2600.0	19000.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	61020.0	
	SSTL	45.0	8470.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	47936.0	
	Initial > SSTL	2555.0	10530.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13085.0	
	Subsequent	3400	8690	1600	5200	120	310	3400	370.000	5000	28000.0	
	SSTL	45.0	8470.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	47935.0	
	Subsequent > SSTL	3355.0	190.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3485.0	
SW-1	Initial	190.0	2.8	23.0	36.0	17.0	6.5	340.0	2.6	23.0	580.9	NS June 2017 - Results from 5/18/2016
	SSTL	5.0	2.8	23.0	36.0	17.0	6.5	240.0	2.6	23.0	356.9	
	Initial > SSTL	125.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	225.0	
	Subsequent	130	18	65	62	12	16	430	10	100	851.0	
	SSTL	5.0	2.8	23.0	36.0	17.0	6.5	240.0	2.6	23.0	356.9	
	Subsequent > SSTL	125.0	15.2	30.0	56.0	0.0	9.5	190.0	7.4	77.0	510.1	

SSTL = Site Specific Target Level
RBSL= Risk Based Screening Levels
MBE= Methyl Tert-Butyl Ether
n/a = not applicable
0.0 - Excluded from Calculations

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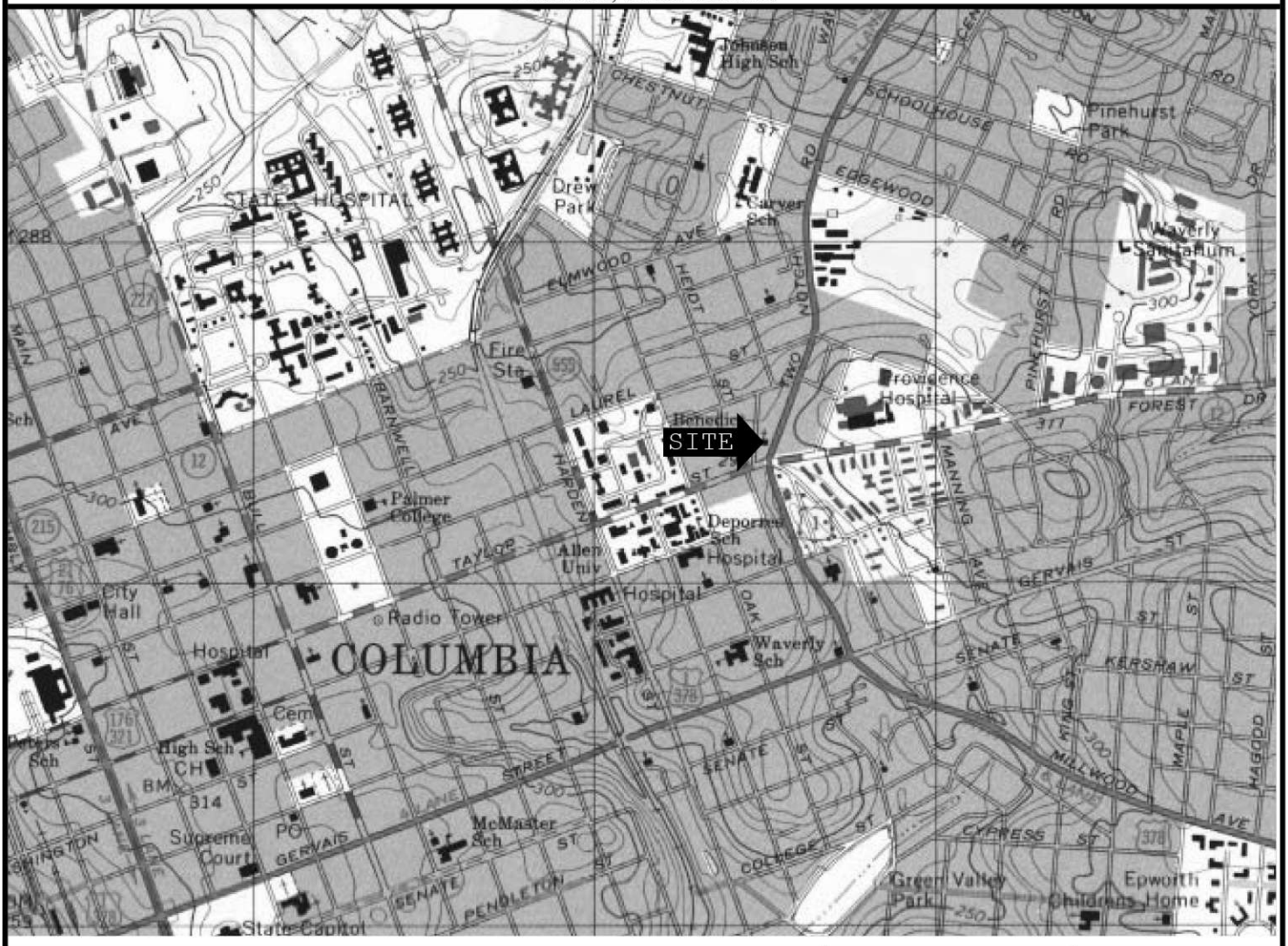
Initial>SSTL	421858.00
Subsequent>SSTL	181984.40
COC Reduction	56.85%

Figures

Figure 1: Topographic Map
Figure 2: Site Facility Base Map
Figure 3: Chemicals of Concern Map
Figure 4: Groundwater Elevation Map

FIGURE 1

Site Location Map
Handy Pantry #65 / University Mart / Clouds Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina



CRAWFORD ENVIRONMENTAL SERVICES

1701 Shenandoah Avenue, NW
Roanoke Virginia, 24017

540-343-6256 (office) 540-343-6259 (fax)

NORTH COLUMBIA, SOUTH CAROLINA

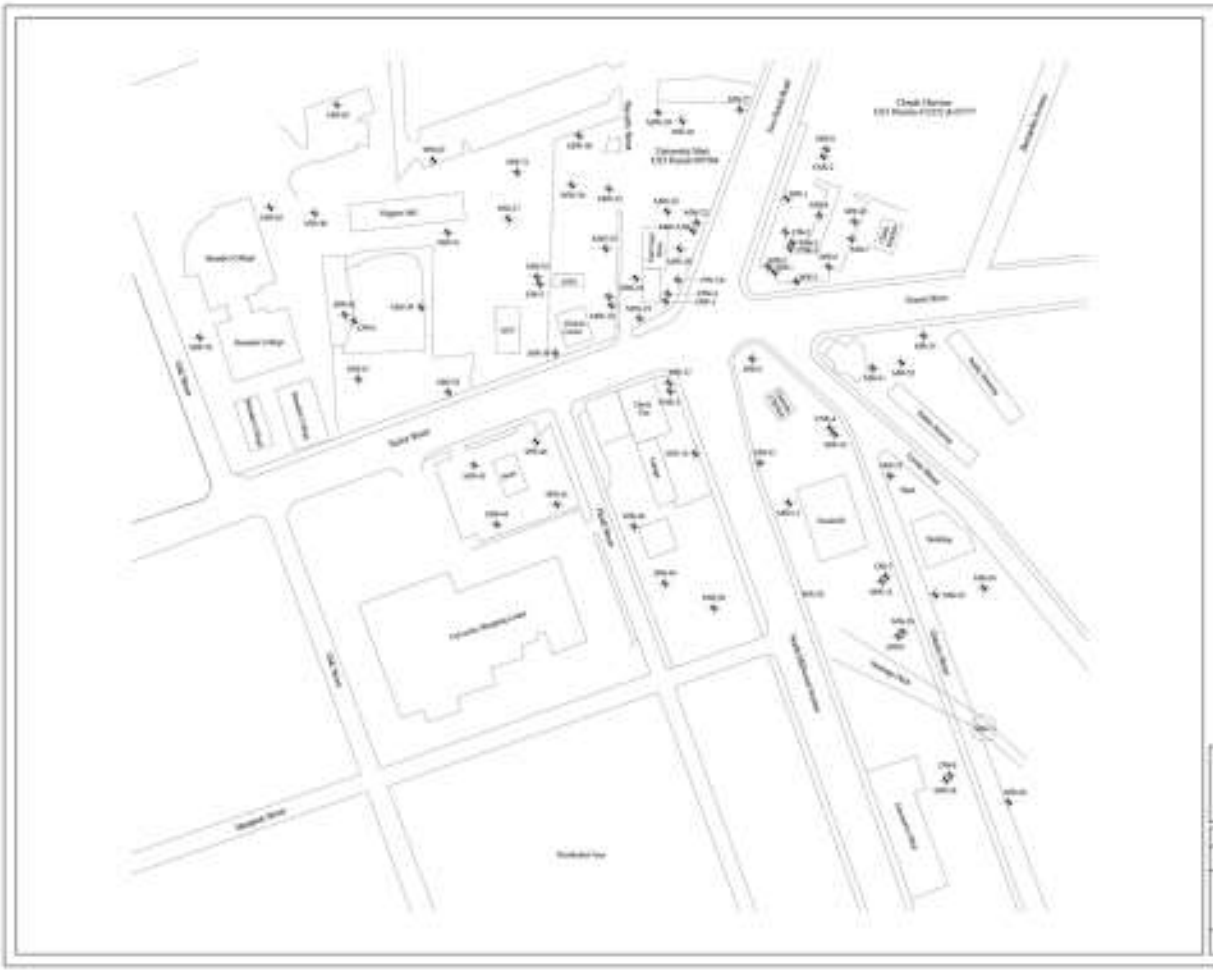
Source: U.S.G.S. Topographic Map of the Columbia North Quadrangle, Virginia, 7.5 Minute Series (1977, revised 1988)
Scale: 1:24,000 Contour Interval: 20 Feet
Vertical Datum: National Geodetic Vertical Datum 1929
Horizontal Datum: North American Datum1927

Project: CASE Report

Client: SCDHEC

CES Job #: 7.0547

Latitude:
034°00'42.72"N
Longitude:
081°01'00.13"W



Legend

Monitoring Well (MW) Location

N

0 75' 150' 300'

1 inch equals 150 feet

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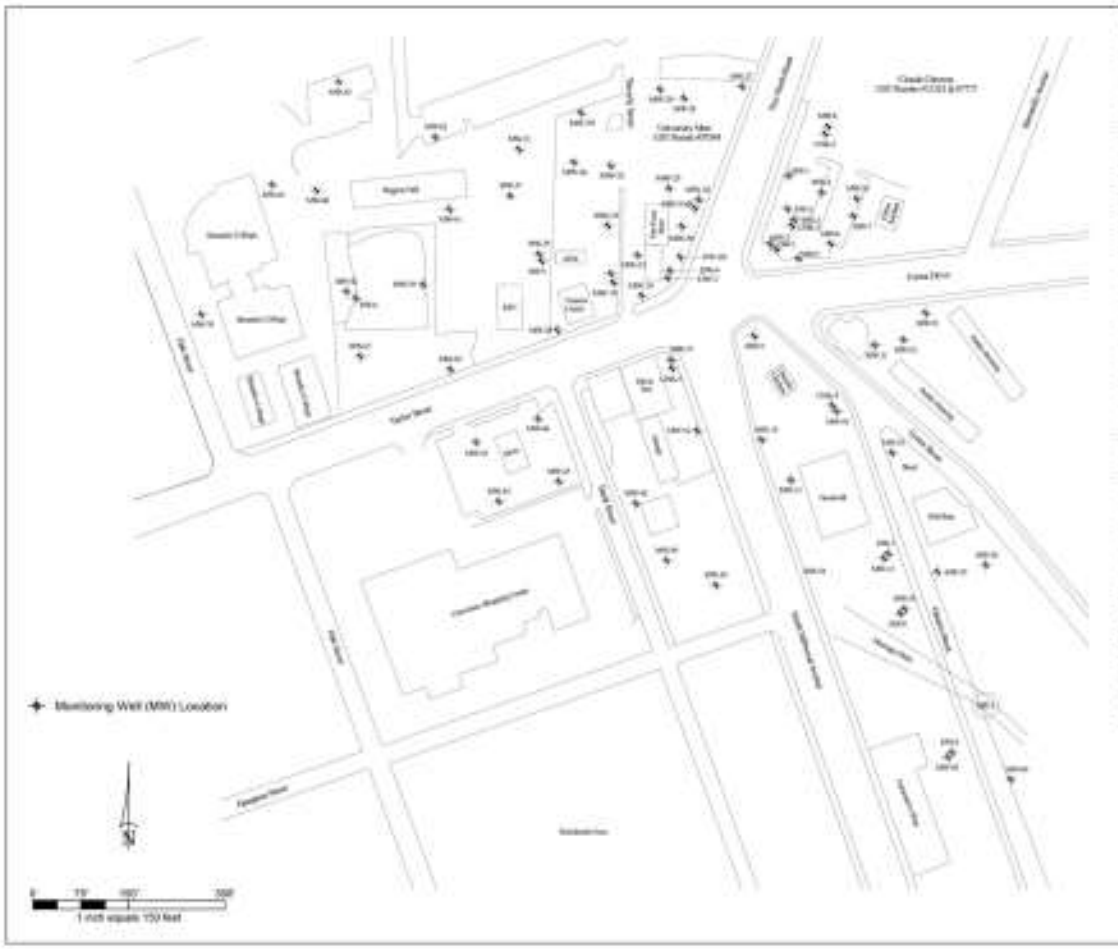
Figure 2

Cloud's Chevron
Site Facility Base Map

June 2017 Case Report



Groundwater Laboratory Analytical Result Summary

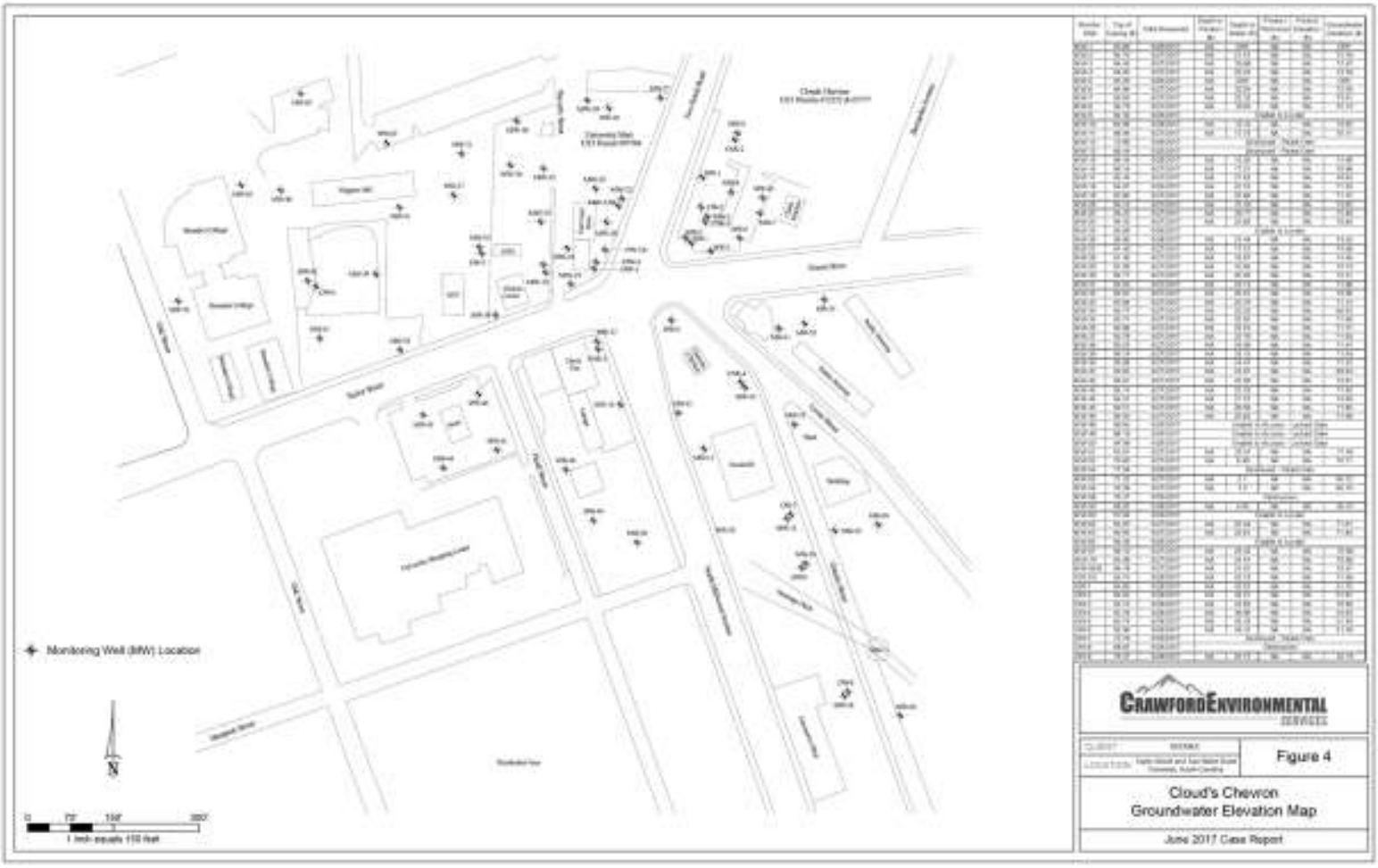
CRAWFORD ENVIRONMENTAL SERVICES

CLIENT:	[illegible]
LOCATION:	[illegible]

Figure 3

Cloud's Chevron
Groundwater Chemicals of Concern Map

June 2017 Case Report



CRAWFORD ENVIRONMENTAL SERVICES

Figure 4

Cloud's Chevron
Groundwater Elevation Map

June 2017 Case Report

Appendix A

Groundwater Laboratory Analytical Report

&

Chain-of-Custody Documentation

ACCESS ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT

Crawford Environmental Services
15 Church Ave, SW
Roanoke VA 24011

ATTENTION
Dan Fisher

PROJECT ID
Clouds Exxon

LABORATORY REPORT NUMBER
1706R80

DATE
July 07, 2017

Primary Data Review By

Chris Pafford
Project Manager, AES

Secondary Data Review By

Ashley Amick
Project Manager, Access Analytical
aamick@axs-inc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Analytical Environmental Services Inc. (AES Inc), 3080 Presidential Drive, Atlanta, GA 30340.**
- **AES is SCDHEC certified laboratory # 98016, NCDENR certified lab # 562, GA certified lab # FL-E87582, NELAP certified laboratory # E87582**
- Local support services for this project are provided by Access Analytical, Inc. Access Analytical is a representative of AES serving client in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll fee at 883.315.4243

Access Analytical - Chain of Custody Record

LAB USE ONLY

Sales Order # _____ PO # _____ Access Quote # _____

Project Work Order # 1706R80

Laboratory ID: _____

Company Name: CRAWFORD ENVIRONMENTAL

Report To: DAN Fisher

Address: 1701 Shenandoah Ave

City: Roanoke State: VA Zip: 24011

Phone: 540-343-6256 Fax: 540-3436259

Email: DFisher@crawfordenvironmental.com

Project ID: Clouds Exxon

Sampled By: Billy Ewing

Preservative (*see codes): 2

Container Type (*see codes): G

REQUESTED LAB ANALYSIS: BTEX/N/M/MT BE/oxyB

ACCESS ANALYTICAL, INC.

7478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4303

www.axs-inc.com

*Preservative Codes (place corresponding # in block above analysis field): 0 = None, 1 = HCL, 2 = HNO3, 3 = H2SO4, 4 = NaOH, 5 = Na2S2O3, 6 = Method 8038 set w/ NaHSO4 & ON-OH, 7 = NaOH/ZnOAC, 8 = H3PO4

*Matrix Codes (place corresponding code in matrix column): DW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix (see codes)	Program Area (see codes)	TOTAL # of containers	BTEX/N/M/MT BE/oxyB	NOTES / COMMENTS (If sample is a composite please use space below to note manifolds times & dates)
mw 15	6-28-17	750	G	GW	UST	3	3	
mw 59		800						
mw 10.		740						
mw 26		730						
DW 9.		825						
DW -1		855						
DW -2.		935						
DW -3		1005						
DW -4.		1050						
PW 1R		1115						

Turnaround Time:

X Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:
X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (hh:mm)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C)	
[signature]	JHS	6-28-17	1420	✓Y ___N	1.0 (°C)	___(N/A)
JHS	FedEx	6-28-17	1700	✓Y ___N	___(°C)	___(N/A)
	[signature] (FedEx)	6/29/17	10:25AM	✓Y ___N	4.8 (°C)	___(N/A)
				___Y ___N	3.4 (°C)	___(N/A)

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Access Analytical - Chain of Custody Record

LAB USE ONLY

Sales Order #: _____ PO #: _____ Access Quote #: _____ Project Work Order #: 170085

Laboratory ID: _____

Company Name: Crawford Engineering — Preservative (*see codes): 2 — Container Type (*see codes): G

Report To: D Fisher

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Ferry

Sampled By: BF

1. REQUESTED LAB ANALYSIS: BTEX/MTBE/naphthalene

| Sample ID/Description | Date Collected | Time Collected | Type (grab = G, composite = C) | Matrix (see codes) | Program (RCRA, CWA, SDWA, other) | TOTAL # of containers | | |

LAB USE ONLY

Access Analytical - Chain of Custody Record

Project Work Order # 1706R80

Sales Order # _____ PO # _____ Access Quote # _____ Laboratory ID: _____

Company Name: CRAW FORD EXVIRO

Report To: D Fisher

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Exxon

Sampled By: B.E.

Preservative (*see codes): 2

Container Type (*see codes): 2

↓ REQUESTED LAB ANALYSIS: ↓ BTEX/N/M/MTBE/OXYS

ACCESS ANALYTICAL, INC.

7478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4303

www.aas-inc.com

*Preservative Codes (place corresponding # in block above analysis field): 0 = None, 1 = HCL, 2 = HNO3, 3 = H2SO4, 4 = NaOH, 5 = Na2S2O3, 6 = Method 5035 set w/ NaHSO4 & CH3OH, 7 = NaOH/ZnOAC, 8 = H3PO4

*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, WI = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewater), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	BTEX/N/M/MTBE/OXYS	NOTES / COMMENTS (If sample is a composite please use space below to note start/finish times & dates)
mw 8	5-27-17	1350	G	GW	OT	3	3	
mw 4		1340						
mw 3		1330						
mw 6		1250						
mw 2		1320						
mw 7		1240						
mw 45		1230						
mw 44		1220						
mw 43		1210						
mw 46		1200						

Turnaround Time:

X Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:

X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (hours)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C)	
[signature]	JHS	6-28-17	1420	✓ Y ___ N	1.0 (°C)	___ (N/A)
JHS	FedEx	6-28-17	1700	✓ Y ___ N	___ (°C)	___ (N/A)
	[signature]	6/29/17	10:25AM	✓ Y ___ N	4.8 (°C)	___ (N/A)
	(FedEX)			___ Y ___ N	3.4 (°C)	___ (N/A)

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Access Analytical - Chain of Custody Record

LAB USE ONLY

Sales Order # _____ PO # _____ Access Quote # _____

Project Work Order # 1010280

Laboratory ID: _____

Company Name: CRAWFORD ENVIRO

Report To: D Fisher

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Exxon

Sampled By: BE

Preservative (*see codes): 2

Container Type (*see codes): G

1 REQUESTED LAB ANALYSIS: 1

BTEX/N/M/MTBE/OXYS

ACCESS ANALYTICAL, INC.

7478 Carlisle Street
Inno, SC 29063

Phone: (803) 781-4243
Fax: 781-4303

www.axs-inc.com

*Preservative Codes (place corresponding # in block above analysis field): 0 = None, 1 = HCL, 2 = HNO3, 3 = H2SO4, 4 = NaOH, 5 = Na2S2O3, 6 = Method 5035 set w/ NaHSO4 & CH3OH, 7 = NaOH/ZnOAC, 8 = H3PO4

*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Sample ID/Description	Date Collected:	Time Collected:	Type (grab or composite)	Matrix (see codes)	Program Area (see codes)	TOTAL # of containers	BTEX/N/M/MTBE/OXYS	NOTES / COMMENTS (If sample is a composite please use space below to note smallest time & date)
MW 16	6-27-17	1100	G	GW	CST	3	3	
MW 17		1050						
MW 22		1130						
MW 5AR		1120						
MW 20		1110						
MW 19		1040						
MW 23		1020						
~~Dup 3~~		~~[illegible]~~						
MW 62		1030						
MW 63		1010						

Turnaround Time:

X Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:

X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm dd yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C)	
[signature]	JHS	6-28-17	1420	✓ Y ___ N	1.0 (°C)	___ (N/A)
JHS	FedEx	6/28/17	1700	✓ Y ___ N	___ (°C)	___ (N/A)
	[signature] (FedEx)	6/29/17	10:25AM	✓ Y ___ N	4.8 (°C)	___ (N/A)
				___ Y ___ N	3.4 (°C)	___ (N/A)

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Access Analytical - Chain of Custody Record

LAB USE ONLY

Sales Order # _____ PO # _____ Access Quote # _____

Project Work Order # 1706R80

Laboratory ID: _____

Company Name: Crawford Enviro.

Report To: Dfisher

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Exxon

Sampled By: BE

Preservative: (*use codes) 2

Container Type: (*use codes) G

REQUESTED LAB ANALYSIS: BTEX/N/M/MTBE/oxys

ACCESS ANALYTICAL, INC.

7478 Carlisle Street
Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4303

www.axs-inc.com

*Preservative Codes (place corresponding # in block above analysis field): 0 = None, 1 = HCL, 2 = HNO3, 3 = H2SO4, 4 = NaOH, 5 = Na2S2O3, 6 = Method 5035 set w/ NaHSO4 & CH3OH, 7 = NaOH/ZnOAC, 8 = H3PO4

*Matrix Codes (place corresponding code in matrix column): GW = ground water, WW = waste water, DW = drinking water, S = soil, SL = sludge, A = air, IW = industrial waste, WO = waste oil, OT = other (specify in comments section)

*Program Area Codes: CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Sample ID/Description	Date Collected:	Time Collected:	Type (grab or composite)	Matrix (use codes)	Program Area (use codes)	TOTAL # of containers	BTEX/N/M/MTBE/oxys	NOTES / COMMENTS (Example in a composite phase use space below to note start/finish times & dates)
mw 70	5224	1000	G	GW	OT	3	3	
mw 40		950						
mw 41		940						
mw 39		930						
mw 42		700						
mw 67		710						
mw 38		720						
mw 31		730						
mw 37		740						
mw 35		750						

Turnaround Time:

X Standard
___ RUSH*
*Date Required: _____
(For rush work, results emailed/faxed by end of business day on date required)

Project Location:

X SC
___ NC
___ Other
(specify) _____

Relinquished By:	Received By:	Date (mm dd yy)	Time (HHH)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C)	
[signature]	JHS	6-28-17	1420	✓ Y ___ N	1.0 (°C)	___ (N/A)
JHS	FedEx	6-28-17	1700	✓ Y ___ N	___ (°C)	___ (N/A)
	[signature]	6/29/17	10:25 AM	✓ Y ___ N	4.8 (°C)	___ (N/A)
	(FedEx)			___ Y ___ N	3.4 (°C)	___ (N/A)

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Access Analytical - Chain of Custody Record

LAB USE ONLY

Sales Order # _____ PO # _____ Access Quote # _____

Project Work Order # 170672

Laboratory ID: _____

Company Name: Crawford Consulting

Report To: D. Fisher

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Exxon

Sampled By: BF

Preservative (*see codes): 2

Container Type (*see codes): 6

1 REQUESTED LAB ANALYSIS: 1

BTEX/MTBE/5m TBA by 8260

| Sample ID/Description | Date Collected | Time Collected | Type: (grab or composite) | Matrix (see codes) | Program Area (see codes) | TOTAL # of containers | | |

Access Analytical - Chain of Custody Record

LAB USE ONLY

Project Work Order # 170628

Sales Order # _____ PO # _____ Access Quote # _____ Laboratory ID: _____

Company Name: CRAWFORD EXCAVATING

Report To: D Asher

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Exca

Sampled By: BE

Preservative (*see codes): 2

Container Type (*see codes):

1 REQUESTED LAB ANALYSIS: BTEX/V/m/mTBE/Naphth

| Sample ID/Description | Date Collected: | Time Collected: | Type: (grab = g, composite = c) | Matrix (see codes) | Program Area (see codes) | Total # of containers | | |

Client: Crawford Environmental Services
Project: Clouds Exxon
Lab ID: 1706R80

Case Narrative

Sample Receiving Nonconformance:

Samples 1706R81-011A through -014A listed as collected 05-28-17 on the Chain of Custody (COC) were labeled 06-28-17. Samples were logged in using the collection date on the bottle labels. Samples 1706R81-015A through -030A, and -041 through -061A listed as 05-27-17 on the COC were labeled 06-27-17. Samples were logged in using the collection date listed on the bottle label.

Sample "DUP-3" was received and listed on Chain of Custody however it was crossed out by the client. The laboratory proceeded with analysis at the request of Angela Martin via email 06-30-17

1 of 3 vials for "MW 55" listed the sample ID as "MW 56". Sample was identified using the collection date and time and was logged in using the information present on the COC.

All samples were analyzed to include 1, 2 - Dichloroethane at the request of Angela Martin via email 06-30-17.

Volatiles Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1706R80-008, -010, -011, -013, -023, -033, -035, & -036 required dilution during preparation and/or analysis resulting in elevated reporting limits.

Percent recovery for the internal standard compounds Pentafluorobenzene, 1,4-Difluorobenzene, Chlorobenzene-d5 and 1,4-Dichlorobenzene-d4 on samples 1706R80-016A, -034A, & -052A was outside control limits biased low due to suspected matrix interference.

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW15
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 7:50:00 AM
Lab ID:	1706R80-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/03/2017 16:20	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	07/03/2017 16:20	NP
Ethylbenzene	320		2.6	10	ug/L	244942	10	07/03/2017 16:44	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	07/03/2017 16:20	NP
Naphthalene	880		9.3	50	ug/L	244942	10	07/03/2017 16:44	NP
Toluene	300		3.9	10	ug/L	244942	10	07/03/2017 16:44	NP
Xylenes, Total	7500		15	20	ug/L	244942	20	07/05/2017 15:34	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	244942	20	07/05/2017 15:34	NP
Surr: 4-Bromofluorobenzene	97		0	70-130	%REC	244942	10	07/03/2017 16:44	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	244942	1	07/03/2017 16:20	NP
Surr: Dibromofluoromethane	87.5		0	70-130	%REC	244942	1	07/03/2017 16:20	NP
Surr: Dibromofluoromethane	92.9		0	70-130	%REC	244942	10	07/03/2017 16:44	NP
Surr: Dibromofluoromethane	93.1		0	70-130	%REC	244942	20	07/05/2017 15:34	NP
Surr: Toluene-d8	98.9		0	70-130	%REC	244942	1	07/03/2017 16:20	NP
Surr: Toluene-d8	100		0	70-130	%REC	244942	10	07/03/2017 16:44	NP
Surr: Toluene-d8	98.7		0	70-130	%REC	244942	20	07/05/2017 15:34	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/03/2017 16:20	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/03/2017 16:20	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/03/2017 16:20	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/03/2017 16:20	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/03/2017 16:20	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/03/2017 16:20	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/03/2017 16:20	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/03/2017 16:20	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 59
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 8:00:00 AM
Lab ID:	1706R80-002	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/05/2017 12:22	NP
Benzene	2400		7.5	20	ug/L	244942	20	06/30/2017 20:45	NP
Ethylbenzene	2000		5.1	20	ug/L	244942	20	06/30/2017 20:45	NP
Methyl tert-butyl ether	43		0.45	1.0	ug/L	244942	1	07/05/2017 12:22	NP
Naphthalene	490		19	100	ug/L	244942	20	06/30/2017 20:45	NP
Toluene	77		0.39	1.0	ug/L	244942	1	07/05/2017 12:22	NP
Xylenes, Total	3400		15	20	ug/L	244942	20	06/30/2017 20:45	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	244942	1	07/05/2017 12:22	NP
Surr: 4-Bromofluorobenzene	91.5		0	70-130	%REC	244942	20	06/30/2017 20:45	NP
Surr: Dibromofluoromethane	89.8		0	70-130	%REC	244942	1	07/05/2017 12:22	NP
Surr: Dibromofluoromethane	93.9		0	70-130	%REC	244942	20	06/30/2017 20:45	NP
Surr: Toluene-d8	99		0	70-130	%REC	244942	1	07/05/2017 12:22	NP
Surr: Toluene-d8	95.6		0	70-130	%REC	244942	20	06/30/2017 20:45	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/05/2017 12:22	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/05/2017 12:22	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/05/2017 12:22	NP
Isopropyl ether	130		3.8	10	ug/L	244942	1	07/05/2017 12:22	NP
tert-Amyl alcohol	3600		560	2000	ug/L	244942	20	06/30/2017 20:45	NP
tert-Amyl methyl ether	32		3.4	10	ug/L	244942	1	07/05/2017 12:22	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/05/2017 12:22	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/05/2017 12:22	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 10
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 7:40:00 AM
Lab ID:	1706R80-003	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 01:32	NP
Benzene	27		0.37	1.0	ug/L	244942	1	07/01/2017 01:32	NP
Ethylbenzene	17		0.26	1.0	ug/L	244942	1	07/01/2017 01:32	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	07/01/2017 01:32	NP
Naphthalene	120		0.93	5.0	ug/L	244942	1	07/01/2017 01:32	NP
Toluene	3.3		0.39	1.0	ug/L	244942	1	07/01/2017 01:32	NP
Xylenes, Total	59		0.77	1.0	ug/L	244942	1	07/01/2017 01:32	NP
Surr: 4-Bromofluorobenzene	88.9		0	70-130	%REC	244942	1	07/01/2017 01:32	NP
Surr: Dibromofluoromethane	97.4		0	70-130	%REC	244942	1	07/01/2017 01:32	NP
Surr: Toluene-d8	101		0	70-130	%REC	244942	1	07/01/2017 01:32	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/01/2017 01:32	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/01/2017 01:32	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/01/2017 01:32	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/01/2017 01:32	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/01/2017 01:32	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/01/2017 01:32	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/01/2017 01:32	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/01/2017 01:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 26
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 7:30:00 AM
Lab ID:	1706R80-004	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 01:56	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 01:56	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244942	1	07/01/2017 01:56	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	07/01/2017 01:56	NP
Naphthalene	1.1	J	0.93	5.0	ug/L	244942	1	07/01/2017 01:56	NP
Toluene	BRL		0.39	1.0	ug/L	244942	1	07/01/2017 01:56	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244942	1	07/01/2017 01:56	NP
Surr: 4-Bromofluorobenzene	87.7		0	70-130	%REC	244942	1	07/01/2017 01:56	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	244942	1	07/01/2017 01:56	NP
Surr: Toluene-d8	96		0	70-130	%REC	244942	1	07/01/2017 01:56	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/01/2017 01:56	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/01/2017 01:56	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/01/2017 01:56	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/01/2017 01:56	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/01/2017 01:56	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/01/2017 01:56	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/01/2017 01:56	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/01/2017 01:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 9
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 8:25:00 AM
Lab ID:	1706R80-005	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 02:19	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 02:19	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244942	1	07/01/2017 02:19	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	07/01/2017 02:19	NP
Naphthalene	BRL		0.93	5.0	ug/L	244942	1	07/01/2017 02:19	NP
Toluene	BRL		0.39	1.0	ug/L	244942	1	07/01/2017 02:19	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244942	1	07/01/2017 02:19	NP
Surr: 4-Bromofluorobenzene	83.2		0	70-130	%REC	244942	1	07/01/2017 02:19	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	244942	1	07/01/2017 02:19	NP
Surr: Toluene-d8	99.2		0	70-130	%REC	244942	1	07/01/2017 02:19	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/01/2017 02:19	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/01/2017 02:19	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/01/2017 02:19	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/01/2017 02:19	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/01/2017 02:19	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/01/2017 02:19	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/01/2017 02:19	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/01/2017 02:19	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-1
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 8:55:00 AM
Lab ID:	1706R80-006	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 02:43	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 02:43	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244942	1	07/01/2017 02:43	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	07/01/2017 02:43	NP
Naphthalene	BRL		0.93	5.0	ug/L	244942	1	07/01/2017 02:43	NP
Toluene	BRL		0.39	1.0	ug/L	244942	1	07/01/2017 02:43	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244942	1	07/01/2017 02:43	NP
Surr: 4-Bromofluorobenzene	79.9		0	70-130	%REC	244942	1	07/01/2017 02:43	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	244942	1	07/01/2017 02:43	NP
Surr: Toluene-d8	98.5		0	70-130	%REC	244942	1	07/01/2017 02:43	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/01/2017 02:43	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/01/2017 02:43	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/01/2017 02:43	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/01/2017 02:43	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/01/2017 02:43	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/01/2017 02:43	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/01/2017 02:43	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/01/2017 02:43	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-2
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 9:35:00 AM
Lab ID:	1706R80-007	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 03:07	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 03:07	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244942	1	07/01/2017 03:07	NP
Methyl tert-butyl ether	2.4		0.45	1.0	ug/L	244942	1	07/01/2017 03:07	NP
Naphthalene	BRL		0.93	5.0	ug/L	244942	1	07/01/2017 03:07	NP
Toluene	BRL		0.39	1.0	ug/L	244942	1	07/01/2017 03:07	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244942	1	07/01/2017 03:07	NP
Surr: 4-Bromofluorobenzene	82.1		0	70-130	%REC	244942	1	07/01/2017 03:07	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	244942	1	07/01/2017 03:07	NP
Surr: Toluene-d8	98.9		0	70-130	%REC	244942	1	07/01/2017 03:07	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/01/2017 03:07	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/01/2017 03:07	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/01/2017 03:07	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/01/2017 03:07	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/01/2017 03:07	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/01/2017 03:07	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/01/2017 03:07	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/01/2017 03:07	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-3
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 10:05:00 AM
Lab ID:	1706R80-008	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		19	50	ug/L	244942	50	06/30/2017 17:59	NP
Benzene	3400		19	50	ug/L	244942	50	06/30/2017 17:59	NP
Ethylbenzene	1600		13	50	ug/L	244942	50	06/30/2017 17:59	NP
Methyl tert-butyl ether	120		22	50	ug/L	244942	50	06/30/2017 17:59	NP
Naphthalene	310		46	250	ug/L	244942	50	06/30/2017 17:59	NP
Toluene	8600		20	50	ug/L	244942	50	06/30/2017 17:59	NP
Xylenes, Total	5200		38	50	ug/L	244942	50	06/30/2017 17:59	NP
Surr: 4-Bromofluorobenzene	89.6		0	70-130	%REC	244942	50	06/30/2017 17:59	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	244942	50	06/30/2017 17:59	NP
Surr: Toluene-d8	98.9		0	70-130	%REC	244942	50	06/30/2017 17:59	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		1200	5000	ug/L	244942	50	06/30/2017 17:59	NP
Ethanol	BRL		2200	5000	ug/L	244942	50	06/30/2017 17:59	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	244942	50	06/30/2017 17:59	NP
Isopropyl ether	480	J	190	500	ug/L	244942	50	06/30/2017 17:59	NP
tert-Amyl alcohol	3400	J	1400	5000	ug/L	244942	50	06/30/2017 17:59	NP
tert-Amyl methyl ether	370	J	170	500	ug/L	244942	50	06/30/2017 17:59	NP
tert-Butyl Alcohol	BRL		670	5000	ug/L	244942	50	06/30/2017 17:59	NP
tert-Butyl formate	BRL		650	5000	ug/L	244942	50	06/30/2017 17:59	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DW-4
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 10:50:00 AM
Lab ID:	1706R80-009	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 03:31	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 03:31	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244942	1	07/01/2017 03:31	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	07/01/2017 03:31	NP
Naphthalene	BRL		0.93	5.0	ug/L	244942	1	07/01/2017 03:31	NP
Toluene	BRL		0.39	1.0	ug/L	244942	1	07/01/2017 03:31	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244942	1	07/01/2017 03:31	NP
Surr: 4-Bromofluorobenzene	83.3		0	70-130	%REC	244942	1	07/01/2017 03:31	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	244942	1	07/01/2017 03:31	NP
Surr: Toluene-d8	99.7		0	70-130	%REC	244942	1	07/01/2017 03:31	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/01/2017 03:31	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/01/2017 03:31	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/01/2017 03:31	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/01/2017 03:31	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/01/2017 03:31	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/01/2017 03:31	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/01/2017 03:31	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/01/2017 03:31	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	PW 1R
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 11:15:00 AM
Lab ID:	1706R80-010	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		19	50	ug/L	244942	50	06/30/2017 18:23	NP
Benzene	380		19	50	ug/L	244942	50	06/30/2017 18:23	NP
Ethylbenzene	510		13	50	ug/L	244942	50	06/30/2017 18:23	NP
Methyl tert-butyl ether	BRL		22	50	ug/L	244942	50	06/30/2017 18:23	NP
Naphthalene	320		46	250	ug/L	244942	50	06/30/2017 18:23	NP
Toluene	7900		20	50	ug/L	244942	50	06/30/2017 18:23	NP
Xylenes, Total	9100		38	50	ug/L	244942	50	06/30/2017 18:23	NP
Surr: 4-Bromofluorobenzene	88.6		0	70-130	%REC	244942	50	06/30/2017 18:23	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	244942	50	06/30/2017 18:23	NP
Surr: Toluene-d8	97.6		0	70-130	%REC	244942	50	06/30/2017 18:23	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		1200	5000	ug/L	244942	50	06/30/2017 18:23	NP
Ethanol	BRL		2200	5000	ug/L	244942	50	06/30/2017 18:23	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	244942	50	06/30/2017 18:23	NP
Isopropyl ether	BRL		190	500	ug/L	244942	50	06/30/2017 18:23	NP
tert-Amyl alcohol	BRL		1400	5000	ug/L	244942	50	06/30/2017 18:23	NP
tert-Amyl methyl ether	BRL		170	500	ug/L	244942	50	06/30/2017 18:23	NP
tert-Butyl Alcohol	BRL		670	5000	ug/L	244942	50	06/30/2017 18:23	NP
tert-Butyl formate	BRL		650	5000	ug/L	244942	50	06/30/2017 18:23	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 5
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 11:20:00 AM
Lab ID:	1706R80-011	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		19	50	ug/L	244942	50	06/30/2017 18:47	NP
Benzene	400		19	50	ug/L	244942	50	06/30/2017 18:47	NP
Ethylbenzene	650		13	50	ug/L	244942	50	06/30/2017 18:47	NP
Methyl tert-butyl ether	BRL		22	50	ug/L	244942	50	06/30/2017 18:47	NP
Naphthalene	370		46	250	ug/L	244942	50	06/30/2017 18:47	NP
Toluene	9800		20	50	ug/L	244942	50	06/30/2017 18:47	NP
Xylenes, Total	11000		38	50	ug/L	244942	50	06/30/2017 18:47	NP
Surr: 4-Bromofluorobenzene	92.6		0	70-130	%REC	244942	50	06/30/2017 18:47	NP
Surr: Dibromofluoromethane	99.4		0	70-130	%REC	244942	50	06/30/2017 18:47	NP
Surr: Toluene-d8	97.4		0	70-130	%REC	244942	50	06/30/2017 18:47	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		1200	5000	ug/L	244942	50	06/30/2017 18:47	NP
Ethanol	BRL		2200	5000	ug/L	244942	50	06/30/2017 18:47	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	244942	50	06/30/2017 18:47	NP
Isopropyl ether	BRL		190	500	ug/L	244942	50	06/30/2017 18:47	NP
tert-Amyl alcohol	BRL		1400	5000	ug/L	244942	50	06/30/2017 18:47	NP
tert-Amyl methyl ether	BRL		170	500	ug/L	244942	50	06/30/2017 18:47	NP
tert-Butyl Alcohol	BRL		670	5000	ug/L	244942	50	06/30/2017 18:47	NP
tert-Butyl formate	BRL		650	5000	ug/L	244942	50	06/30/2017 18:47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 6
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 11:35:00 AM
Lab ID:	1706R80-012	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 03:55	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 03:55	NP
Ethylbenzene	0.37	J	0.26	1.0	ug/L	244942	1	07/01/2017 03:55	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	07/01/2017 03:55	NP
Naphthalene	BRL		0.93	5.0	ug/L	244942	1	07/01/2017 03:55	NP
Toluene	3.0		0.39	1.0	ug/L	244942	1	07/01/2017 03:55	NP
Xylenes, Total	4.1		0.77	1.0	ug/L	244942	1	07/01/2017 03:55	NP
Surr: 4-Bromofluorobenzene	85.4		0	70-130	%REC	244942	1	07/01/2017 03:55	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	244942	1	07/01/2017 03:55	NP
Surr: Toluene-d8	100		0	70-130	%REC	244942	1	07/01/2017 03:55	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/01/2017 03:55	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/01/2017 03:55	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/01/2017 03:55	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/01/2017 03:55	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/01/2017 03:55	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/01/2017 03:55	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/01/2017 03:55	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/01/2017 03:55	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 5
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 11:55:00 AM
Lab ID:	1706R80-013	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		19	50	ug/L	244942	50	06/30/2017 19:10	NP
Benzene	5200		19	50	ug/L	244942	50	06/30/2017 19:10	NP
Ethylbenzene	380		13	50	ug/L	244942	50	06/30/2017 19:10	NP
Methyl tert-butyl ether	890		22	50	ug/L	244942	50	06/30/2017 19:10	NP
Naphthalene	130	J	46	250	ug/L	244942	50	06/30/2017 19:10	NP
Toluene	1400		20	50	ug/L	244942	50	06/30/2017 19:10	NP
Xylenes, Total	2400		38	50	ug/L	244942	50	06/30/2017 19:10	NP
Surr: 4-Bromofluorobenzene	87.9		0	70-130	%REC	244942	50	06/30/2017 19:10	NP
Surr: Dibromofluoromethane	96.8		0	70-130	%REC	244942	50	06/30/2017 19:10	NP
Surr: Toluene-d8	96.7		0	70-130	%REC	244942	50	06/30/2017 19:10	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		1200	5000	ug/L	244942	50	06/30/2017 19:10	NP
Ethanol	BRL		2200	5000	ug/L	244942	50	06/30/2017 19:10	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	244942	50	06/30/2017 19:10	NP
Isopropyl ether	750		190	500	ug/L	244942	50	06/30/2017 19:10	NP
tert-Amyl alcohol	7200		1400	5000	ug/L	244942	50	06/30/2017 19:10	NP
tert-Amyl methyl ether	390	J	170	500	ug/L	244942	50	06/30/2017 19:10	NP
tert-Butyl Alcohol	BRL		670	5000	ug/L	244942	50	06/30/2017 19:10	NP
tert-Butyl formate	BRL		650	5000	ug/L	244942	50	06/30/2017 19:10	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	FB-2
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 12:10:00 PM
Lab ID:	1706R80-014	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	06/30/2017 13:29	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	06/30/2017 13:29	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244942	1	06/30/2017 13:29	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	06/30/2017 13:29	NP
Naphthalene	BRL		0.93	5.0	ug/L	244942	1	06/30/2017 13:29	NP
Toluene	BRL		0.39	1.0	ug/L	244942	1	06/30/2017 13:29	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244942	1	06/30/2017 13:29	NP
Surr: 4-Bromofluorobenzene	83.5		0	70-130	%REC	244942	1	06/30/2017 13:29	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	244942	1	06/30/2017 13:29	NP
Surr: Toluene-d8	94.3		0	70-130	%REC	244942	1	06/30/2017 13:29	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	06/30/2017 13:29	NP
Ethanol	BRL		43	100	ug/L	244942	1	06/30/2017 13:29	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	06/30/2017 13:29	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	06/30/2017 13:29	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	06/30/2017 13:29	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	06/30/2017 13:29	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	06/30/2017 13:29	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	06/30/2017 13:29	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 56
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 2:30:00 PM
Lab ID:	1706R80-015	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 04:19	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 04:19	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244942	1	07/01/2017 04:19	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	07/01/2017 04:19	NP
Naphthalene	BRL		0.93	5.0	ug/L	244942	1	07/01/2017 04:19	NP
Toluene	BRL		0.39	1.0	ug/L	244942	1	07/01/2017 04:19	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244942	1	07/01/2017 04:19	NP
Surr: 4-Bromofluorobenzene	78.4		0	70-130	%REC	244942	1	07/01/2017 04:19	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	244942	1	07/01/2017 04:19	NP
Surr: Toluene-d8	98.1		0	70-130	%REC	244942	1	07/01/2017 04:19	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/01/2017 04:19	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/01/2017 04:19	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/01/2017 04:19	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/01/2017 04:19	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/01/2017 04:19	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/01/2017 04:19	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/01/2017 04:19	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/01/2017 04:19	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 55
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 2:00:00 PM
Lab ID:	1706R80-016	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/05/2017 20:44	NP
Benzene	200		3.7	10	ug/L	244942	10	06/30/2017 21:33	NP
Ethylbenzene	53		0.26	1.0	ug/L	244942	1	07/05/2017 20:44	NP
Methyl tert-butyl ether	100		0.45	1.0	ug/L	244942	1	07/05/2017 20:44	NP
Naphthalene	50		0.93	5.0	ug/L	244942	1	07/05/2017 20:44	NP
Toluene	2.9		0.39	1.0	ug/L	244942	1	07/05/2017 20:44	NP
Xylenes, Total	20		0.77	1.0	ug/L	244942	1	07/05/2017 20:44	NP
Surr: 4-Bromofluorobenzene	85.9		0	70-130	%REC	244942	10	06/30/2017 21:33	NP
Surr: 4-Bromofluorobenzene	99		0	70-130	%REC	244942	1	07/05/2017 20:44	NP
Surr: Dibromofluoromethane	92.8		0	70-130	%REC	244942	1	07/05/2017 20:44	NP
Surr: Dibromofluoromethane	97		0	70-130	%REC	244942	10	06/30/2017 21:33	NP
Surr: Toluene-d8	97		0	70-130	%REC	244942	10	06/30/2017 21:33	NP
Surr: Toluene-d8	102		0	70-130	%REC	244942	1	07/05/2017 20:44	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/05/2017 20:44	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/05/2017 20:44	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/05/2017 20:44	NP
Isopropyl ether	39		3.8	10	ug/L	244942	1	07/05/2017 20:44	NP
tert-Amyl alcohol	2000		28	100	ug/L	244942	1	07/05/2017 20:44	NP
tert-Amyl methyl ether	15		3.4	10	ug/L	244942	1	07/05/2017 20:44	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/05/2017 20:44	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/05/2017 20:44	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 4
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 2:05:00 PM
Lab ID:	1706R80-017	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/03/2017 17:31	NP
Benzene	310		3.7	10	ug/L	244942	10	06/30/2017 21:57	NP
Ethylbenzene	87		0.26	1.0	ug/L	244942	1	07/03/2017 17:31	NP
Methyl tert-butyl ether	110		0.45	1.0	ug/L	244942	1	07/03/2017 17:31	NP
Naphthalene	69		0.93	5.0	ug/L	244942	1	07/03/2017 17:31	NP
Toluene	4.7		0.39	1.0	ug/L	244942	1	07/03/2017 17:31	NP
Xylenes, Total	28		0.77	1.0	ug/L	244942	1	07/03/2017 17:31	NP
Surr: 4-Bromofluorobenzene	84.4		0	70-130	%REC	244942	10	06/30/2017 21:57	NP
Surr: 4-Bromofluorobenzene	97.8		0	70-130	%REC	244942	1	07/03/2017 17:31	NP
Surr: Dibromofluoromethane	92.9		0	70-130	%REC	244942	1	07/03/2017 17:31	NP
Surr: Dibromofluoromethane	96.7		0	70-130	%REC	244942	10	06/30/2017 21:57	NP
Surr: Toluene-d8	95.5		0	70-130	%REC	244942	10	06/30/2017 21:57	NP
Surr: Toluene-d8	99.6		0	70-130	%REC	244942	1	07/03/2017 17:31	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/03/2017 17:31	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/03/2017 17:31	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/03/2017 17:31	NP
Isopropyl ether	41		3.8	10	ug/L	244942	1	07/03/2017 17:31	NP
tert-Amyl alcohol	2000		28	100	ug/L	244942	1	07/03/2017 17:31	NP
tert-Amyl methyl ether	15		3.4	10	ug/L	244942	1	07/03/2017 17:31	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/03/2017 17:31	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/03/2017 17:31	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 53
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 1:10:00 PM
Lab ID:	1706R80-018	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 04:43	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 04:43	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244942	1	07/01/2017 04:43	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	07/01/2017 04:43	NP
Naphthalene	BRL		0.93	5.0	ug/L	244942	1	07/01/2017 04:43	NP
Toluene	BRL		0.39	1.0	ug/L	244942	1	07/01/2017 04:43	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244942	1	07/01/2017 04:43	NP
Surr: 4-Bromofluorobenzene	82.5		0	70-130	%REC	244942	1	07/01/2017 04:43	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	244942	1	07/01/2017 04:43	NP
Surr: Toluene-d8	102		0	70-130	%REC	244942	1	07/01/2017 04:43	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/01/2017 04:43	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/01/2017 04:43	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/01/2017 04:43	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/01/2017 04:43	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/01/2017 04:43	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/01/2017 04:43	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/01/2017 04:43	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/01/2017 04:43	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 11
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 2:10:00 PM
Lab ID:	1706R80-019	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 05:06	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 05:06	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244942	1	07/01/2017 05:06	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	07/01/2017 05:06	NP
Naphthalene	BRL		0.93	5.0	ug/L	244942	1	07/01/2017 05:06	NP
Toluene	BRL		0.39	1.0	ug/L	244942	1	07/01/2017 05:06	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244942	1	07/01/2017 05:06	NP
Surr: 4-Bromofluorobenzene	77.6		0	70-130	%REC	244942	1	07/01/2017 05:06	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	244942	1	07/01/2017 05:06	NP
Surr: Toluene-d8	99.6		0	70-130	%REC	244942	1	07/01/2017 05:06	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/01/2017 05:06	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/01/2017 05:06	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/01/2017 05:06	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/01/2017 05:06	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/01/2017 05:06	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/01/2017 05:06	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/01/2017 05:06	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/01/2017 05:06	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 51
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 1:00:00 PM
Lab ID:	1706R80-020	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 05:30	NP
Benzene	BRL		0.37	1.0	ug/L	244942	1	07/01/2017 05:30	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244942	1	07/01/2017 05:30	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244942	1	07/01/2017 05:30	NP
Naphthalene	BRL		0.93	5.0	ug/L	244942	1	07/01/2017 05:30	NP
Toluene	BRL		0.39	1.0	ug/L	244942	1	07/01/2017 05:30	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244942	1	07/01/2017 05:30	NP
Surr: 4-Bromofluorobenzene	83.7		0	70-130	%REC	244942	1	07/01/2017 05:30	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	244942	1	07/01/2017 05:30	NP
Surr: Toluene-d8	101		0	70-130	%REC	244942	1	07/01/2017 05:30	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244942	1	07/01/2017 05:30	NP
Ethanol	BRL		43	100	ug/L	244942	1	07/01/2017 05:30	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244942	1	07/01/2017 05:30	NP
Isopropyl ether	BRL		3.8	10	ug/L	244942	1	07/01/2017 05:30	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244942	1	07/01/2017 05:30	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244942	1	07/01/2017 05:30	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244942	1	07/01/2017 05:30	NP
tert-Butyl formate	BRL		13	100	ug/L	244942	1	07/01/2017 05:30	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 8
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 1:50:00 PM
Lab ID:	1706R80-021	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 05:54	NP
Benzene	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 05:54	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 05:54	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244943	1	07/01/2017 05:54	NP
Naphthalene	BRL		0.93	5.0	ug/L	244943	1	07/01/2017 05:54	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 05:54	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 05:54	NP
Surr: 4-Bromofluorobenzene	80.1		0	70-130	%REC	244943	1	07/01/2017 05:54	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	244943	1	07/01/2017 05:54	NP
Surr: Toluene-d8	100		0	70-130	%REC	244943	1	07/01/2017 05:54	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 05:54	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 05:54	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 05:54	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 05:54	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/01/2017 05:54	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 05:54	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 05:54	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 05:54	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 4
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 1:40:00 PM
Lab ID:	1706R80-022	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 06:18	NP
Benzene	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 06:18	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 06:18	NP
Methyl tert-butyl ether	0.73	J	0.45	1.0	ug/L	244943	1	07/01/2017 06:18	NP
Naphthalene	BRL		0.93	5.0	ug/L	244943	1	07/01/2017 06:18	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 06:18	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 06:18	NP
Surr: 4-Bromofluorobenzene	78.3		0	70-130	%REC	244943	1	07/01/2017 06:18	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	244943	1	07/01/2017 06:18	NP
Surr: Toluene-d8	98.9		0	70-130	%REC	244943	1	07/01/2017 06:18	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 06:18	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 06:18	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 06:18	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 06:18	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/01/2017 06:18	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 06:18	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 06:18	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 06:18	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 3
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 1:30:00 PM
Lab ID:	1706R80-023	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	12		3.7	10	ug/L	244943	10	06/30/2017 22:21	NP
Benzene	3900		37	100	ug/L	244943	100	07/05/2017 14:23	NP
Ethylbenzene	1100		2.6	10	ug/L	244943	10	06/30/2017 22:21	NP
Methyl tert-butyl ether	370		4.5	10	ug/L	244943	10	06/30/2017 22:21	NP
Naphthalene	560		9.3	50	ug/L	244943	10	06/30/2017 22:21	NP
Toluene	13000		39	100	ug/L	244943	100	07/05/2017 14:23	NP
Xylenes, Total	10000		77	100	ug/L	244943	100	07/05/2017 14:23	NP
Surr: 4-Bromofluorobenzene	98		0	70-130	%REC	244943	10	06/30/2017 22:21	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	244943	100	07/05/2017 14:23	NP
Surr: Dibromofluoromethane	92.9		0	70-130	%REC	244943	10	06/30/2017 22:21	NP
Surr: Dibromofluoromethane	94.7		0	70-130	%REC	244943	100	07/05/2017 14:23	NP
Surr: Toluene-d8	95.3		0	70-130	%REC	244943	10	06/30/2017 22:21	NP
Surr: Toluene-d8	99.3		0	70-130	%REC	244943	100	07/05/2017 14:23	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		240	1000	ug/L	244943	10	06/30/2017 22:21	NP
Ethanol	BRL		430	1000	ug/L	244943	10	06/30/2017 22:21	NP
Ethyl tert-butyl ether	BRL		36	1000	ug/L	244943	10	06/30/2017 22:21	NP
Isopropyl ether	110		38	100	ug/L	244943	10	06/30/2017 22:21	NP
tert-Amyl alcohol	BRL		280	1000	ug/L	244943	10	06/30/2017 22:21	NP
tert-Amyl methyl ether	210		34	100	ug/L	244943	10	06/30/2017 22:21	NP
tert-Butyl Alcohol	BRL		130	1000	ug/L	244943	10	06/30/2017 22:21	NP
tert-Butyl formate	BRL		130	1000	ug/L	244943	10	06/30/2017 22:21	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 6
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 12:50:00 PM
Lab ID:	1706R80-024	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 06:42	NP
Benzene	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 06:42	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 06:42	NP
Methyl tert-butyl ether	1.9		0.45	1.0	ug/L	244943	1	07/01/2017 06:42	NP
Naphthalene	BRL		0.93	5.0	ug/L	244943	1	07/01/2017 06:42	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 06:42	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 06:42	NP
Surr: 4-Bromofluorobenzene	80.7		0	70-130	%REC	244943	1	07/01/2017 06:42	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	244943	1	07/01/2017 06:42	NP
Surr: Toluene-d8	101		0	70-130	%REC	244943	1	07/01/2017 06:42	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 06:42	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 06:42	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 06:42	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 06:42	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/01/2017 06:42	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 06:42	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 06:42	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 06:42	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 2
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 1:20:00 PM
Lab ID:	1706R80-025	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	5.5		0.37	1.0	ug/L	244943	1	07/01/2017 07:06	NP
Benzene	190		0.37	1.0	ug/L	244943	1	07/01/2017 07:06	NP
Ethylbenzene	140		0.26	1.0	ug/L	244943	1	07/01/2017 07:06	NP
Methyl tert-butyl ether	370		4.5	10	ug/L	244943	10	07/03/2017 13:56	NP
Naphthalene	140		0.93	5.0	ug/L	244943	1	07/01/2017 07:06	NP
Toluene	5.6		0.39	1.0	ug/L	244943	1	07/01/2017 07:06	NP
Xylenes, Total	640		7.7	10	ug/L	244943	10	07/03/2017 13:56	NP
Surr: 4-Bromofluorobenzene	88.1		0	70-130	%REC	244943	10	07/03/2017 13:56	NP
Surr: 4-Bromofluorobenzene	94.9		0	70-130	%REC	244943	1	07/01/2017 07:06	NP
Surr: Dibromofluoromethane	98.6		0	70-130	%REC	244943	1	07/01/2017 07:06	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	244943	10	07/03/2017 13:56	NP
Surr: Toluene-d8	98.6		0	70-130	%REC	244943	10	07/03/2017 13:56	NP
Surr: Toluene-d8	103		0	70-130	%REC	244943	1	07/01/2017 07:06	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 07:06	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 07:06	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 07:06	NP
Isopropyl ether	24		3.8	10	ug/L	244943	1	07/01/2017 07:06	NP
tert-Amyl alcohol	190		28	100	ug/L	244943	1	07/01/2017 07:06	NP
tert-Amyl methyl ether	14		3.4	10	ug/L	244943	1	07/01/2017 07:06	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 07:06	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 07:06	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 7
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 12:40:00 PM
Lab ID:	1706R80-026	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 07:30	NP
Benzene	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 07:30	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 07:30	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244943	1	07/01/2017 07:30	NP
Naphthalene	1.3	J	0.93	5.0	ug/L	244943	1	07/01/2017 07:30	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 07:30	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 07:30	NP
Surr: 4-Bromofluorobenzene	86.4		0	70-130	%REC	244943	1	07/01/2017 07:30	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	244943	1	07/01/2017 07:30	NP
Surr: Toluene-d8	97		0	70-130	%REC	244943	1	07/01/2017 07:30	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 07:30	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 07:30	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 07:30	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 07:30	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/01/2017 07:30	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 07:30	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 07:30	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 07:30	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 45
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 12:30:00 PM
Lab ID:	1706R80-027	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 07:54	NP
Benzene	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 07:54	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 07:54	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244943	1	07/01/2017 07:54	NP
Naphthalene	BRL		0.93	5.0	ug/L	244943	1	07/01/2017 07:54	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 07:54	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 07:54	NP
Surr: 4-Bromofluorobenzene	83.1		0	70-130	%REC	244943	1	07/01/2017 07:54	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	244943	1	07/01/2017 07:54	NP
Surr: Toluene-d8	101		0	70-130	%REC	244943	1	07/01/2017 07:54	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 07:54	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 07:54	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 07:54	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 07:54	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/01/2017 07:54	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 07:54	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 07:54	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 07:54	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 44
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 12:20:00 PM
Lab ID:	1706R80-028	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 08:18	NP
Benzene	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 08:18	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 08:18	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244943	1	07/01/2017 08:18	NP
Naphthalene	BRL		0.93	5.0	ug/L	244943	1	07/01/2017 08:18	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 08:18	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 08:18	NP
Surr: 4-Bromofluorobenzene	84.3		0	70-130	%REC	244943	1	07/01/2017 08:18	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	244943	1	07/01/2017 08:18	NP
Surr: Toluene-d8	99		0	70-130	%REC	244943	1	07/01/2017 08:18	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 08:18	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 08:18	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 08:18	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 08:18	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/01/2017 08:18	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 08:18	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 08:18	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 08:18	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 43
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 12:10:00 PM
Lab ID:	1706R80-029	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 08:41	NP
Benzene	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 08:41	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 08:41	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244943	1	07/01/2017 08:41	NP
Naphthalene	BRL		0.93	5.0	ug/L	244943	1	07/01/2017 08:41	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 08:41	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 08:41	NP
Surr: 4-Bromofluorobenzene	80.4		0	70-130	%REC	244943	1	07/01/2017 08:41	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	244943	1	07/01/2017 08:41	NP
Surr: Toluene-d8	99.1		0	70-130	%REC	244943	1	07/01/2017 08:41	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 08:41	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 08:41	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 08:41	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 08:41	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/01/2017 08:41	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 08:41	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 08:41	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 08:41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 46
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 12:00:00 PM
Lab ID:	1706R80-030	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 09:05	NP
Benzene	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 09:05	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 09:05	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244943	1	07/01/2017 09:05	NP
Naphthalene	BRL		0.93	5.0	ug/L	244943	1	07/01/2017 09:05	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 09:05	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 09:05	NP
Surr: 4-Bromofluorobenzene	81.2		0	70-130	%REC	244943	1	07/01/2017 09:05	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	244943	1	07/01/2017 09:05	NP
Surr: Toluene-d8	99.5		0	70-130	%REC	244943	1	07/01/2017 09:05	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 09:05	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 09:05	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 09:05	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 09:05	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/01/2017 09:05	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 09:05	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 09:05	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 09:05	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 16
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 11:00:00 AM
Lab ID:	1706R80-031	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 09:29	NP
Benzene	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 09:29	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 09:29	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244943	1	07/01/2017 09:29	NP
Naphthalene	BRL		0.93	5.0	ug/L	244943	1	07/01/2017 09:29	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 09:29	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 09:29	NP
Surr: 4-Bromofluorobenzene	81.8		0	70-130	%REC	244943	1	07/01/2017 09:29	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	244943	1	07/01/2017 09:29	NP
Surr: Toluene-d8	100		0	70-130	%REC	244943	1	07/01/2017 09:29	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 09:29	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 09:29	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 09:29	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 09:29	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/01/2017 09:29	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 09:29	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 09:29	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 09:29	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 17
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 10:50:00 AM
Lab ID:	1706R80-032	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	10		0.37	1.0	ug/L	244943	1	07/03/2017 15:56	NP
Ethylbenzene	190		2.6	10	ug/L	244943	10	07/05/2017 16:22	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244943	1	07/03/2017 15:56	NP
Naphthalene	190		9.3	50	ug/L	244943	10	07/05/2017 16:22	NP
Toluene	5.8		0.39	1.0	ug/L	244943	1	07/03/2017 15:56	NP
Xylenes, Total	26		0.77	1.0	ug/L	244943	1	07/03/2017 15:56	NP
Surr: 4-Bromofluorobenzene	98.1		0	70-130	%REC	244943	10	07/05/2017 16:22	NP
Surr: 4-Bromofluorobenzene	96.3		0	70-130	%REC	244943	1	07/03/2017 15:56	NP
Surr: Dibromofluoromethane	95.8		0	70-130	%REC	244943	1	07/03/2017 15:56	NP
Surr: Dibromofluoromethane	94.9		0	70-130	%REC	244943	10	07/05/2017 16:22	NP
Surr: Toluene-d8	97.7		0	70-130	%REC	244943	10	07/05/2017 16:22	NP
Surr: Toluene-d8	101		0	70-130	%REC	244943	1	07/03/2017 15:56	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/03/2017 15:56	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/03/2017 15:56	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/03/2017 15:56	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/03/2017 15:56	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/03/2017 15:56	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/03/2017 15:56	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/03/2017 15:56	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/03/2017 15:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 22
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 11:30:00 AM
Lab ID:	1706R80-033	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		190	500	ug/L	244943	500	06/30/2017 15:36	NP
Benzene	2100		190	500	ug/L	244943	500	06/30/2017 15:36	NP
Ethylbenzene	1100		130	500	ug/L	244943	500	06/30/2017 15:36	NP
Methyl tert-butyl ether	BRL		220	500	ug/L	244943	500	06/30/2017 15:36	NP
Naphthalene	BRL		460	2500	ug/L	244943	500	06/30/2017 15:36	NP
Toluene	13000		200	500	ug/L	244943	500	06/30/2017 15:36	NP
Xylenes, Total	15000		380	500	ug/L	244943	500	06/30/2017 15:36	NP
Surr: 4-Bromofluorobenzene	86.6		0	70-130	%REC	244943	500	06/30/2017 15:36	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	244943	500	06/30/2017 15:36	NP
Surr: Toluene-d8	98		0	70-130	%REC	244943	500	06/30/2017 15:36	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		12000	50000	ug/L	244943	500	06/30/2017 15:36	NP
Ethanol	24000	J	22000	50000	ug/L	244943	500	06/30/2017 15:36	NP
Ethyl tert-butyl ether	BRL		1800	50000	ug/L	244943	500	06/30/2017 15:36	NP
Isopropyl ether	BRL		1900	5000	ug/L	244943	500	06/30/2017 15:36	NP
tert-Amyl alcohol	BRL		14000	50000	ug/L	244943	500	06/30/2017 15:36	NP
tert-Amyl methyl ether	BRL		1700	5000	ug/L	244943	500	06/30/2017 15:36	NP
tert-Butyl Alcohol	BRL		6700	50000	ug/L	244943	500	06/30/2017 15:36	NP
tert-Butyl formate	BRL		6500	50000	ug/L	244943	500	06/30/2017 15:36	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW SAR
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 11:20:00 AM
Lab ID:	1706R80-034	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/05/2017 14:47	NP
Benzene	1900		19	50	ug/L	244943	50	06/30/2017 19:58	NP
Ethylbenzene	330		13	50	ug/L	244943	50	06/30/2017 19:58	NP
Methyl tert-butyl ether	2.3		0.45	1.0	ug/L	244943	1	07/05/2017 14:47	NP
Naphthalene	390		9.3	50	ug/L	244943	10	07/05/2017 15:10	NP
Toluene	92		0.39	1.0	ug/L	244943	1	07/05/2017 14:47	NP
Xylenes, Total	1400		38	50	ug/L	244943	50	06/30/2017 19:58	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	244943	1	07/05/2017 14:47	NP
Surr: 4-Bromofluorobenzene	87.3		0	70-130	%REC	244943	50	06/30/2017 19:58	NP
Surr: 4-Bromofluorobenzene	96.5		0	70-130	%REC	244943	10	07/05/2017 15:10	NP
Surr: Dibromofluoromethane	99.1		0	70-130	%REC	244943	50	06/30/2017 19:58	NP
Surr: Dibromofluoromethane	93.1		0	70-130	%REC	244943	1	07/05/2017 14:47	NP
Surr: Dibromofluoromethane	92.5		0	70-130	%REC	244943	10	07/05/2017 15:10	NP
Surr: Toluene-d8	97.6		0	70-130	%REC	244943	50	06/30/2017 19:58	NP
Surr: Toluene-d8	96.2		0	70-130	%REC	244943	10	07/05/2017 15:10	NP
Surr: Toluene-d8	100		0	70-130	%REC	244943	1	07/05/2017 14:47	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/05/2017 14:47	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/05/2017 14:47	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/05/2017 14:47	NP
Isopropyl ether	30		3.8	10	ug/L	244943	1	07/05/2017 14:47	NP
tert-Amyl alcohol	220		28	100	ug/L	244943	1	07/05/2017 14:47	NP
tert-Amyl methyl ether	13		3.4	10	ug/L	244943	1	07/05/2017 14:47	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/05/2017 14:47	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/05/2017 14:47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 20
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 11:10:00 AM
Lab ID:	1706R80-035	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		19	50	ug/L	244943	50	06/30/2017 20:21	NP
Benzene	390		19	50	ug/L	244943	50	06/30/2017 20:21	NP
Ethylbenzene	2000		13	50	ug/L	244943	50	06/30/2017 20:21	NP
Methyl tert-butyl ether	BRL		22	50	ug/L	244943	50	06/30/2017 20:21	NP
Naphthalene	1500		46	250	ug/L	244943	50	06/30/2017 20:21	NP
Toluene	10000		39	100	ug/L	244943	100	07/03/2017 13:33	NP
Xylenes, Total	26000		77	100	ug/L	244943	100	07/03/2017 13:33	NP
Surr: 4-Bromofluorobenzene	94.4		0	70-130	%REC	244943	50	06/30/2017 20:21	NP
Surr: 4-Bromofluorobenzene	95.4		0	70-130	%REC	244943	100	07/03/2017 13:33	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	244943	50	06/30/2017 20:21	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	244943	100	07/03/2017 13:33	NP
Surr: Toluene-d8	99.9		0	70-130	%REC	244943	50	06/30/2017 20:21	NP
Surr: Toluene-d8	100		0	70-130	%REC	244943	100	07/03/2017 13:33	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		1200	5000	ug/L	244943	50	06/30/2017 20:21	NP
Ethanol	BRL		2200	5000	ug/L	244943	50	06/30/2017 20:21	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	244943	50	06/30/2017 20:21	NP
Isopropyl ether	310	J	190	500	ug/L	244943	50	06/30/2017 20:21	NP
tert-Amyl alcohol	2500	J	1400	5000	ug/L	244943	50	06/30/2017 20:21	NP
tert-Amyl methyl ether	BRL		170	500	ug/L	244943	50	06/30/2017 20:21	NP
tert-Butyl Alcohol	BRL		670	5000	ug/L	244943	50	06/30/2017 20:21	NP
tert-Butyl formate	BRL		650	5000	ug/L	244943	50	06/30/2017 20:21	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 19
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 10:40:00 AM
Lab ID:	1706R80-036	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		37	100	ug/L	244943	100	06/30/2017 17:35	NP
Benzene	3200		37	100	ug/L	244943	100	06/30/2017 17:35	NP
Ethylbenzene	1100		26	100	ug/L	244943	100	06/30/2017 17:35	NP
Methyl tert-butyl ether	130		45	100	ug/L	244943	100	06/30/2017 17:35	NP
Naphthalene	950		93	500	ug/L	244943	100	06/30/2017 17:35	NP
Toluene	21000		200	500	ug/L	244943	500	07/03/2017 13:09	NP
Xylenes, Total	20000		77	100	ug/L	244943	100	06/30/2017 17:35	NP
Surr: 4-Bromofluorobenzene	87.6		0	70-130	%REC	244943	500	07/03/2017 13:09	NP
Surr: 4-Bromofluorobenzene	92		0	70-130	%REC	244943	100	06/30/2017 17:35	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	244943	500	07/03/2017 13:09	NP
Surr: Dibromofluoromethane	99.4		0	70-130	%REC	244943	100	06/30/2017 17:35	NP
Surr: Toluene-d8	98.5		0	70-130	%REC	244943	500	07/03/2017 13:09	NP
Surr: Toluene-d8	99.6		0	70-130	%REC	244943	100	06/30/2017 17:35	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		2400	10000	ug/L	244943	100	06/30/2017 17:35	NP
Ethanol	BRL		4300	10000	ug/L	244943	100	06/30/2017 17:35	NP
Ethyl tert-butyl ether	BRL		360	10000	ug/L	244943	100	06/30/2017 17:35	NP
Isopropyl ether	640	J	380	1000	ug/L	244943	100	06/30/2017 17:35	NP
tert-Amyl alcohol	6700	J	2800	10000	ug/L	244943	100	06/30/2017 17:35	NP
tert-Amyl methyl ether	BRL		340	1000	ug/L	244943	100	06/30/2017 17:35	NP
tert-Butyl Alcohol	BRL		1300	10000	ug/L	244943	100	06/30/2017 17:35	NP
tert-Butyl formate	BRL		1300	10000	ug/L	244943	100	06/30/2017 17:35	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 23
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 10:20:00 AM
Lab ID:	1706R80-037	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/05/2017 17:10	NP
Benzene	400		7.5	20	ug/L	244943	20	06/30/2017 21:09	NP
Ethylbenzene	120		0.26	1.0	ug/L	244943	1	07/05/2017 17:10	NP
Methyl tert-butyl ether	6.3		0.45	1.0	ug/L	244943	1	07/05/2017 17:10	NP
Naphthalene	370		19	100	ug/L	244943	20	06/30/2017 21:09	NP
Toluene	1500		7.9	20	ug/L	244943	20	06/30/2017 21:09	NP
Xylenes, Total	3800		15	20	ug/L	244943	20	06/30/2017 21:09	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	244943	1	07/05/2017 17:10	NP
Surr: 4-Bromofluorobenzene	89.1		0	70-130	%REC	244943	20	06/30/2017 21:09	NP
Surr: Dibromofluoromethane	95.8		0	70-130	%REC	244943	20	06/30/2017 21:09	NP
Surr: Dibromofluoromethane	89.4		0	70-130	%REC	244943	1	07/05/2017 17:10	NP
Surr: Toluene-d8	98.3		0	70-130	%REC	244943	1	07/05/2017 17:10	NP
Surr: Toluene-d8	97.4		0	70-130	%REC	244943	20	06/30/2017 21:09	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/05/2017 17:10	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/05/2017 17:10	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/05/2017 17:10	NP
Isopropyl ether	21		3.8	10	ug/L	244943	1	07/05/2017 17:10	NP
tert-Amyl alcohol	1000		28	100	ug/L	244943	1	07/05/2017 17:10	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/05/2017 17:10	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/05/2017 17:10	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/05/2017 17:10	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 62
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 10:30:00 AM
Lab ID:	1706R80-038	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 09:53	NP
Benzene	1.6		0.37	1.0	ug/L	244943	1	07/01/2017 09:53	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 09:53	NP
Methyl tert-butyl ether	0.69	J	0.45	1.0	ug/L	244943	1	07/01/2017 09:53	NP
Naphthalene	2.4	J	0.93	5.0	ug/L	244943	1	07/01/2017 09:53	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 09:53	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 09:53	NP
Surr: 4-Bromofluorobenzene	80.7		0	70-130	%REC	244943	1	07/01/2017 09:53	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	244943	1	07/01/2017 09:53	NP
Surr: Toluene-d8	100		0	70-130	%REC	244943	1	07/01/2017 09:53	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 09:53	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 09:53	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 09:53	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 09:53	NP
tert-Amyl alcohol	93	J	28	100	ug/L	244943	1	07/01/2017 09:53	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 09:53	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 09:53	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 09:53	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 63
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 10:10:00 AM
Lab ID:	1706R80-039	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 10:17	NP
Benzene	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 10:17	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 10:17	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244943	1	07/01/2017 10:17	NP
Naphthalene	BRL		0.93	5.0	ug/L	244943	1	07/01/2017 10:17	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 10:17	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 10:17	NP
Surr: 4-Bromofluorobenzene	81.4		0	70-130	%REC	244943	1	07/01/2017 10:17	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	244943	1	07/01/2017 10:17	NP
Surr: Toluene-d8	99.6		0	70-130	%REC	244943	1	07/01/2017 10:17	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 10:17	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 10:17	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 10:17	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 10:17	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/01/2017 10:17	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 10:17	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 10:17	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 10:17	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 70
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 10:00:00 AM
Lab ID:	1706R80-040	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 21:42	NP
Benzene	BRL		0.37	1.0	ug/L	244943	1	07/01/2017 21:42	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244943	1	07/01/2017 21:42	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244943	1	07/01/2017 21:42	NP
Naphthalene	BRL		0.93	5.0	ug/L	244943	1	07/01/2017 21:42	NP
Toluene	BRL		0.39	1.0	ug/L	244943	1	07/01/2017 21:42	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244943	1	07/01/2017 21:42	NP
Surr: 4-Bromofluorobenzene	86.2		0	70-130	%REC	244943	1	07/01/2017 21:42	NP
Surr: Dibromofluoromethane	99.5		0	70-130	%REC	244943	1	07/01/2017 21:42	NP
Surr: Toluene-d8	96.8		0	70-130	%REC	244943	1	07/01/2017 21:42	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244943	1	07/01/2017 21:42	NP
Ethanol	BRL		43	100	ug/L	244943	1	07/01/2017 21:42	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244943	1	07/01/2017 21:42	NP
Isopropyl ether	BRL		3.8	10	ug/L	244943	1	07/01/2017 21:42	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244943	1	07/01/2017 21:42	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244943	1	07/01/2017 21:42	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244943	1	07/01/2017 21:42	NP
tert-Butyl formate	BRL		13	100	ug/L	244943	1	07/01/2017 21:42	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 40
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 9:50:00 AM
Lab ID:	1706R80-041	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/01/2017 22:06	NP
Benzene	22		0.37	1.0	ug/L	244945	1	07/01/2017 22:06	NP
Ethylbenzene	600		2.6	10	ug/L	244945	10	07/03/2017 14:20	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/01/2017 22:06	NP
Naphthalene	480		9.3	50	ug/L	244945	10	07/03/2017 14:20	NP
Toluene	5.1		0.39	1.0	ug/L	244945	1	07/01/2017 22:06	NP
Xylenes, Total	98		0.77	1.0	ug/L	244945	1	07/01/2017 22:06	NP
Surr: 4-Bromofluorobenzene	89.4		0	70-130	%REC	244945	10	07/03/2017 14:20	NP
Surr: 4-Bromofluorobenzene	97.3		0	70-130	%REC	244945	1	07/01/2017 22:06	NP
Surr: Dibromofluoromethane	93		0	70-130	%REC	244945	1	07/01/2017 22:06	NP
Surr: Dibromofluoromethane	99.3		0	70-130	%REC	244945	10	07/03/2017 14:20	NP
Surr: Toluene-d8	98.7		0	70-130	%REC	244945	1	07/01/2017 22:06	NP
Surr: Toluene-d8	99		0	70-130	%REC	244945	10	07/03/2017 14:20	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/01/2017 22:06	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/01/2017 22:06	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/01/2017 22:06	NP
Isopropyl ether	6.4	J	3.8	10	ug/L	244945	1	07/01/2017 22:06	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/01/2017 22:06	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/01/2017 22:06	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/01/2017 22:06	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/01/2017 22:06	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 41
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 9:40:00 AM
Lab ID:	1706R80-042	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/03/2017 15:32	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/03/2017 15:32	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/03/2017 15:32	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/03/2017 15:32	NP
Naphthalene	BRL		0.93	5.0	ug/L	244945	1	07/03/2017 15:32	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/03/2017 15:32	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/03/2017 15:32	NP
Surr: 4-Bromofluorobenzene	88.3		0	70-130	%REC	244945	1	07/03/2017 15:32	NP
Surr: Dibromofluoromethane	99.7		0	70-130	%REC	244945	1	07/03/2017 15:32	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	244945	1	07/03/2017 15:32	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/01/2017 22:29	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/01/2017 22:29	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/01/2017 22:29	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/01/2017 22:29	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/01/2017 22:29	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/01/2017 22:29	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/01/2017 22:29	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/01/2017 22:29	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 39
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 9:30:00 AM
Lab ID:	1706R80-043	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/01/2017 22:53	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/01/2017 22:53	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/01/2017 22:53	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/01/2017 22:53	NP
Naphthalene	BRL		0.93	5.0	ug/L	244945	1	07/01/2017 22:53	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/01/2017 22:53	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/01/2017 22:53	NP
Surr: 4-Bromofluorobenzene	86.2		0	70-130	%REC	244945	1	07/01/2017 22:53	NP
Surr: Dibromofluoromethane	99.2		0	70-130	%REC	244945	1	07/01/2017 22:53	NP
Surr: Toluene-d8	98.7		0	70-130	%REC	244945	1	07/01/2017 22:53	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/01/2017 22:53	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/01/2017 22:53	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/01/2017 22:53	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/01/2017 22:53	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/01/2017 22:53	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/01/2017 22:53	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/01/2017 22:53	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/01/2017 22:53	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 42
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 7:00:00 AM
Lab ID:	1706R80-044	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/01/2017 23:17	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/01/2017 23:17	NP
Ethylbenzene	3.8		0.26	1.0	ug/L	244945	1	07/01/2017 23:17	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/01/2017 23:17	NP
Naphthalene	4.9	J	0.93	5.0	ug/L	244945	1	07/01/2017 23:17	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/01/2017 23:17	NP
Xylenes, Total	5.4		0.77	1.0	ug/L	244945	1	07/01/2017 23:17	NP
Surr: 4-Bromofluorobenzene	87.8		0	70-130	%REC	244945	1	07/01/2017 23:17	NP
Surr: Dibromofluoromethane	98.2		0	70-130	%REC	244945	1	07/01/2017 23:17	NP
Surr: Toluene-d8	97.2		0	70-130	%REC	244945	1	07/01/2017 23:17	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/01/2017 23:17	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/01/2017 23:17	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/01/2017 23:17	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/01/2017 23:17	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/01/2017 23:17	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/01/2017 23:17	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/01/2017 23:17	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/01/2017 23:17	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 67
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 7:10:00 AM
Lab ID:	1706R80-045	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/01/2017 23:41	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/01/2017 23:41	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/01/2017 23:41	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/01/2017 23:41	NP
Naphthalene	BRL		0.93	5.0	ug/L	244945	1	07/01/2017 23:41	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/01/2017 23:41	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/01/2017 23:41	NP
Surr: 4-Bromofluorobenzene	82.3		0	70-130	%REC	244945	1	07/01/2017 23:41	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	244945	1	07/01/2017 23:41	NP
Surr: Toluene-d8	99.5		0	70-130	%REC	244945	1	07/01/2017 23:41	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/01/2017 23:41	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/01/2017 23:41	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/01/2017 23:41	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/01/2017 23:41	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/01/2017 23:41	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/01/2017 23:41	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/01/2017 23:41	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/01/2017 23:41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 38
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 7:20:00 AM
Lab ID:	1706R80-046	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 00:05	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 00:05	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/02/2017 00:05	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/02/2017 00:05	NP
Naphthalene	BRL		0.93	5.0	ug/L	244945	1	07/02/2017 00:05	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/02/2017 00:05	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/02/2017 00:05	NP
Surr: 4-Bromofluorobenzene	83		0	70-130	%REC	244945	1	07/02/2017 00:05	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	244945	1	07/02/2017 00:05	NP
Surr: Toluene-d8	98.2		0	70-130	%REC	244945	1	07/02/2017 00:05	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/02/2017 00:05	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/02/2017 00:05	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/02/2017 00:05	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/02/2017 00:05	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/02/2017 00:05	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/02/2017 00:05	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/02/2017 00:05	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/02/2017 00:05	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 31
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 7:30:00 AM
Lab ID:	1706R80-047	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 00:29	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 00:29	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/02/2017 00:29	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/02/2017 00:29	NP
Naphthalene	BRL		0.93	5.0	ug/L	244945	1	07/02/2017 00:29	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/02/2017 00:29	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/02/2017 00:29	NP
Surr: 4-Bromofluorobenzene	83		0	70-130	%REC	244945	1	07/02/2017 00:29	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	244945	1	07/02/2017 00:29	NP
Surr: Toluene-d8	98.7		0	70-130	%REC	244945	1	07/02/2017 00:29	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/02/2017 00:29	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/02/2017 00:29	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/02/2017 00:29	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/02/2017 00:29	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/02/2017 00:29	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/02/2017 00:29	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/02/2017 00:29	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/02/2017 00:29	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 37
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 7:40:00 AM
Lab ID:	1706R80-048	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 00:53	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 00:53	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/02/2017 00:53	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/02/2017 00:53	NP
Naphthalene	BRL		0.93	5.0	ug/L	244945	1	07/02/2017 00:53	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/02/2017 00:53	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/02/2017 00:53	NP
Surr: 4-Bromofluorobenzene	81.9		0	70-130	%REC	244945	1	07/02/2017 00:53	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	244945	1	07/02/2017 00:53	NP
Surr: Toluene-d8	99.2		0	70-130	%REC	244945	1	07/02/2017 00:53	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/02/2017 00:53	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/02/2017 00:53	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/02/2017 00:53	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/02/2017 00:53	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/02/2017 00:53	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/02/2017 00:53	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/02/2017 00:53	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/02/2017 00:53	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 35
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 7:50:00 AM
Lab ID:	1706R80-049	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/05/2017 12:46	NP
Benzene	3100		7.5	20	ug/L	244945	20	07/01/2017 18:07	NP
Ethylbenzene	2400		5.1	20	ug/L	244945	20	07/01/2017 18:07	NP
Methyl tert-butyl ether	56		0.45	1.0	ug/L	244945	1	07/05/2017 12:46	NP
Naphthalene	780		19	100	ug/L	244945	20	07/01/2017 18:07	NP
Toluene	3800		7.9	20	ug/L	244945	20	07/01/2017 18:07	NP
Xylenes, Total	4700		15	20	ug/L	244945	20	07/01/2017 18:07	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	244945	1	07/05/2017 12:46	NP
Surr: 4-Bromofluorobenzene	93.3		0	70-130	%REC	244945	20	07/01/2017 18:07	NP
Surr: Dibromofluoromethane	88.5		0	70-130	%REC	244945	1	07/05/2017 12:46	NP
Surr: Dibromofluoromethane	96.7		0	70-130	%REC	244945	20	07/01/2017 18:07	NP
Surr: Toluene-d8	97.8		0	70-130	%REC	244945	1	07/05/2017 12:46	NP
Surr: Toluene-d8	99.4		0	70-130	%REC	244945	20	07/01/2017 18:07	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/05/2017 12:46	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/05/2017 12:46	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/05/2017 12:46	NP
Isopropyl ether	120		3.8	10	ug/L	244945	1	07/05/2017 12:46	NP
tert-Amyl alcohol	3000		560	2000	ug/L	244945	20	07/01/2017 18:07	NP
tert-Amyl methyl ether	29		3.4	10	ug/L	244945	1	07/05/2017 12:46	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/05/2017 12:46	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/05/2017 12:46	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 1
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 7:55:00 AM
Lab ID:	1706R80-050	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/05/2017 13:10	NP
Benzene	3000		7.5	20	ug/L	244945	20	07/01/2017 19:43	NP
Ethylbenzene	2400		5.1	20	ug/L	244945	20	07/01/2017 19:43	NP
Methyl tert-butyl ether	59		0.45	1.0	ug/L	244945	1	07/05/2017 13:10	NP
Naphthalene	800		19	100	ug/L	244945	20	07/01/2017 19:43	NP
Toluene	3600		7.9	20	ug/L	244945	20	07/01/2017 19:43	NP
Xylenes, Total	4600		15	20	ug/L	244945	20	07/01/2017 19:43	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	244945	1	07/05/2017 13:10	NP
Surr: 4-Bromofluorobenzene	95.6		0	70-130	%REC	244945	20	07/01/2017 19:43	NP
Surr: Dibromofluoromethane	90.4		0	70-130	%REC	244945	1	07/05/2017 13:10	NP
Surr: Dibromofluoromethane	95		0	70-130	%REC	244945	20	07/01/2017 19:43	NP
Surr: Toluene-d8	99		0	70-130	%REC	244945	1	07/05/2017 13:10	NP
Surr: Toluene-d8	97.5		0	70-130	%REC	244945	20	07/01/2017 19:43	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/05/2017 13:10	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/05/2017 13:10	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/05/2017 13:10	NP
Isopropyl ether	120		3.8	10	ug/L	244945	1	07/05/2017 13:10	NP
tert-Amyl alcohol	3000		560	2000	ug/L	244945	20	07/01/2017 19:43	NP
tert-Amyl methyl ether	35		3.4	10	ug/L	244945	1	07/05/2017 13:10	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/05/2017 13:10	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/05/2017 13:10	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 34
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 8:00:00 AM
Lab ID:	1706R80-051	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 01:16	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 01:16	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/02/2017 01:16	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/02/2017 01:16	NP
Naphthalene	BRL		0.93	5.0	ug/L	244945	1	07/02/2017 01:16	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/02/2017 01:16	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/02/2017 01:16	NP
Surr: 4-Bromofluorobenzene	84.4		0	70-130	%REC	244945	1	07/02/2017 01:16	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	244945	1	07/02/2017 01:16	NP
Surr: Toluene-d8	98		0	70-130	%REC	244945	1	07/02/2017 01:16	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/02/2017 01:16	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/02/2017 01:16	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/02/2017 01:16	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/02/2017 01:16	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/02/2017 01:16	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/02/2017 01:16	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/02/2017 01:16	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/02/2017 01:16	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 18
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 8:10:00 AM
Lab ID:	1706R80-052	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/05/2017 15:58	NP
Benzene	310		7.5	20	ug/L	244945	20	07/01/2017 20:07	NP
Ethylbenzene	300		5.1	20	ug/L	244945	20	07/01/2017 20:07	NP
Methyl tert-butyl ether	6.3		0.45	1.0	ug/L	244945	1	07/05/2017 15:58	NP
Naphthalene	140		0.93	5.0	ug/L	244945	1	07/05/2017 15:58	NP
Toluene	1800		7.9	20	ug/L	244945	20	07/01/2017 20:07	NP
Xylenes, Total	4100		15	20	ug/L	244945	20	07/01/2017 20:07	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	244945	1	07/05/2017 15:58	NP
Surr: 4-Bromofluorobenzene	88.8		0	70-130	%REC	244945	20	07/01/2017 20:07	NP
Surr: Dibromofluoromethane	90.7		0	70-130	%REC	244945	1	07/05/2017 15:58	NP
Surr: Dibromofluoromethane	97.7		0	70-130	%REC	244945	20	07/01/2017 20:07	NP
Surr: Toluene-d8	97		0	70-130	%REC	244945	1	07/05/2017 15:58	NP
Surr: Toluene-d8	97.9		0	70-130	%REC	244945	20	07/01/2017 20:07	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/05/2017 15:58	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/05/2017 15:58	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/05/2017 15:58	NP
Isopropyl ether	11		3.8	10	ug/L	244945	1	07/05/2017 15:58	NP
tert-Amyl alcohol	190		28	100	ug/L	244945	1	07/05/2017 15:58	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/05/2017 15:58	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/05/2017 15:58	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/05/2017 15:58	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 33
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 8:20:00 AM
Lab ID:	1706R80-053	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/01/2017 20:54	NP
Benzene	80		0.37	1.0	ug/L	244945	1	07/01/2017 20:54	NP
Ethylbenzene	100		0.26	1.0	ug/L	244945	1	07/01/2017 20:54	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/01/2017 20:54	NP
Naphthalene	210		9.3	50	ug/L	244945	10	07/01/2017 21:18	NP
Toluene	250		3.9	10	ug/L	244945	10	07/01/2017 21:18	NP
Xylenes, Total	1400		7.7	10	ug/L	244945	10	07/01/2017 21:18	NP
Surr: 4-Bromofluorobenzene	92.1		0	70-130	%REC	244945	10	07/01/2017 21:18	NP
Surr: 4-Bromofluorobenzene	99.1		0	70-130	%REC	244945	1	07/01/2017 20:54	NP
Surr: Dibromofluoromethane	92.7		0	70-130	%REC	244945	1	07/01/2017 20:54	NP
Surr: Dibromofluoromethane	94.3		0	70-130	%REC	244945	10	07/01/2017 21:18	NP
Surr: Toluene-d8	98.9		0	70-130	%REC	244945	1	07/01/2017 20:54	NP
Surr: Toluene-d8	99.3		0	70-130	%REC	244945	10	07/01/2017 21:18	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/01/2017 20:54	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/01/2017 20:54	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/01/2017 20:54	NP
Isopropyl ether	9.3	J	3.8	10	ug/L	244945	1	07/01/2017 20:54	NP
tert-Amyl alcohol	860		28	100	ug/L	244945	1	07/01/2017 20:54	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/01/2017 20:54	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/01/2017 20:54	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/01/2017 20:54	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 36
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 9:20:00 AM
Lab ID:	1706R80-054	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 01:40	NP
Benzene	1.0		0.37	1.0	ug/L	244945	1	07/02/2017 01:40	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/02/2017 01:40	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/02/2017 01:40	NP
Naphthalene	47		0.93	5.0	ug/L	244945	1	07/02/2017 01:40	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/02/2017 01:40	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/02/2017 01:40	NP
Surr: 4-Bromofluorobenzene	84.2		0	70-130	%REC	244945	1	07/02/2017 01:40	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	244945	1	07/02/2017 01:40	NP
Surr: Toluene-d8	103		0	70-130	%REC	244945	1	07/02/2017 01:40	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/02/2017 01:40	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/02/2017 01:40	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/02/2017 01:40	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/02/2017 01:40	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/02/2017 01:40	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/02/2017 01:40	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/02/2017 01:40	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/02/2017 01:40	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 30
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 9:10:00 AM
Lab ID:	1706R80-055	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 02:04	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 02:04	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/02/2017 02:04	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/02/2017 02:04	NP
Naphthalene	BRL		0.93	5.0	ug/L	244945	1	07/02/2017 02:04	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/02/2017 02:04	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/02/2017 02:04	NP
Surr: 4-Bromofluorobenzene	80		0	70-130	%REC	244945	1	07/02/2017 02:04	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	244945	1	07/02/2017 02:04	NP
Surr: Toluene-d8	97.9		0	70-130	%REC	244945	1	07/02/2017 02:04	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/02/2017 02:04	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/02/2017 02:04	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/02/2017 02:04	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/02/2017 02:04	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/02/2017 02:04	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/02/2017 02:04	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/02/2017 02:04	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/02/2017 02:04	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 2
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 10:25:00 AM
Lab ID:	1706R80-056	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/05/2017 16:46	NP
Benzene	400		3.7	10	ug/L	244945	10	07/06/2017 09:48	NP
Ethylbenzene	76		0.26	1.0	ug/L	244945	1	07/05/2017 16:46	NP
Methyl tert-butyl ether	6.2		0.45	1.0	ug/L	244945	1	07/05/2017 16:46	NP
Naphthalene	370		9.3	50	ug/L	244945	10	07/06/2017 09:48	NP
Toluene	1700		3.9	10	ug/L	244945	10	07/06/2017 09:48	NP
Xylenes, Total	4100		7.7	10	ug/L	244945	10	07/06/2017 09:48	NP
Surr: 4-Bromofluorobenzene	96.7		0	70-130	%REC	244945	10	07/06/2017 09:48	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	244945	1	07/05/2017 16:46	NP
Surr: Dibromofluoromethane	91.3		0	70-130	%REC	244945	1	07/05/2017 16:46	NP
Surr: Dibromofluoromethane	94.6		0	70-130	%REC	244945	10	07/06/2017 09:48	NP
Surr: Toluene-d8	99.1		0	70-130	%REC	244945	1	07/05/2017 16:46	NP
Surr: Toluene-d8	100		0	70-130	%REC	244945	10	07/06/2017 09:48	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/05/2017 16:46	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/05/2017 16:46	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/05/2017 16:46	NP
Isopropyl ether	21		3.8	10	ug/L	244945	1	07/05/2017 16:46	NP
tert-Amyl alcohol	980		28	100	ug/L	244945	1	07/05/2017 16:46	NP
tert-Amyl methyl ether	9.9	J	3.4	10	ug/L	244945	1	07/05/2017 16:46	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/05/2017 16:46	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/05/2017 16:46	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 32
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 9:00:00 AM
Lab ID:	1706R80-057	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 02:28	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 02:28	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/02/2017 02:28	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/02/2017 02:28	NP
Naphthalene	1.4	J	0.93	5.0	ug/L	244945	1	07/02/2017 02:28	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/02/2017 02:28	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/02/2017 02:28	NP
Surr: 4-Bromofluorobenzene	80.5		0	70-130	%REC	244945	1	07/02/2017 02:28	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	244945	1	07/02/2017 02:28	NP
Surr: Toluene-d8	99.6		0	70-130	%REC	244945	1	07/02/2017 02:28	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/02/2017 02:28	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/02/2017 02:28	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/02/2017 02:28	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/02/2017 02:28	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/02/2017 02:28	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/02/2017 02:28	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/02/2017 02:28	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/02/2017 02:28	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 27
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 8:50:00 AM
Lab ID:	1706R80-058	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 02:52	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 02:52	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/02/2017 02:52	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/02/2017 02:52	NP
Naphthalene	BRL		0.93	5.0	ug/L	244945	1	07/02/2017 02:52	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/02/2017 02:52	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/02/2017 02:52	NP
Surr: 4-Bromofluorobenzene	84.3		0	70-130	%REC	244945	1	07/02/2017 02:52	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	244945	1	07/02/2017 02:52	NP
Surr: Toluene-d8	98.8		0	70-130	%REC	244945	1	07/02/2017 02:52	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/02/2017 02:52	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/02/2017 02:52	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/02/2017 02:52	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/02/2017 02:52	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/02/2017 02:52	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/02/2017 02:52	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/02/2017 02:52	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/02/2017 02:52	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 28
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 8:40:00 AM
Lab ID:	1706R80-059	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 03:15	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 03:15	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/02/2017 03:15	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/02/2017 03:15	NP
Naphthalene	BRL		0.93	5.0	ug/L	244945	1	07/02/2017 03:15	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/02/2017 03:15	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/02/2017 03:15	NP
Surr: 4-Bromofluorobenzene	81.6		0	70-130	%REC	244945	1	07/02/2017 03:15	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	244945	1	07/02/2017 03:15	NP
Surr: Toluene-d8	102		0	70-130	%REC	244945	1	07/02/2017 03:15	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/02/2017 03:15	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/02/2017 03:15	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/02/2017 03:15	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/02/2017 03:15	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/02/2017 03:15	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/02/2017 03:15	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/02/2017 03:15	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/02/2017 03:15	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 29
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 8:30:00 AM
Lab ID:	1706R80-060	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 03:39	NP
Benzene	BRL		0.37	1.0	ug/L	244945	1	07/02/2017 03:39	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244945	1	07/02/2017 03:39	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244945	1	07/02/2017 03:39	NP
Naphthalene	BRL		0.93	5.0	ug/L	244945	1	07/02/2017 03:39	NP
Toluene	BRL		0.39	1.0	ug/L	244945	1	07/02/2017 03:39	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244945	1	07/02/2017 03:39	NP
Surr: 4-Bromofluorobenzene	79.2		0	70-130	%REC	244945	1	07/02/2017 03:39	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	244945	1	07/02/2017 03:39	NP
Surr: Toluene-d8	101		0	70-130	%REC	244945	1	07/02/2017 03:39	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244945	1	07/02/2017 03:39	NP
Ethanol	BRL		43	100	ug/L	244945	1	07/02/2017 03:39	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244945	1	07/02/2017 03:39	NP
Isopropyl ether	BRL		3.8	10	ug/L	244945	1	07/02/2017 03:39	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244945	1	07/02/2017 03:39	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244945	1	07/02/2017 03:39	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244945	1	07/02/2017 03:39	NP
tert-Butyl formate	BRL		13	100	ug/L	244945	1	07/02/2017 03:39	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	FB-1
Project Name:	Clouds Exxon	**Collection Date:**	6/27/2017 3:00:00 PM
Lab ID:	1706R80-061	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244948	1	07/03/2017 10:47	NP
Benzene	BRL		0.37	1.0	ug/L	244948	1	07/03/2017 10:47	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244948	1	07/03/2017 10:47	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244948	1	07/03/2017 10:47	NP
Naphthalene	BRL		0.93	5.0	ug/L	244948	1	07/03/2017 10:47	NP
Toluene	BRL		0.39	1.0	ug/L	244948	1	07/03/2017 10:47	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244948	1	07/03/2017 10:47	NP
Surr: 4-Bromofluorobenzene	82.7		0	70-130	%REC	244948	1	07/03/2017 10:47	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	244948	1	07/03/2017 10:47	NP
Surr: Toluene-d8	95.2		0	70-130	%REC	244948	1	07/03/2017 10:47	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244948	1	07/03/2017 10:47	NP
Ethanol	BRL		43	100	ug/L	244948	1	07/03/2017 10:47	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244948	1	07/03/2017 10:47	NP
Isopropyl ether	BRL		3.8	10	ug/L	244948	1	07/03/2017 10:47	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244948	1	07/03/2017 10:47	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244948	1	07/03/2017 10:47	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244948	1	07/03/2017 10:47	NP
tert-Butyl formate	BRL		13	100	ug/L	244948	1	07/03/2017 10:47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	TRIP BLANK
Project Name:	Clouds Exxon	**Collection Date:**	6/29/2017 10:25:00 AM
Lab ID:	1706R80-062	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244948	1	07/03/2017 11:10	NP
Benzene	BRL		0.37	1.0	ug/L	244948	1	07/03/2017 11:10	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244948	1	07/03/2017 11:10	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244948	1	07/03/2017 11:10	NP
Naphthalene	BRL		0.93	5.0	ug/L	244948	1	07/03/2017 11:10	NP
Toluene	BRL		0.39	1.0	ug/L	244948	1	07/03/2017 11:10	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244948	1	07/03/2017 11:10	NP
Surr: 4-Bromofluorobenzene	86.7		0	70-130	%REC	244948	1	07/03/2017 11:10	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	244948	1	07/03/2017 11:10	NP
Surr: Toluene-d8	99.7		0	70-130	%REC	244948	1	07/03/2017 11:10	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244948	1	07/03/2017 11:10	NP
Ethanol	BRL		43	100	ug/L	244948	1	07/03/2017 11:10	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244948	1	07/03/2017 11:10	NP
Isopropyl ether	BRL		3.8	10	ug/L	244948	1	07/03/2017 11:10	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244948	1	07/03/2017 11:10	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244948	1	07/03/2017 11:10	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244948	1	07/03/2017 11:10	NP
tert-Butyl formate	BRL		13	100	ug/L	244948	1	07/03/2017 11:10	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 7-Jul-17

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP-3
Project Name:	Clouds Exxon	**Collection Date:**	6/28/2017 12:35:00 PM
Lab ID:	1706R80-063	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	244948	1	07/03/2017 11:34	NP
Benzene	BRL		0.37	1.0	ug/L	244948	1	07/03/2017 11:34	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	244948	1	07/03/2017 11:34	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	244948	1	07/03/2017 11:34	NP
Naphthalene	BRL		0.93	5.0	ug/L	244948	1	07/03/2017 11:34	NP
Toluene	BRL		0.39	1.0	ug/L	244948	1	07/03/2017 11:34	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	244948	1	07/03/2017 11:34	NP
Surr: 4-Bromofluorobenzene	84.1		0	70-130	%REC	244948	1	07/03/2017 11:34	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	244948	1	07/03/2017 11:34	NP
Surr: Toluene-d8	100		0	70-130	%REC	244948	1	07/03/2017 11:34	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	244948	1	07/03/2017 11:34	NP
Ethanol	BRL		43	100	ug/L	244948	1	07/03/2017 11:34	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	244948	1	07/03/2017 11:34	NP
Isopropyl ether	BRL		3.8	10	ug/L	244948	1	07/03/2017 11:34	NP
tert-Amyl alcohol	BRL		28	100	ug/L	244948	1	07/03/2017 11:34	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	244948	1	07/03/2017 11:34	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	244948	1	07/03/2017 11:34	NP
tert-Butyl formate	BRL		13	100	ug/L	244948	1	07/03/2017 11:34	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Access Analytical, Inc.** AES Work Order Number: **1706R80**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other ____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	●	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	●	○		
5.	Custody seals intact on shipping container?	○	○	●		
6.	Temperature blanks present?	○	●	○		
7.	Cooler temperature(s) within limits of 0-6°C? [See item 13 and 14 for temperature recordings.]	●	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	●	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	●	○	○		
10.	Sampler name and/or signature on COC?	●	○	○		
11.	Were all samples received within holding time?	●	○	○		
12.	TAT marked on the COC?	●	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 4.8 °C Cooler 2 Temperature 3.4 °C Cooler 3 Temperature ____ °C Cooler 4 Temperature ____ °C

14. Cooler 5 Temperature ____ °C Cooler 6 Temperature ____ °C Cooler 7 Temperature ____ °C Cooler 8 Temperature ____ °C

15. Comments: ____

I certify that I have completed sections 1-15 (dated initials). MJ 6/29/17

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	●	○	○		
17.	Custody seals present on sample containers?	○	●	○		
18.	Custody seals intact on sample containers?	○	○	●		
19.	Do sample container labels match the COC?	○	●	○	incomplete info ☐ illegible ☐ no label ☐ other ■	
20.	Are analyses requested indicated on the COC?	●	○	○		
21.	Were all of the samples listed on the COC received?	○	●	○	samples received but not listed on COC ■ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	●	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	●	○	○		
24.	Were samples received in appropriate containers?	●	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	●	○	○		
26.	Were trip blanks submitted?	●	○	○	listed on COC ☐ not listed on COC ■	

27. Comments: ____

I certify that I have completed sections 16-27 (dated initials). AJ 6/29/17

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked?	○	○	●		
29.	Containers meet preservation guidelines?	○	○	●		
30.	Was pH adjusted?	○	○	●		

I certify that I have completed sections 28-30 (dated initials). AJ 6/29/17

Checklist 1/19/17 Rev 0.

Locked

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244942

Sample ID: MB-244942	Client ID:		Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B		BatchID: 244942	Analysis Date: 06/30/2017	Seq No: 7614696

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	41.53	0	50.00		83.1	70	130				
Surr: Dibromofluoromethane	49.35	0	50.00		98.7	70	130				
Surr: Toluene-d8	49.36	0	50.00		98.7	70	130				

Sample ID: MB-244942	Client ID:		Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: MBLK	TestCode: Oxygenates SW8260B		BatchID: 244942	Analysis Date: 06/30/2017	Seq No: 7614911

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: LCS-244942	Client ID:		Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B		BatchID: 244942	Analysis Date: 06/30/2017	Seq No: 7614692

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:
- `>` Greater than Result value
- `<` Less than Result value
- B Analyte detected in the associated method Blank
- BRL Below reporting limit
- E Estimated (value above quantitation range)
- H Holding times for preparation or analysis exceeded
- J Estimated value detected below Reporting Limit
- N Analyte not NELAC certified
- R RPD outside limits due to matrix
- Rpt Lim Reporting Limit
- S Spike Recovery outside limits due to matrix

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244942

Sample ID: LCS-244942	Client ID:	Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 244942	Analysis Date: 06/30/2017	Seq No: 7614692

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	21.00	1.0	20.00		105	70	130				
Benzene	20.31	1.0	20.00		102	70	130				
Ethylbenzene	19.38	1.0	20.00		96.9	70	130				
Naphthalene	19.23	5.0	20.00		96.2	70	130				
Toluene	19.35	1.0	20.00		96.8	70	130				
Xylenes, Total	58.80	1.0	60.00		98.0	70	130				
Surr: 4-Bromofluorobenzene	44.78	0	50.00		89.6	70	130				
Surr: Dibromofluoromethane	52.12	0	50.00		104	70	130				
Surr: Toluene-d8	46.64	0	50.00		93.3	70	130				

Sample ID: LCS-244942	Client ID:	Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: LCS	TestCode: Oxygenates SW8260B	BatchID: 244942	Analysis Date: 06/30/2017	Seq No: 7614909

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	974.2	100	1000		97.4	70	130				
Ethanol	1108	100	1000		111	70	130				
Ethyl tert-butyl ether	213.4	100	200.0		107	70	130				
Isopropyl ether	210.7	10	200.0		105	70	130				
tert-Amyl alcohol	1088	100	1000		109	70	130				
tert-Amyl methyl ether	209.7	10	200.0		105	70	130				
tert-Butyl Alcohol	1110	100	1000		111	70	130				
tert-Butyl formate	1079	100	1000		108	70	130				

Sample ID: 1706R80-001AMS	Client ID: MW15	Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 244942	Analysis Date: 06/30/2017	Seq No: 7614700

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	9160	500	10000		91.6	71.9	139				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244942

Sample ID: 1706R80-001AMS	Client ID: MW15	Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 244942	Analysis Date: 06/30/2017	Seq No: 7614700

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	8850	500	10000		88.5	71.6	132				
Ethylbenzene	8770	500	10000	230.0	85.4	81.2	130				
Naphthalene	9045	2500	10000		90.4	51.8	132				
Toluene	8915	500	10000		89.2	72.5	135				
Xylenes, Total	32210	500	30000	4880	91.1	76.1	139				
Surr: 4-Bromofluorobenzene	23060	0	25000		92.2	70	130				
Surr: Dibromofluoromethane	25630	0	25000		103	70	130				
Surr: Toluene-d8	24300	0	25000		97.2	70	130				

Sample ID: 1706R80-001AMS	Client ID: MW15	Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: MS	TestCode: Oxygenates SW8260B	BatchID: 244942	Analysis Date: 06/30/2017	Seq No: 7614918

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	177100	50000	250000		70.8	60.3	131				
Ethanol	218200	50000	250000		87.3	60.6	136				
Ethyl tert-butyl ether	46400	10000	50000		92.8	70.3	129				
Isopropyl ether	47210	5000	50000		94.4	70.1	130				
tert-Amyl alcohol	191600	50000	250000		76.7	67.6	135				
tert-Amyl methyl ether	45760	5000	50000		91.5	70	128				
tert-Butyl Alcohol	177300	50000	250000		70.9	64	140				
tert-Butyl formate	250300	50000	250000		100	55.3	128				

Sample ID: 1706R80-001AMSD	Client ID: MW15	Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 244942	Analysis Date: 06/30/2017	Seq No: 7614701

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	9570	500	10000		95.7	71.9	139	9160	4.38	20	
Benzene	8765	500	10000		87.6	71.6	132	8850	0.965	20.7	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244942

Sample ID: 1706R80-001AMSD	Client ID: MW15	Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 244942	Analysis Date: 06/30/2017	Seq No: 7614701

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	8630	500	10000	230.0	84.0	81.2	130	8770	1.61	20	
Naphthalene	9030	2500	10000		90.3	51.8	132	9045	0.166	37.8	
Toluene	9035	500	10000		90.4	72.5	135	8915	1.34	23.2	
Xylenes, Total	31190	500	30000	4880	87.7	76.1	139	32210	3.22	20	
Surr: 4-Bromofluorobenzene	22750	0	25000		91.0	70	130	23060	0	0	
Surr: Dibromofluoromethane	25230	0	25000		101	70	130	25630	0	0	
Surr: Toluene-d8	24340	0	25000		97.4	70	130	24300	0	0	

Sample ID: 1706R80-001AMSD	Client ID: MW15	Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: MSD	TestCode: Oxygenates SW8260B	BatchID: 244942	Analysis Date: 06/30/2017	Seq No: 7614921

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	198500	50000	250000		79.4	60.3	131	177100	11.4	19.3	
Ethanol	295600	50000	250000		118	60.6	136	218200	30.1	33.3	
Ethyl tert-butyl ether	45920	10000	50000		91.8	70.3	129	46400	1.04	20	
Isopropyl ether	46590	5000	50000		93.2	70.1	130	47210	1.32	20	
tert-Amyl alcohol	226000	50000	250000		90.4	67.6	135	191600	16.4	19.8	
tert-Amyl methyl ether	45390	5000	50000		90.8	70	128	45760	0.823	20	
tert-Butyl Alcohol	215000	50000	250000		86.0	64	140	177300	19.2	25	
tert-Butyl formate	245700	50000	250000		98.3	55.3	128	250300	1.88	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value
B	Analyte detected in the associated method Blank	BRL	Below reporting limit
E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified
R	RPD outside limits due to matrix	Rpt Lim	Reporting Limit
S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244943

Sample ID: **MB-244943**	Client ID:			Units: **ug/L**	Prep Date: **06/30/2017**	Run No: **346744**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **244943**	Analysis Date: **06/30/2017**	Seq No: **7614697**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	43.00	0	50.00		86.0	70	130				
Surr: Dibromofluoromethane	51.89	0	50.00		104	70	130				
Surr: Toluene-d8	50.23	0	50.00		100	70	130				

Sample ID: **MB-244943**	Client ID:			Units: **ug/L**	Prep Date: **06/30/2017**	Run No: **346744**
SampleType: **MBLK**	TestCode: **Oxygenates SW8260B**			BatchID: **244943**	Analysis Date: **06/30/2017**	Seq No: **7614912**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-244943**	Client ID:			Units: **ug/L**	Prep Date: **06/30/2017**	Run No: **346744**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **244943**	Analysis Date: **06/30/2017**	Seq No: **7614695**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244943

Sample ID: **LCS-244943**	Client ID:	Units: **ug/L**	Prep Date: **06/30/2017**	Run No: **346744**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **244943**	Analysis Date: **06/30/2017**	Seq No: **7614695**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	17.90	1.0	20.00		89.5	70	130				
Benzene	17.91	1.0	20.00		89.6	70	130				
Ethylbenzene	17.74	1.0	20.00		88.7	70	130				
Naphthalene	17.18	5.0	20.00		85.9	70	130				
Toluene	17.48	1.0	20.00		87.4	70	130				
Xylenes, Total	53.10	1.0	60.00		88.5	70	130				
Surr: 4-Bromofluorobenzene	45.71	0	50.00		91.4	70	130				
Surr: Dibromofluoromethane	50.79	0	50.00		102	70	130				
Surr: Toluene-d8	47.44	0	50.00		94.9	70	130				

Sample ID: **LCS-244943**	Client ID:	Units: **ug/L**	Prep Date: **06/30/2017**	Run No: **346744**
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**	BatchID: **244943**	Analysis Date: **06/30/2017**	Seq No: **7614910**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	785.0	100	1000		78.5	70	130				
Ethanol	857.6	100	1000		85.8	70	130				
Ethyl tert-butyl ether	181.8	100	200.0		90.9	70	130				
Isopropyl ether	179.8	10	200.0		89.9	70	130				
tert-Amyl alcohol	872.4	100	1000		87.2	70	130				
tert-Amyl methyl ether	178.2	10	200.0		89.1	70	130				
tert-Butyl Alcohol	858.4	100	1000		85.8	70	130				
tert-Butyl formate	905.7	100	1000		90.6	70	130				

Sample ID: **1706R80-033AMS**	Client ID: **MW 22**	Units: **ug/L**	Prep Date: **06/30/2017**	Run No: **346744**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **244943**	Analysis Date: **06/30/2017**	Seq No: **7614704**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	9810	500	10000		98.1	71.9	139				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244943

Sample ID: 1706R80-033AMS	Client ID: MW 22	Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 244943	Analysis Date: 06/30/2017	Seq No: 7614704

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	12460	500	10000	2105	104	71.6	132				
Ethylbenzene	11050	500	10000	1090	99.6	81.2	130				
Naphthalene	9365	2500	10000		93.6	51.8	132				
Toluene	24840	500	10000	12940	119	72.5	135				
Xylenes, Total	49890	500	30000	15480	115	76.1	139				
Surr: 4-Bromofluorobenzene	23020	0	25000		92.1	70	130				
Surr: Dibromofluoromethane	26230	0	25000		105	70	130				
Surr: Toluene-d8	24610	0	25000		98.4	70	130				

Sample ID: 1706R80-033AMS	Client ID: MW 22	Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: MS	TestCode: Oxygenates SW8260B	BatchID: 244943	Analysis Date: 06/30/2017	Seq No: 7614926

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	179000	50000	250000		71.6	60.3	131				
Ethanol	212700	50000	250000	24280	75.4	60.6	136				
Ethyl tert-butyl ether	48970	10000	50000		97.9	70.3	129				
Isopropyl ether	50070	5000	50000		100	70.1	130				
tert-Amyl alcohol	190800	50000	250000		76.3	67.6	135				
tert-Amyl methyl ether	50610	5000	50000		101	70	128				
tert-Butyl Alcohol	159100	50000	250000		63.7	64	140				S
tert-Butyl formate	267400	50000	250000		107	55.3	128				

Sample ID: 1706R80-033AMSD	Client ID: MW 22	Units: ug/L	Prep Date: 06/30/2017	Run No: 346744
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 244943	Analysis Date: 06/30/2017	Seq No: 7614705

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	9560	500	10000		95.6	71.9	139	9810	2.58	20	
Benzene	11770	500	10000	2105	96.6	71.6	132	12460	5.70	20.7	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244943

Sample ID: **1706R80-033AMSD**	Client ID: **MW 22**			Units: **ug/L**	Prep Date: **06/30/2017**	Run No: **346744**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **244943**	Analysis Date: **06/30/2017**	Seq No: **7614705**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	11080	500	10000	1090	99.9	81.2	130	11050	0.316	20	
Naphthalene	9590	2500	10000		95.9	51.8	132	9365	2.37	37.8	
Toluene	23590	500	10000	12940	106	72.5	135	24840	5.16	23.2	
Xylenes, Total	50300	500	30000	15480	116	76.1	139	49890	0.809	20	
Surr: 4-Bromofluorobenzene	23960	0	25000		95.8	70	130	23020	0	0	
Surr: Dibromofluoromethane	25740	0	25000		103	70	130	26230	0	0	
Surr: Toluene-d8	24070	0	25000		96.3	70	130	24610	0	0	

Sample ID: **1706R80-033AMSD**	Client ID: **MW 22**			Units: **ug/L**	Prep Date: **06/30/2017**	Run No: **346744**
SampleType: **MSD**	TestCode: **Oxygenates SW8260B**			BatchID: **244943**	Analysis Date: **06/30/2017**	Seq No: **7614927**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	198200	50000	250000		79.3	60.3	131	179000	10.2	19.3	
Ethanol	265500	50000	250000	24280	96.5	60.6	136	212700	22.1	33.3	
Ethyl tert-butyl ether	47440	10000	50000		94.9	70.3	129	48970	3.18	20	
Isopropyl ether	48810	5000	50000		97.6	70.1	130	50070	2.55	20	
tert-Amyl alcohol	221900	50000	250000		88.8	67.6	135	190800	15.1	19.8	
tert-Amyl methyl ether	47050	5000	50000		94.1	70	128	50610	7.30	20	
tert-Butyl Alcohol	199900	50000	250000		80.0	64	140	159100	22.7	25	
tert-Butyl formate	249100	50000	250000		99.6	55.3	128	267400	7.11	20	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method Blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244945

Sample ID: **MB-244945**	Client ID:			Units: **ug/L**	Prep Date: **07/01/2017**	Run No: **346758**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **244945**	Analysis Date: **07/01/2017**	Seq No: **7615213**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	40.88	0	50.00		81.8	70	130				
Surr: Dibromofluoromethane	52.82	0	50.00		106	70	130				
Surr: Toluene-d8	50.65	0	50.00		101	70	130				

Sample ID: **MB-244945**	Client ID:			Units: **ug/L**	Prep Date: **07/01/2017**	Run No: **346758**
SampleType: **MBLK**	TestCode: **Oxygenates SW8260B**			BatchID: **244945**	Analysis Date: **07/01/2017**	Seq No: **7615326**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-244945**	Client ID:			Units: **ug/L**	Prep Date: **07/01/2017**	Run No: **346758**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **244945**	Analysis Date: **07/01/2017**	Seq No: **7615212**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 7-Jul-17

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244945

Sample ID: **LCS-244945**	Client ID:	Units: **ug/L**	Prep Date: **07/01/2017**	Run No: **346758**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **244945**	Analysis Date: **07/01/2017**	Seq No: **7615212**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	18.70	1.0	20.00		93.5	70	130				
Benzene	19.21	1.0	20.00		96.0	70	130				
Ethylbenzene	18.17	1.0	20.00		90.8	70	130				
Naphthalene	17.16	5.0	20.00		85.8	70	130				
Toluene	18.18	1.0	20.00		90.9	70	130				
Xylenes, Total	55.16	1.0	60.00		91.9	70	130				
Surr: 4-Bromofluorobenzene	46.19	0	50.00		92.4	70	130				
Surr: Dibromofluoromethane	50.77	0	50.00		102	70	130				
Surr: Toluene-d8	47.57	0	50.00		95.1	70	130				

Sample ID: **LCS-244945**	Client ID:	Units: **ug/L**	Prep Date: **07/01/2017**	Run No: **346758**
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**	BatchID: **244945**	Analysis Date: **07/01/2017**	Seq No: **7615325**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	441.7	100	500.0		88.3	70	130				
Ethanol	512.8	100	500.0		103	70	130				
Ethyl tert-butyl ether	94.99	20	100.0		95.0	70	130				
Isopropyl ether	97.23	10	100.0		97.2	70	130				
tert-Amyl alcohol	472.0	100	500.0		94.4	70	130				
tert-Amyl methyl ether	95.36	10	100.0		95.4	70	130				
tert-Butyl Alcohol	464.0	100	500.0		92.8	70	130				
tert-Butyl formate	488.7	100	500.0		97.7	70	130				

Sample ID: **1706R80-041AMS**	Client ID: **MW 40**	Units: **ug/L**	Prep Date: **07/01/2017**	Run No: **346824**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **244945**	Analysis Date: **07/03/2017**	Seq No: **7616847**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	178.7	10	200.0		89.4	71.9	139				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244945

Sample ID: **1706R80-041AMS**	Client ID: **MW 40**			Units: **ug/L**	Prep Date: **07/01/2017**	Run No: **346824**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **244945**	Analysis Date: **07/03/2017**	Seq No: **7616847**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	210.7	10	200.0	23.00	93.8	71.6	132				
Ethylbenzene	810.4	10	200.0	600.0	105	81.2	130				
Naphthalene	583.2	50	200.0	481.0	51.1	51.8	132				S
Toluene	194.0	10	200.0	5.300	94.4	72.5	135				
Xylenes, Total	653.8	10	600.0	83.90	95.0	76.1	139				
Surr: 4-Bromofluorobenzene	471.6	0	500.0		94.3	70	130				
Surr: Dibromofluoromethane	491.8	0	500.0		98.4	70	130				
Surr: Toluene-d8	489.7	0	500.0		97.9	70	130				

Sample ID: **1706R80-049AMS**	Client ID: **MW 35**			Units: **ug/L**	Prep Date: **07/01/2017**	Run No: **346758**
SampleType: **MS**	TestCode: **Oxygenates SW8260B**			BatchID: **244945**	Analysis Date: **07/01/2017**	Seq No: **7615328**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	8095	2000	10000		80.9	60.3	131				
Ethanol	8671	2000	10000		86.7	60.6	136				
Ethyl tert-butyl ether	1633	400	2000		81.6	70.3	129				
Isopropyl ether	1803	200	2000	245.4	77.9	70.1	130				
tert-Amyl alcohol	12760	2000	10000	2958	98.0	67.6	135				
tert-Amyl methyl ether	1681	200	2000	158.2	76.1	70	128				
tert-Butyl Alcohol	8676	2000	10000		86.8	64	140				
tert-Butyl formate	7189	2000	10000		71.9	55.3	128				

Sample ID: **1706R80-041AMSD**	Client ID: **MW 40**			Units: **ug/L**	Prep Date: **07/01/2017**	Run No: **346824**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **244945**	Analysis Date: **07/03/2017**	Seq No: **7616848**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	173.7	10	200.0		86.8	71.9	139	178.7	2.84	20	
Benzene	203.6	10	200.0	23.00	90.3	71.6	132	210.7	3.43	20.7	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244945

Sample ID: **1706R80-041AMSD**	Client ID: **MW 40**				Units: **ug/L**		Prep Date: **07/01/2017**		Run No: **346824**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **244945**		Analysis Date: **07/03/2017**		Seq No: **7616848**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	795.9	10	200.0	600.0	98.0	81.2	130	810.4	1.81	20	
Naphthalene	674.9	50	200.0	481.0	97.0	51.8	132	583.2	14.6	37.8	
Toluene	183.5	10	200.0	5.300	89.1	72.5	135	194.0	5.56	23.2	
Xylenes, Total	656.8	10	600.0	83.90	95.5	76.1	139	653.8	0.458	20	
Surr: 4-Bromofluorobenzene	490.0	0	500.0		98.0	70	130	471.6	0	0	
Surr: Dibromofluoromethane	492.2	0	500.0		98.4	70	130	491.8	0	0	
Surr: Toluene-d8	488.8	0	500.0		97.8	70	130	489.7	0	0	

Sample ID: **1706R80-049AMSD**	Client ID: **MW 35**				Units: **ug/L**		Prep Date: **07/01/2017**		Run No: **346758**	
SampleType: **MSD**	TestCode: **Oxygenates SW8260B**				BatchID: **244945**		Analysis Date: **07/01/2017**		Seq No: **7615329**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	7627	2000	10000		76.3	60.3	131	8095	5.96	19.3	
Ethanol	10890	2000	10000		109	60.6	136	8671	22.7	33.3	
Ethyl tert-butyl ether	1606	400	2000		80.3	70.3	129	1633	1.64	20	
Isopropyl ether	1779	200	2000	245.4	76.7	70.1	130	1803	1.35	20	
tert-Amyl alcohol	11400	2000	10000	2958	84.4	67.6	135	12760	11.3	19.8	
tert-Amyl methyl ether	1611	200	2000	158.2	72.6	70	128	1681	4.28	20	
tert-Butyl Alcohol	8198	2000	10000		82.0	64	140	8676	5.67	25	
tert-Butyl formate	6649	2000	10000		66.5	55.3	128	7189	7.81	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value
BRL	Below reporting limit	E	Estimated (value above quantitation range)
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix
B	Analyte detected in the associated method blank		
H	Holding times for preparation or analysis exceeded		
R	RPD outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244948

Sample ID: **MB-244948**	Client ID:			Units: **ug/L**	Prep Date: **07/03/2017**	Run No: **346824**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **244948**	Analysis Date: **07/03/2017**	Seq No: **7616835**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	40.72	0	50.00		81.4	70	130				
Surr: Dibromofluoromethane	50.62	0	50.00		101	70	130				
Surr: Toluene-d8	49.04	0	50.00		98.1	70	130				

Sample ID: **MB-244948**	Client ID:			Units: **ug/L**	Prep Date: **07/03/2017**	Run No: **346824**
SampleType: **MBLK**	TestCode: **Oxygenates SW8260B**			BatchID: **244948**	Analysis Date: **07/03/2017**	Seq No: **7617139**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-244948**	Client ID:			Units: **ug/L**	Prep Date: **07/03/2017**	Run No: **346824**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **244948**	Analysis Date: **07/03/2017**	Seq No: **7616834**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244948

Sample ID: **LCS-244948**	Client ID:		Units: **ug/L**	Prep Date: **07/03/2017**	Run No: **346824**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **244948**	Analysis Date: **07/03/2017**	Seq No: **7616834**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	17.38	1.0	20.00		86.9	70	130				
Benzene	17.89	1.0	20.00		89.4	70	130				
Ethylbenzene	16.66	1.0	20.00		83.3	70	130				
Naphthalene	14.16	5.0	20.00		70.8	70	130				
Toluene	17.73	1.0	20.00		88.6	70	130				
Xylenes, Total	51.18	1.0	60.00		85.3	70	130				
Surr: 4-Bromofluorobenzene	46.96	0	50.00		93.9	70	130				
Surr: Dibromofluoromethane	51.56	0	50.00		103	70	130				
Surr: Toluene-d8	50.71	0	50.00		101	70	130				

Sample ID: **LCS-244948**	Client ID:		Units: **ug/L**	Prep Date: **07/03/2017**	Run No: **346824**
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**		BatchID: **244948**	Analysis Date: **07/03/2017**	Seq No: **7617138**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	471.7	100	500.0		94.3	70	130				
Ethanol	504.9	100	500.0		101	70	130				
Ethyl tert-butyl ether	95.07	20	100.0		95.1	70	130				
Isopropyl ether	93.30	10	100.0		93.3	70	130				
tert-Amyl alcohol	553.9	100	500.0		111	70	130				
tert-Amyl methyl ether	98.13	10	100.0		98.1	70	130				
tert-Butyl Alcohol	580.8	100	500.0		116	70	130				
tert-Butyl formate	505.2	100	500.0		101	70	130				

Sample ID: **1706R80-063AMS**	Client ID: **DUP-3**		Units: **ug/L**	Prep Date: **07/03/2017**	Run No: **346824**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **244948**	Analysis Date: **07/03/2017**	Seq No: **7616840**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	19.40	1.0	20.00		97.0	71.9	139				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244948

Sample ID: **1706R80-063AMS**	Client ID: **DUP-3**				Units: **ug/L**		Prep Date: **07/03/2017**		Run No: **346824**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **244948**		Analysis Date: **07/03/2017**		Seq No: **7616840**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	18.54	1.0	20.00		92.7	71.6	132				
Ethylbenzene	18.45	1.0	20.00		92.2	81.2	130				
Naphthalene	16.32	5.0	20.00		81.6	51.8	132				
Toluene	18.57	1.0	20.00		92.8	72.5	135				
Xylenes, Total	55.16	1.0	60.00		91.9	76.1	139				
Surr: 4-Bromofluorobenzene	47.26	0	50.00		94.5	70	130				
Surr: Dibromofluoromethane	53.13	0	50.00		106	70	130				
Surr: Toluene-d8	49.15	0	50.00		98.3	70	130				

Sample ID: **1706R80-063AMS**	Client ID: **DUP-3**				Units: **ug/L**		Prep Date: **07/03/2017**		Run No: **346824**	
SampleType: **MS**	TestCode: **Oxygenates SW8260B**				BatchID: **244948**		Analysis Date: **07/03/2017**		Seq No: **7617143**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	386.0	100	500.0		77.2	60.3	131				
Ethanol	467.6	100	500.0		93.5	60.6	136				
Ethyl tert-butyl ether	88.61	20	100.0		88.6	70.3	129				
Isopropyl ether	89.87	10	100.0		89.9	70.1	130				
tert-Amyl alcohol	455.9	100	500.0		91.2	67.6	135				
tert-Amyl methyl ether	90.76	10	100.0		90.8	70	128				
tert-Butyl Alcohol	456.3	100	500.0		91.3	64	140				
tert-Butyl formate	431.3	100	500.0		86.3	55.3	128				

Sample ID: **1706R80-063AMSD**	Client ID: **DUP-3**				Units: **ug/L**		Prep Date: **07/03/2017**		Run No: **346824**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **244948**		Analysis Date: **07/03/2017**		Seq No: **7616841**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	18.64	1.0	20.00		93.2	71.9	139	19.40	4.00	20	
Benzene	17.69	1.0	20.00		88.4	71.6	132	18.54	4.69	20.7	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1706R80

ANALYTICAL QC SUMMARY REPORT

BatchID: 244948

Sample ID: **1706R80-063AMSD**	Client ID: **DUP-3**				Units: **ug/L**		Prep Date: **07/03/2017**		Run No: **346824**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **244948**		Analysis Date: **07/03/2017**		Seq No: **7616841**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	17.28	1.0	20.00		86.4	81.2	130	18.45	6.55	20	
Naphthalene	17.64	5.0	20.00		88.2	51.8	132	16.32	7.77	37.8	
Toluene	17.42	1.0	20.00		87.1	72.5	135	18.57	6.39	23.2	
Xylenes, Total	51.29	1.0	60.00		85.5	76.1	139	55.16	7.27	20	
Surr: 4-Bromofluorobenzene	46.34	0	50.00		92.7	70	130	47.26	0	0	
Surr: Dibromofluoromethane	51.25	0	50.00		102	70	130	53.13	0	0	
Surr: Toluene-d8	47.82	0	50.00		95.6	70	130	49.15	0	0	

Sample ID: **1706R80-063AMSD**	Client ID: **DUP-3**				Units: **ug/L**		Prep Date: **07/03/2017**		Run No: **346824**	
SampleType: **MSD**	TestCode: **Oxygenates SW8260B**				BatchID: **244948**		Analysis Date: **07/03/2017**		Seq No: **7617144**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	437.3	100	500.0		87.5	60.3	131	386.0	12.5	19.3	
Ethanol	477.0	100	500.0		95.4	60.6	136	467.6	1.98	33.3	
Ethyl tert-butyl ether	89.39	20	100.0		89.4	70.3	129	88.61	0.876	20	
Isopropyl ether	89.28	10	100.0		89.3	70.1	130	89.87	0.659	20	
tert-Amyl alcohol	500.6	100	500.0		100	67.6	135	455.9	9.35	19.8	
tert-Amyl methyl ether	90.60	10	100.0		90.6	70	128	90.76	0.176	20	
tert-Butyl Alcohol	571.4	100	500.0		114	64	140	456.3	22.4	25	
tert-Butyl formate	369.4	100	500.0		73.9	55.3	128	431.3	15.5	20	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method Blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Appendix B

Groundwater Sampling Data Sheets

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/ /26	Site ID #: 07584/07777/[illegible]	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 1	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 17 to 27		Total Well Depth (TWD) (ft.): 27
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): DRY		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	7	[illegible]	[illegible]				
Time (military)								
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy Emery	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/18	Site ID #: 01584/07777/12354	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 2	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 20 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 8.49	1 casing volume (CV = LWC x C) (gals.): 1.3		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	[illegible]	[illegible]	[illegible]				
Time (military)	1320							
PH (s.u.)	5.40							
Specific Conductivity (uS/cm)	208							
Water Temperature (°C)	23.93							
Turbidity (NTU)	20.7							
Dissolved Oxygen (mg/L)	0.65							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1320	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/19	Site ID #: 07594/07777/12356	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw3	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 19 to 29	Total Well Depth (TWD) (ft.): 29
Depth to Free Product (DFP) (ft.):		Depth to Groundwater (DGW) (ft.): 20.98	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 8.02		1 casing volume (CV = LWC x C) (gals.): 1.2	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	[illegible]	[illegible]	[illegible]				
Time (military)	1330							
PH (s.u.)	5.89							
Specific Conductivity (µS/cm)	172							
Water Temperature (°C)	25.12							
Turbidity (NTU)	12.4							
Dissolved Oxygen (mg/L)	.50							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1330	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 01584/01777/RIC	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-4	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 18 to 28	Total Well Depth (TWD) (ft.): [redacted] 25
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 20.55		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.45	1 casing volume (CV = LWC x C) (gals.): 1.1		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	[redacted]	[redacted]	[redacted]				
Time (military)	1340							
PH (s.u.)	4.99							
Specific Conductivity (µS/cm)	145							
Water Temperature (°C)	24.67							
Turbidity (NTU)	75.6							
Dissolved Oxygen (mg/L)	2.42							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1340	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/ /26	Site ID #: 07594/07777/12354	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 5	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 16 to 26	Total Well Depth (TWD) (ft.): 26
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): Dry		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	[illegible]	[illegible]	[illegible]				
Time (military)	D							
PH (s.u.)	R							
Specific Conductivity (µS/cm)	R							
Water Temperature (°C)	Y							
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy Emery	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/16	Site ID #: 02584/02777/02778	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW5AR	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 18 to 28	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 21.61		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 6.39	1 casing volume (CV = LWC x C) (gals.): 1.0		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	0820							
PH (s.u.)	6.62							
Specific Conductivity (µS/cm)	380							
Water Temperature (°C)	24.55							
Turbidity (NTU)	16.0							
Dissolved Oxygen (mg/L)	0.46							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1120	Duplicate: Y or N	If yes, Duplicate Time:

Notes: ___

Signature: ___

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/19	Site ID #: 01584/0777/RISC	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 6	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.91		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.09	1 casing volume (CV = LWC x C) (gals.): 1.1344		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	8	8	8				
Time (military)	1250							
PH (s.u.)	4.58							
Specific Conductivity (µS/cm)	116							
Water Temperature (°C)	24.69							
Turbidity (NTU)	2.0							
Dissolved Oxygen (mg/L)	1.97							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1250	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/12364	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HORIBA	Serial #:	Calibration			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 7	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 20 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.32		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.68	1 casing volume (CV = LWC x C) (gals.): 1.2288		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	1240							
PH (s.u.)	4.31							
Specific Conductivity (µS/cm)	125							
Water Temperature (°C)	24.48							
Turbidity (NTU)	16.9							
Dissolved Oxygen (mg/L)	4.45							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1248	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 01584/02777/12164	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 8	Well Diameter (ft.): 2 ll	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 18.5 to 28	Total Well Depth (TWD) (ft.): 28
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 19.65		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 8.35	1 casing volume (CV = LWC x C) (gals.): 1.3		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	1350							
PH (s.u.)	5.63							
Specific Conductivity (µS/cm)	43							
Water Temperature (°C)	24.89							
Turbidity (NTU)	62.9							
Dissolved Oxygen (mg/L)	1.83							

Sampling Data

Sampled By: Billy Ewing	Sampling Time: 1350	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/28/26	Site ID #: 07584/07777/12354	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 10	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 18 to 28	Total Well Depth (TWD) (ft.): 28
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 15.33		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 12.67	1 casing volume (CV = LWC x C) (gals.): 2.0272		3 casing volumes (3 x CV) (gals.)

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	5	5	8				
Time (military)	740							
PH (s.u.)	6.62							
Specific Conductivity (µS/cm)	452							
Water Temperature (°C)	24.14							
Turbidity (NTU)	17.1							
Dissolved Oxygen (mg/L)	0.29							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 740	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07594/07777/R3C4	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: OAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 11	Well Diameter (ft.): 2 ft	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 17.75		Free Product Thickness (ft.):
Length of water column (LWC = TWD - DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1410							
PH (s.u.)	4.71							
Specific Conductivity (µS/cm)	86							
Water Temperature (°C)	22.00							
Turbidity (NTU)	176							
Dissolved Oxygen (mg/l)	0.64							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1410	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/28/18	Site ID #: 07594/07777/12364	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 15	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 15 to 25	Total Well Depth (TWD) (ft.): 25
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 13.36		Free Product Thickness (ft.):
Length of water column (LWC = TWD - DGW) (ft.): 9.64	1 casing volume (CV = LWC x C) (gals.): 1.5		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	750							
PH (s.u.)	6.84							
Specific Conductivity (µS/cm)	604							
Water Temperature (°C)	73.45							
Turbidity (NTU)	79.0							
Dissolved Oxygen (mg/L)	0.13							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 750	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/26	Site ID #: 07584/07777/12124	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-16	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 15 to 25	Total Well Depth (TWD) (ft.): 25
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 17.21		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.79	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	1100							
PH (s.u.)	6.25							
Specific Conductivity (µS/cm)	80							
Water Temperature (°C)	24.38							
Turbidity (NTU)	212							
Dissolved Oxygen (mg/L)	0.96							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1100	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/14	Site ID #: 07584/07777/12364	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw17	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 21.62		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 8.38	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	1050							
PH (s.u.)	6.14							
Specific Conductivity (µS/cm)	534							
Water Temperature (°C)	23.71							
Turbidity (NTU)	4.2							
Dissolved Oxygen (mg/L)	0.47							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1050	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 01584/0777/RIC	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 19	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.80		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.2	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	1040							
PH (s.u.)	6.09							
Specific Conductivity (µS/cm)	145							
Water Temperature (°C)	24.22							
Turbidity (NTU)	3.8							
Dissolved Oxygen (mg/L)	0.40							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1040	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 01584/0777/RC	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 20	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 15 to 25	Total Well Depth (TWD) (ft.): 25
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 21.56		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 3.56	1 casing volume (CV = LWC x C) (gals.): 0.56		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	2	3	5				
Time (military)	1110							
PH (s.u.)	5.44							
Specific Conductivity (µS/cm)	226							
Water Temperature (°C)	24.94							
Turbidity (NTU)	24							
Dissolved Oxygen (mg/L)	0.76							

Sampling Data

Sampled By: Billy Emory	Sampling Time: 1110	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/R354	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 22	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 50
Depth to Free Product (DFP) (ft.):		Depth to Groundwater (DGW) (ft.): 20.77	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.23		1 casing volume (CV = LWC x C) (gals.): 1.15	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	1130							
PH (s.u.)	6.06							
Specific Conductivity (µS/cm)	282							
Water Temperature (°C)	24.06							
Turbidity (NTU)	2.7							
Dissolved Oxygen (mg/L)	0.43							

Sampling Data

Sampled By: Billy Emery	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

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SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/26	Site ID #: 07584/07777/12354	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw23	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 20 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.60		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 6.4	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	1020							
PH (s.u.)	6.14							
Specific Conductivity (µS/cm)	192							
Water Temperature (°C)	24.73							
Turbidity (NTU)	8.2							
Dissolved Oxygen (mg/L)	38							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1020	Duplicate: Y or N	If yes, Duplicate Time: 1025

Notes: DUP 02

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/28/17	Site ID #: 07587/07777/[illegible]	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 26	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.662	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 21.44		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 8.56	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	X	X	X				
Time (military)	0730							
PH (s.u.)	4.71							
Specific Conductivity (µS/cm)	80							
Water Temperature (°C)	23.34							
Turbidity (NTU)	131							
Dissolved Oxygen (mg/L)	3.22							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 730	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/12164	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: Hanna	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 27	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 15 to 30	Total Well Depth (TWD) (ft.): 30	
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 17.31	Free Product Thickness (ft.):	
Length of water column (LWC = TWD – DGW) (ft.): 12.69	1 casing volume (CV = LWC x C) (gals.): 2.0304	3 casing volumes (3 x CV) (gals.):	

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	3	3	3				
Time (military)	850							
PH (s.u.)	6.11							
Specific Conductivity (µS/cm)	275							
Water Temperature (°C)	22.37							
Turbidity (NTU)	2.5							
Dissolved Oxygen (mg/L)	3.67							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 850	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Broken cap

Signature:

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/12354	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-28	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 15 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 16.97		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 13.03	1 casing volume (CV = LWC x C) (gals.) [redacted] 2.0845		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	3	3	3				
Time (military)	[redacted] 1840							
PH (s.u.)	5.82							
Specific Conductivity (µS/cm)	171							
Water Temperature (°C)	20.96							
Turbidity (NTU)	17.4							
Dissolved Oxygen (mg/L)	5.71							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 840	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/12356	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 29	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 15 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 16.95		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 13.05	1 casing volume (CV = LWC x C) (gals.): 2.088		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	0th Vol.	1st Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	830							
PH (s.u.)	5.08							
Specific Conductivity (µS/cm)	221							
Water Temperature (°C)	20.78							
Turbidity (NTU)	10.4							
Dissolved Oxygen (mg/L)	0.41							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 830	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/12354	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 30	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 15 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 20.46		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.54	1 casing volume (CV = LWC x C) (gals.): 1.5264		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	~~1~~	~~2~~	~~3~~				
Time (military)	910							
PH (s.u.)	6.58							
Specific Conductivity (µS/cm)	264							
Water Temperature (°C)	22.31							
Turbidity (NTU)	2.7							
Dissolved Oxygen (mg/L)	1.87							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 910	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07587/07777/12754	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 31	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.12		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.88	1 casing volume (CV = LWC x C) (gals.): 1.7408		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	6th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	730							
PH (s.u.)	4.88							
Specific Conductivity (µS/cm)	91							
Water Temperature (°C)	21.07							
Turbidity (NTU)	19.0							
Dissolved Oxygen (mg/L)	2.44							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 730	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 01584/07771/RISK	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HORIBA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-32	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 15 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 20.91		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.09	1 casing volume (CV = LWC x C) (gals.): 1.4544		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	900							
PH (s.u.)	5.19							
Specific Conductivity (uS/cm)	136							
Water Temperature (°C)	23.12							
Turbidity (NTU)	2.2							
Dissolved Oxygen (mg/L)	0.64							

Sampling Data

Sampled By: Billy Ewing	Sampling Time: 900	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 01587/0777/RISK	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: Hanna	Serial #:	Calibration			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-33	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.70		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 12.3	1 casing volume (CV = LWC x C) (gals.): 1.968		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	~~5~~	~~5~~	~~5~~				
Time (military)	820							
PH (s.u.)	5.61							
Specific Conductivity (µS/cm)	148							
Water Temperature (°C)	23.47							
Turbidity (NTU)	14.7							
Dissolved Oxygen (mg/L)	0.71							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 820	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/12354	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 34	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):		Depth to Groundwater (DGW) (ft.): 23.52	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 11.48		1 casing volume (CV = LWC x C) (gals.): 1.8368	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	[illegible]	[illegible]	[illegible]				
Time (military)	800							
PH (s.u.)	4.48							
Specific Conductivity (uS/cm)	103							
Water Temperature (°C)	23.13							
Turbidity (NTU)	4.4							
Dissolved Oxygen (mg/L)	1.32							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 800	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/12364	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 35	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.65		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 12.35	1 casing volume (CV = LWC x C) (gals.): 1.976		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	750							
PH (s.u.)	5.56							
Specific Conductivity (µS/cm)	130							
Water Temperature (°C)	23.66							
Turbidity (NTU)	5.0							
Dissolved Oxygen (mg/L)	0.42							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 750	Duplicate: Y or N	If yes, Duplicate Time: 755

Notes: DUP 1

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07587/07777/123C	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 36	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.52		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 12.48	1 casing volume (CV = LWC x C) (gals.): 1.9968		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	~~1~~	~~2~~	~~3~~				
Time (military)	920							
PH (s.u.)	5.65							
Specific Conductivity (µS/cm)	147							
Water Temperature (°C)	23.46							
Turbidity (NTU)	18.2							
Dissolved Oxygen (mg/L)	0.43							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 920	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet -- Sampling

Site Information

Date: 6/27/17	Site ID #: 07587/07777/12354	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 37	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.76		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 12.24	1 casing volume (CV = LWC x C) (gals.): 1.9584		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	740							
PH (s.u.)	4.70							
Specific Conductivity (uS/cm)	93							
Water Temperature (°C)	23.44							
Turbidity (NTU)	1.7							
Dissolved Oxygen (mg/L)	2.49							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 740	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/0777/RG	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-38	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.06		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.) 5.94	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.)

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	[illegible]	[illegible]	[illegible]				
Time (military)	7:20							
PH (S.U.)	4.69							
Specific Conductivity (µS/cm)	84							
Water Temperature (°C)	23.94							
Turbidity (NTU)	3.0							
Dissolved Oxygen (mg/L)	4.37							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 720	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/19	Site ID #: 07584/07777/RSA	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 39	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.18		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.82	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	930							
PH (s.u.)	5.07							
Specific Conductivity (uS/cm)	32							
Water Temperature (°C)	22.29							
Turbidity (NTU)	1.4							
Dissolved Oxygen (mg/L)	1.74							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 930	Duplicate: Y or N	If yes, Duplicate Time:

Notes: NO CAP

Signature:

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/12354	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: Horiba	Serial #	Calibration:			
YSI 63 (pH, Specific Conductivity, temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 56 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-40	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.47		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.53	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	950							
PH (s.u.)	6.29							
Specific Conductivity (µS/cm)	294							
Water Temperature (°C)	21.25							
Turbidity (NTU)	7.0							
Dissolved Oxygen (mg/L)	0.48							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 950	Duplicate: Y or N	If yes, Duplicate Time:

Notes: No CAP

Signature:

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/R3C4	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 41	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.91		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.09	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	[illegible]	[illegible]	[illegible]				
Time (military)	940							
PH (s.u.)	5.49							
Specific Conductivity (µS/cm)	70							
Water Temperature (°C)	21.41							
Turbidity (NTU)	2.2							
Dissolved Oxygen (mg/L)	2.43							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 940	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/12364	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 42	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35.00
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.00		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.00	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	700							
PH (s.u.)	5.06							
Specific Conductivity (µS/cm)	52							
Water Temperature (°C)	22.05							
Turbidity (NTU)	3.1							
Dissolved Oxygen (mg/L)	2.99							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 700	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/21/17	Site ID #: 07584/07777/[illegible]	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw43	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 40	Total Well Depth (TWD) (ft.): 40
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.32		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 16.68	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	1210							
PH (s.u.)	4.72							
Specific Conductivity (uS/cm)	92							
Water Temperature (°C)	24.85							
Turbidity (NTU)	16.1							
Dissolved Oxygen (mg/L)	4.88							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1210	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07587/07777/12364	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 44	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 16' to 31	Total Well Depth (TWD) (ft.): 31
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 21.57		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.43	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	1220							
PH (s.u.)	4.19							
Specific Conductivity (µS/cm)	87							
Water Temperature (°C)	23.67							
Turbidity (NTU)	19.4							
Dissolved Oxygen (mg/L)	4.56							

Sampling Data

Sampled By: Billy Emery	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07587/07777/12354	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw45	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 15 to 30	Total Well Depth (TWD) (ft.): 30.
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 20.56		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.44	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	1230							
PH (s.u.)	4.08							
Specific Conductivity (µS/cm)	88							
Water Temperature (°C)	24.64							
Turbidity (NTU)	5.3							
Dissolved Oxygen (mg/L)	3.91							

Sampling Data

Sampled By: Billy Emery	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time: 1235

Notes: PUP 3

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/12124	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: Hanna	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 46	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.82		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 12.18	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	1200							
PH (s.u.)	5.43							
Specific Conductivity (µS/cm)	80							
Water Temperature (°C)	25.08							
Turbidity (NTU)	115							
Dissolved Oxygen (mg/L)	4.97							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1200	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 02514/0077/R04	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-51	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.662	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ PW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.51		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 12.49	1 casing volume (CV = LWC x C) (gals.): 1.9		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	X	3	3				
Time (military)	1302							
PH (s.u.)	4.51							
Specific Conductivity (µS/cm)	94							
Water Temperature (°C)	22.34							
Turbidity (NTU)	45.9							
Dissolved Oxygen (mg/L)	4.73							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1310	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/ /26	Site ID #: 07584/07777/12364	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 52	Well Diameter (ft.):	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): DTY		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)								
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy Emery	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07514/0777/1104	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-53	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ Private WSW ___ Public WSW		Screened Interval (ft.): 5 to 20	Total Well Depth (TWD) (ft.): 20
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 9.49		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.51	1 casing volume (CV = LWC x C) (gals.): 1.6		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4	2	3				
Time (military)	1310							
PH (s.u.)	4.52							
Specific Conductivity (uS/cm)	53							
Water Temperature (°C)	24.59							
Turbidity (NTU)	20.8							
Dissolved Oxygen (mg/L)	2.69							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1318	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 01584/0777/RSA	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 55	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 4 to 14	Total Well Depth (TWD) (ft.): 14
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 2.1		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 11.9	1 casing volume (CV = LWC x C) (gals.): 1.9		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1	2	3				
Time (military)	1400							
PH (s.u.)	6.03							
Specific Conductivity (µS/cm)	162							
Water Temperature (°C)	28.53							
Turbidity (NTU)	14.5							
Dissolved Oxygen (mg/L)	1.21							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1400	Duplicate: (Y) or N	If yes, Duplicate Time: 1405

Notes: Dup 4

Signature:

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/19	Site ID #: 01514/0777/RSC	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: Hanna	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 56	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ Private WSW ___ Public WSW		Screened Interval (ft.): 5 to 20	Total Well Depth (TWD) (ft.): 20
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 7.20		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 12.8	1 casing volume (CV = LWC x C) (gals.): 2.048		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	2	3	3				
Time (military)	1430							
PH (s.u.)	5.49							
Specific Conductivity (uS/cm)	194							
Water Temperature (°C)	25.24							
Turbidity (NTU)	44.7							
Dissolved Oxygen (mg/L)	1.48							

Sampling Data

Sampled By: Billy Emmy	Sampling Time: 1430	Duplicate: Y or N	If yes, Duplicate Time:

Notes: No Lid, No Cap

Signature:

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/28/19	Site ID #: 01554/0777/2154	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 5Q	Well Diameter (ft.): 2 in	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 7 to 17	Total Well Depth (TWD) (ft.): 17
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 5.65		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 11.35	1 casing volume (CV = LWC x C) (gals.): 1.8		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)		2	2	3				
Time (military)	800							
PH (s.u.)	6.56							
Specific Conductivity (µS/cm)	205							
Water Temperature (°C)	23.02							
Turbidity (NTU)	15.1							
Dissolved Oxygen (mg/L)	7.23							

Sampling Data

Sampled By: Billy Emery	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07581/07777/12356	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 62	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.44		Free Product Thickness (ft.):
Length of water column (LWC = TWD - DGW) (ft.): 12.65	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	1030							
PH (s.u.)	5.13							
Specific Conductivity (uS/cm)	267							
Water Temperature (°C)	21.23							
Turbidity (NTU)	31.9							
Dissolved Oxygen (mg/L)	0.49							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1030	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/19	Site ID #: 01584/07777/12354	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 6863	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.81		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 12.19	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.)

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	1010							
PH (s.u.)	4.83							
Specific Conductivity (µS/cm)	95							
Water Temperature (°C)	22.35							
Turbidity (NTU)	20.2							
Dissolved Oxygen (mg/L)	1.62							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1010	Duplicate: Y or N	If yes, Duplicate Time:

Notes: ___

Signature: [signature]

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/16	Site ID #: 01584/07774/12356	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C. Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw67	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 20 to 35		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.42		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.48	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0	0	0				
Time (military)	710							
PH (s.u.)	5.30							
Specific Conductivity (µS/cm)	100							
Water Temperature (°C)	22.45							
Turbidity (NTU)	6.5							
Dissolved Oxygen (mg/L)	4.01							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 710	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/27/17	Site ID #: 07584/07777/R2C4	Site Name: Claude's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: mw 70	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 29.51		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.49	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	[illegible]	[illegible]	[illegible]				
Time (military)	1000							
PH (s.u.)	5.44							
Specific Conductivity (µS/cm)	95							
Water Temperature (°C)	22.18							
Turbidity (NTU)	4.5							
Dissolved Oxygen (mg/L)	1.09							

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1000	Duplicate: Y or N	If yes, Duplicate Time:

Notes:

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/23/17	Site ID #: 01514/0777/1264	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: PW1R	Well Diameter (ft.): 4"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 45 to 50	Total Well Depth (TWD) (ft.): 50
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.16		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 27.84	1 casing volume (CV = LWC x C) (gals.): 18.1		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	3	NA	3				
Time (military)	1100	1115	[illegible]	[illegible]				
PH (s.u.)	6.35	6.40	D	D				
Specific Conductivity (µS/cm)	137	93.5	D	D				
Water Temperature (°C)	26.42	27.01	R	R				
Turbidity (NTU)	131	94.3	Y	Y				
Dissolved Oxygen (mg/L)	0.72	0.41	Y	Y				

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1145	Duplicate: Y or N	If yes, Duplicate Time: 1130

Notes: DUP 5

Signature:

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/28/26	Site ID #: 01584/0777/024	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: Hanna	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW-Dw1	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 65 to 70	Total Well Depth (TWD) (ft.): 70
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 42.91		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 27.09	1 casing volume (CV = LWC x C) (gals.): 4.3		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.3	8.6	12.9				
Time (military)	840	845	850	855				
PH (s.u.)	7.93	8.80	8.90	8.88				
Specific Conductivity (µS/cm)	103	73	75	74				
Water Temperature (°C)	23.44	23.49	23.45	23.47				
Turbidity (NTU)	210	141	120	105				
Dissolved Oxygen (mg/L)	1.72	1.57	1.47	1.45				

Sampling Data

Sampled By: Billy Emery	Sampling Time: 855	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/14/26	Site ID #: 07584/07777/RG	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: Mark DW2	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 70 to 75		Total Well Depth (TWD) (ft.): 75
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 42.21		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 32.79	1 casing volume (CV = LWC x C) (gals.): 5.2		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	5.2	10.4	15.8				
Time (military)	920	925	930	935				
PH (s.u.)	8.48	7.22	6.55	6.50				
Specific Conductivity (µS/cm)	71	55	51	51				
Water Temperature (°C)	25.52	23.28	23.77	23.75				
Turbidity (NTU)	52.3	66.7	16.6	10.7				
Dissolved Oxygen (mg/L)	3.98	7.63	2.46	2.37				

Sampling Data

Sampled By: Billy Emery	Sampling Time: 935	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature _____

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/28/26	Site ID #: 01584/0777/RR	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW3	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 47 to 52		Total Well Depth (TWD) (ft.): 52
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.85		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 29.15	1 casing volume (CV = LWC x C) (gals.): 4.6		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.6	9.2	13.8				
Time (military)	950	955	1000	1005				
PH (s.u.)	6.73	6.45	6.41	6.40				
Specific Conductivity (µS/cm)	67	209	241	255				
Water Temperature (°C)	24.58	24.35	24.04	24.02				
Turbidity (NTU)	111	43.6	19.1	13.5				
Dissolved Oxygen (mg/L)	0.62	0.19	0.19	0.18				

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1005	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: _____

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/28/17	Site ID #: 01584/07777/RRC	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW4	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 105 to 110	Total Well Depth (TWD) (ft.): 110
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 38.96		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 71.04	1 casing volume (CV = LWC x C) (gals.): 11.3		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	11.3	22.6	33.9				
Time (military)	1020	1030	1040	1050				
PH (s.u.)	6.69	5.68	5.71	5.79				
Specific Conductivity (µS/cm)	164	171	166	160				
Water Temperature (°C)	22.49	22.63	22.68	22.68				
Turbidity (NTU)	98.3	91.3	67.2	60.3				
Dissolved Oxygen (mg/L)	7.43	2.77	2.51	2.81				

Sampling Data

Sampled By: Billy Emery	Sampling Time:	Duplicate: (Y) or N	If yes, Duplicate Time:

Notes:

Signature:

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/28/17	Site ID #: 01584/07777/12364	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HORIBA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW 5	Well Diameter (ft.): 2"	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 65 to 70		Total Well Depth (TWD) (ft.): 70
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 42.36		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 27.64	1 casing volume (CV = LWC x C) (gals.): 4.42		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.84	8.8	12.12				
Time (military)	1150	1155	D	D				
PH (s.u.)	6.33	5.84	R	R				
Specific Conductivity (µS/cm)	120	117	Y	Y				
Water Temperature (°C)	23.19	23.56						
Turbidity (NTU)	216	52.9						
Dissolved Oxygen (mg/L)	1.39	0.55						

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1155	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: Broken Cap

Signature:

Purge

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/24/17	Site ID #: 07584/07777/12354	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fish	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 6	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 60 to 80 65-70		Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 44.31		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 25.69	1 casing volume (CV = LWC x C) (gals.): 4.1		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.1	8.2 1140	12.3 1145				
Time (military)	11:30	1135	1140	1145				
PH (s.u.)	7.32	2.39	D	D				
Specific Conductivity (µS/cm)	271	[redacted] 72						
Water Temperature (°C)	24.81	24.69	"	"				
Turbidity (NTU)	269	<1000	"	"				
Dissolved Oxygen (mg/L)	2.44	2.37						

Sampling Data

Sampled By: Billy Emery	Sampling Time: 1135	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 6/28/24	Site ID #: 07594/07777/12354	Site Name: Claude Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions: Sunny	Ambient Air Temp (°F):

Quality Assurance

Meter Name: HANNA	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW9	Well Diameter (ft.): 7	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.052	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 66 to 65	Total Well Depth (TWD) (ft.): 65
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.73		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 42.27	1 casing volume (CV = LWC x C) (gals.): 6.7		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	6.7	13.4	20.1				
Time (military)	810	815	820	825				
PH (s.u.)	6.05	5.92	6.01	5.92				
Specific Conductivity (µS/cm)	45	41	42	44				
Water Temperature (°C)	21.49	21.37	21.39	21.37				
Turbidity (NTU)	16.8	36.2	32.3	33.[illegible]				
Dissolved Oxygen (mg/L)	0.10	0.38	0.34	0.33				

Sampling Data

Sampled By: Billy Emery	Sampling Time: 825	Duplicate: Y or N	If yes, Duplicate Time:

Notes: No Cap

Signature: [signature]

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

Appendix C

Disposal Manifest

CRAWFORD ENVIRONMENTAL SERVICES

August 29, 2017

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201

Re: Purge Water Report- Development & Groundwater Sampling
Handy Pantry/University Mart and Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
SCDHEC Site ID# 07584/07777/12352

Dear Project Manager;

The letter presents the certification that Crawford Environmental Services (CES) treated purge waters referenced below with a granular activated carbon unit prior to discharge. This was completed in accordance with the conditions laid out in the "Proposed Conditions for use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater" produced by the SCDHEC Bureau of Water.

A total of approximately 109 gallons were treated on June 27 and 28, 2017 for the above referenced facility.

A record of treatment is available upon request. If you have any questions or comments please feel free to contact us at 540-343-6256.

Sincerely,

Daniel J. Fisher
Division Manager
Crawford Environmental Services

Appendix D

QAPP Addendum Contractor Checklist

UST Programmatic QAPP Contractor Checklist				
Item #:	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	Yes		
2	Is UST Owner/Operator name, address, provided?			n/a
3	Is name, address, & phone number of current property owner provided?	Yes		
4	Is the SCDHEC Certified UST Site Rehabilitation Contractor's name, address, phone number, and certification number provided?	Yes		
5	Is the name, address ,telephone number, and certification number of the well driller that installed the boring/monitoring wells provided?			n/a
6	Is the name, address, telephone number, and certification number of the certified laboratories performing analytical analyses provided	Yes		
7	Has the facility history be summarized?			n/a
8	Has the regional geology and hydrogeology been summarized?			n/a
9	Are the receptor survey results provided as required?			n/a
10	Has the current use of the site and adjacent land been described?	Yes		
11	Has the site specific geology been described?			n/a
12	Has the primary soil type been described?			n/a
13	Have the field screening results been described?			n/a
14	Has a description of the soil sample collection and preservation been detailed?			n/a
15	Has the field screening methodology been detailed?			n/a
16	Has the monitoring well installation and development dates been provided?			n/a
17	Has the method of well development been detailed? (Table 2)			n/a
18	Has the justification been provided for the locations of the monitoring wells?			n/a
19	Have the monitoring wells been labeled in accordance with the UST QAPP guidelines?	Yes		
20	Has the groundwater sampling methodology been detailed?	Yes		
21	Have the groundwater sampling dates and groundwater measurements been provided?	Yes		
22	Has the purging methodology been detailed?	Yes		
23	Has the volume of water purged from each well been provided along with the measurements to verify purging is complete?	Yes		
24	If free-product is present, has the thickness been provided?			n/a
25	Does the report include a brief discussion of the assessment done and the results?			n/a

UST Programmatic QAPP Contractor Checklist				
26	Does the report include a brief discussion of the aquifer evaluation and the results?	Yes		
27	Does the report include a brief discussion of the fate & transport models used?			n/a
28	Are the site-conceptual tables included (Tier 1 risk evaluation)			n/a
29	Have the exposure pathways been analyzed (Tier 2 risk evauluation)			n/a
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 risk evaluation)	Yes		
31	Have recommendations for further action been provided and explained?			n/a
32	Has the soil analytical data for the site been provided in tabular format? (Table 5)			n/a
33	Has the potentiometric data for the site been provided in tabular format?	Yes		
34	Has the current and historical laboratory data been provided in tabular format	Yes		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			n/a
36	Have the Site conceptual model tables been included (Tier 1 risk evaluation)			n/a
37	Has the topographic map been provided with all the required elements?	Yes		
38	Has the site base map been provided with all the required elements?	Yes		
39	Have the CoC maps been provided?	Yes		
40	Have the potentiometric maps been provided?	Yes		
41	Have the geologic cross-sections been provided			n/a
42	Have maps showing the predicted migration of the CoCs through time been provided?			n/a
43	Has the site survey been provided and include all necessary elements? (Appendix A)			n/a
44	Have the sampling logs, chain of custody forms and analytical data package been included with all elements? (Appendix B)	Yes		
45	Is the laboratory performing the analyses properly certified? (Appendix B)	Yes		
46	Has the tax map been included with all necessary elements? (Appendix C)			n/a
47	Have the soil/boring field screening logs been provided? (Appendix D)			n/a
48	Have the well completion logs been provided? (Appendix E)			n/a
49	Have the aquifer evaluation forms,data, graphs, equations,etc. been provided? (Appendix F)			n/a
50	Have the disposal manifests been provided? (Appendix G)	Yes		
51	Has a copy of the local zoning regulations been provided? (Appendix H)			n/a

UST Programmatic QAPP Contractor Checklist				
52	Has all fate and transport modeling been provided? (Appendix I)			n/a
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			n/a
54	Has a copy of this form been attached to the final report and are explainations for any missing or incomplete data been provided?	Yes		
Comments:				

dhec
Healthy People. Healthy Communities.

OCT 25 2017

UST DOCKETING

MR CHARLES F CRAWFORD III
CRAWFORD ENVIRONMENTAL SERVICES
15 CHURCH AVENUE SW
ROANOKE VA 24011

Re: **Corrective Action System Evaluation (CASE) Report Review**
UST Permit# 07584, University Mart, 2367 Taylor St., Columbia, SC – 362T
Release #1 reported January 30, 1991; CA# 47811
Release #2 reported April 17, 1998; CA# 47812
UST Permit # 07777, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC – 197T
Release reported December 31, 1991; CA# 47813
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC – 132T
Release reported December 30, 1991; CA# 47814
Contract #IFB-5400007095-1/30/2014-EMW; PO# 4600322226
CASE report received September 12, 2017
Richland County

Dear Mr. Crawford:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the CASE report documenting the corrective action activities and the June 2017 groundwater sampling event. The CASE report has documented 56.86% Chemical of Concern (CoC) reduction. DHEC has granted the request for the semi-annual sampling events can be reduced to sampling only the site-specific target level monitoring wells.

The semi-annual CASE 7 report is due on or before **December 15, 2017.**

On all correspondence regarding this site, please reference UST Permit #07584, #07777, & #12352. If you have any questions regarding this correspondence, please contact me by telephone at (803) 898-0634, by fax at (803) 898-0673, or by e-mail at kuhnkm@dhec.sc.gov.

Sincerely,

Kimberly M. Kuhn, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

cc: Sylvan Food Systems, Inc., 1245 Boston Ave, West Columbia, SC 29170
Gilbert Walker, Public Housing Authority, Gonzales Gardens, P.O. Box 4307, Columbia, SC 29240
1500 Millwood Ave, LLC, 1330 Devonshire Drive, Columbia, SC 29204
John M. Suddeth, 1410 N Millwood Ave, Columbia, SC 29204
Fung Lau, 2300 Taylor St, Suite D, Columbia, SC 29204
Technical File

CRAWFORD ENVIRONMENTAL SERVICES



February 13, 2018

Ms. Kimberly Kuhn
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201



RE: Corrective Action System Evaluation – January 2018 (Sampling Date)
Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352

Dear Ms. Kuhn:

Enclosed please find one copy of the January 2018 Corrective Action System Evaluation (CASE) report prepared by Crawford Environmental Services, Inc. (CES) for the referenced site. Should you have any questions regarding the enclosed material, or if additional information is required, please feel free to contact Charlie Crawford or myself at 540.343.6256.

Best Regards,

Daniel Fisher
Operations Manager

cc:

CRAWFORD ENVIRONMENTAL SERVICES

February 13, 2018

Ms. Kimberly Kuhn
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

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UST Permit # 07584 / 07777 / 12352

Dear Ms. Kuhn:

Enclosed please find one copy of the January 2018 Corrective Action System Evaluation (CASE) report prepared by Crawford Environmental Services, Inc. (CES) for the referenced site. Should you have any questions regarding the enclosed material, or if additional information is required, please feel free to contact Charlie Crawford or myself at 540.343.6256.

Best Regards,

Daniel Fisher
Operations Manager

cc:

CRAWFORD ENVIRONMENTAL SERVICES

Corrective Action System Evaluation Report
January 2018

Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352

February 13, 2018
Revision 0

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
York County
UST Permit #: 07584/07777/12352
CES Job #: 7.0547

PREPARED BY:
Crawford Environmental Services, Inc.
1701 Shenandoah Avenue, NW
Roanoke, Virginia 24017
Phone: 540-343-6256; Fax: 540-343-6259
dfisher@crawfordenvironmental.com

PREPARED FOR:
South Carolina Department of Health & Environmental Control
Ms. Kimberly Kuhn
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

SUBMITTED TO:
South Carolina Department of Health & Environmental Control
Ms. Kimberly Kuhn
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

CRAWFORD ENVIRONMENTAL SERVICES

Title: *Corrective Action System Evaluation Report, Handy Pantry/University Mart and Cloud's Chevron, Site (Site No. 07584/07777/12352), Columbia, South Carolina, January 2018.*

Written By:

Daniel J. Fisher
Senior Project Manager/Technical Reviewer

13 February 2018
Date Reviewed

Reviewed By:

B. Thomas Houghton, P.G.
Senior Project Geologist/Technical Reviewer
Registered South Carolina P.G. No. 2343

14 February 2018
Date Reviewed



Approved By:

Charles F. Crawford
President/Chief Executive Officer, Technical Reviewer

14 February 2018
Date Reviewed

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Table 3: Site Specific Target Level Summary

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Figure 2: Site Facility Base Map
Figure 3: Groundwater Chemicals of Concern
Figure 4: Groundwater Elevation Data Map

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Appendix A: Groundwater Laboratory Analytical Report & Chain-of-Custody Documentation
Appendix B: Groundwater Sampling Data Sheets
Appendix C: Purge Water Disposal Manifest
Appendix D: QAPP Addendum Contractor Checklist

1.0 Project Information

1.1 Introduction

Crawford Environmental Services Inc., (CES) has completed a Corrective Action System Evaluation (CASE) report for the Handy Pantry #65/University Mart and former Cloud's Chevron site. The report describes assessment activities conducted at the site in general accordance with the scope of work as defined in the QAPP Addendum Approval, dated March 20, 2014. The subject property is in a primarily commercial area of Columbia, South Carolina (*Figure 1*). The subject sites, operating as Handy Pantry #65/University Mart and former Cloud's Chevron, is bordered by light commercial properties in all directions. A site plan depicting pertinent features of the subject property is provided as *Figure 2*.

1.2 Facility Information

1.2.1 Site Address

Handy Pantry #65 / University Mart / Clouds Chevron
2367 Taylor Street
Columbia, South Carolina

1.2.2 Property Owner Information

Mr. Mahesh Patel
2367 Taylor Street
Columbia, South Carolina

Mr. Andrew Diggins
1600 Block Two Notch Road
Columbia, South Carolina

1.2.3 Contractor Information

Crawford Environmental Services
1701 Shenandoah Avenue, NW
Roanoke, Virginia 24017
1 (540) 343-6256
Contractor Number: UCC-0388

1.2.4 Laboratory Information

Access Analytical, Inc. (AA)
7478 Carlisle Street
Irmo, SC 29063
1 (803) 781-4243
SC Certification: 32575001

Analytical Environmental Services Inc. (AES)
3785 Presidential Pkwy.
Atlanta, GA 30340
1 (770) 457-8177
SC Certification: 98016003

2.0 Corrective Action Activities

Corrective Action activities at the facility for this phase of work included the following:

-Semi-Annual Sampling Event

2.1 Groundwater Sampling Event

A comprehensive groundwater sampling event, including; recording equilibrated static water levels, product thicknesses, and the collection of chemical samples was completed by CES personnel between January 22 - 24, 2018. CES personnel utilized an electronic water level indicator for water level measurements and an oil/water interface probe for free phase product measurements. Samples for the shallow wells were collected utilizing disposable polyethylene bailers. Shallow wells that exhibited groundwater above the screened bracket were purged of at least three well volumes or purged till dry before sample collection. Deep and intermediate wells exhibiting groundwater above the screened bracket were purged utilizing submersible pumps with dedicated tubing. For sample collection, disposable polyethylene bailers were lowered slowly to the top of the water column (after purging in some cases) allowed to fill one volume, then removed. Disposal records for the 109-gallons of purge water generated are included as Appendix A. Groundwater was then transferred to the appropriate sampling containers and was then placed in coolers, maintaining 4˚C, and delivered to an independent laboratory. Groundwater chemical samples were submitted to Access Analytical, Inc., {SC Certification: 32575001} for analysis.

2.1.1 Groundwater Sampling

Equilibrated static water levels and free-product thicknesses were recorded for monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20, MW-22, MW-23, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, MW-31, MW-32, MW-33, MW-34, MW-35, MW-36, MW-37, MW-38, MW-39, MW-40, MW-41, MW-42, MW-43, MW-44, MW-45, MW-46, MW-49, MW-51, MW-53, MW-55, MW-56, MW-59, MW-62, MW-63, MW-67, MW-70, MW-5AR, PW-1R, DW-1,

DW-2, DW-3, DW-4, DW-5, DW-6, and DW-9. Groundwater sampling data sheets are included as Appendix B.

During the referenced sampling event, CES was unable to access monitoring wells MW-48 and MW-50 due to a locked gate and monitoring wells MW-60, MW-65, DW-7 were unable to be located. CES also utilized a metal detector to locate the wells, however, the overgrown site conditions did not permit the location of the aforementioned monitoring wells. Due to obstructions (vehicle) covering the wells, monitoring wells MW-58 and DW-8 were not able to be sampled. Monitoring wells MW-12, MW-13, MW-54, MW-65 and DW-7 have been paved over following recent construction and presumed destroyed.

CES sampled the monitoring wells, as part of the January 2018 sampling event, for the following chemical analyses:
Benzene/Toluene/Ethylbenzene/Xylenes (BTEX), naphthalene, Methyl Tert-Butyl Ether (MTBE), Tert-Amyl Methyl Ether (TAME), Tert-Butyl Alcohol (TBA), and Tert-Amyl Alcohol (TAA).

During the sampling event CES collected duplicate samples of monitoring wells MW-15, MW-23, MW-33, MW-41, DW-3. Review of the duplicate samples collected from aforementioned monitoring well samples did not yield significant data gaps.

In addition to duplicate samples, CES also collected daily field blank samples at the conclusion of the sample events. The samples were collected at the conclusion of the day to be representative of all samples that were collected during that day. Sealed trip blank samples were also stored with samples during each day of the sampling event.

Table 2 presents the laboratory data for the submitted groundwater samples collected as part of this assessment. The groundwater concentration maps are included as *Figure 3.* The groundwater elevation map is included as *Figure 4*.

3.0 Summary

During the corrective action activities performed at the subject property, CES conducted a comprehensive groundwater monitoring event, to determine the effectiveness of the current corrective action plan. The qualitative and quantitative data collected from recent assessment activities indicates the following regarding current site conditions;

1. During this sampling event, groundwater from monitoring wells MW-2, MW-3, MW-9, MW-10, MW-15, MW-17, MW-18, MW-19, MW-20, MW-22, MW-23, MW-25, MW-32, MW-33, MW-35, MW-39, MW-41, MW-42, MW-55, MW-59,

MW-5AR, PW-1R, DW-3, and DW-5 exhibited hydrocarbon constituent concentrations above the SSTLs for the chemicals of concern.

2. CES calculated a COC reduction of 36.15 percent during this phase of work.

3. Free-phase petroleum was not observed during the January 2018 sampling event.

4.0 Conclusion

Based on the results of the comprehensive sampling event, CES estimates that the historical remedial injects have been successful in targeting source area and contaminants. CES estimates that decreases in the COC reduction percentage observed during this period are based upon a significant number of wells being unable to be sampled and the reduction of free-phase petroleum during sampling event. This reduction should continue to increase as CES pursues continued remedial biological injections. CES recommends continuing a course of biological injections until the goal of 100 % COC reduction is met. The next biological injection event is scheduled for April 2018. CES will focus injections in four recently-installed injection wells, installed July 2016. The next Comprehensive Case Report will be submitted prior to June 5, 2018.

5.0 Limitations

This report is based upon a specific scope of work requested by SCDHEC. This report is intended only for the use of CES's client and anyone else specifically listed on this report. Some data contained within this report was previously collected by other consultants and is assumed to be correct. CES will not and cannot be liable for the unauthorized release by any third party. Other than as contained in this paragraph, CES makes no expressed or implied warranty as to the contents of this report.

Tables

Table 1: Well Construction and Historical Groundwater Elevation Summary
Table 2: Groundwater Laboratory Analytical Result Summary
Table 3: Site Specific Target Levels

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-1	27	17	27	93.89	1/24/2018	NA	DRY	NA	NA	DRY
					6/26/2017	NA	DRY	NA	NA	DRY
					10/19/2016	NA	DRY	NA	NA	DRY
					5/15/2016	NA	DRY	NA	NA	DRY
					11/3/2015	NA	DRY	NA	NA	DRY
					5/29/2015	NA	DRY	NA	NA	DRY
					11/11/2014	NA	DRY	NA	NA	DRY
					4/2/2014	NA	DRY	NA	NA	DRY
MW-2	30	20	30	94.70	1/22/2018	NA	24.04	NA	NA	70.66
					6/27/2017	NA	21.51	NA	NA	73.19
					10/19/2016	NA	21.17	NA	NA	73.53
					5/16/2016	NA	20.08	NA	NA	74.62
					11/3/2015	NA	20.32	NA	NA	74.38
					5/29/2015	22.56	22.57	0.01	72.14	72.13
					11/4/2014	NA	23.03	NA	NA	71.67
					4/2/2014	NA	21.12	NA	NA	73.58
MW-3	29	19	29	94.45	1/22/2018	NA	23.42	NA	NA	71.03
					6/27/2017	NA	20.98	NA	NA	73.47
					10/19/2016	NA	20.18	NA	NA	74.27
					5/16/2016	NA	19.84	NA	NA	74.61
					11/3/2015	NA	23.29	NA	NA	71.16
					5/29/2015	23.2	23.29	0.09	71.25	71.16
					4/2/2014	NA	21.40	NA	NA	73.05
					11/12/2014	NA	23.16	NA	NA	71.29
MW-4	28	18	28	94.85	1/22/2018	NA	22.19	NA	NA	72.66
					6/27/2017	NA	20.55	NA	NA	74.30
					10/19/2016	NA	20.42	NA	NA	74.43
					5/16/2016	NA	19.20	NA	NA	75.65
					11/3/2015	NA	20.35	NA	NA	74.50
					5/29/2015	NA	21.52	NA	NA	73.33
					11/11/2014	NA	21.76	NA	NA	73.09
					4/2/2014	NA	21.31	NA	NA	73.54
MW-5	26	16	26	95.26	1/22/2018	NA	DRY	NA	NA	DRY
					6/26/2017	NA	DRY	NA	NA	DRY
					10/19/2016	NA	DRY	NA	NA	DRY
					5/16/2016	NA	19.75	NA	NA	75.51
					11/3/2015	NA	DRY	NA	NA	DRY
					5/29/2015	NA	DRY	NA	NA	DRY
					11/11/2014	NA	DRY	NA	NA	DRY
					4/2/2014	NA	DRY	NA	NA	DRY
MW-6	30	20	30	94.96	1/22/2018	NA	24.54	NA	NA	70.42
					6/27/2017	NA	22.91	NA	NA	72.05
					10/19/2016	NA	22.04	NA	NA	72.92
					5/17/2016	NA	20.59	NA	NA	74.37
					11/3/2015	NA	21.21	NA	NA	73.75
					5/29/2015	NA	22.38	NA	NA	72.58
					11/11/2014	NA	23.98	NA	NA	70.98
					4/3/2014	NA	22.61	NA	NA	72.35
MW-7	30	20	30	95.93	1/22/2018	NA	24.58	NA	NA	71.35
					6/27/2017	NA	22.32	NA	NA	73.61
					10/19/2016	NA	22.20	NA	NA	73.73
					5/16/2016	NA	20.98	NA	NA	74.95
					11/3/2015	NA	21.79	NA	NA	74.14
					5/29/2015	NA	23.48	NA	NA	72.45
					11/11/2014	NA	24.12	NA	NA	71.81
					4/3/2014	NA	23.02	NA	NA	72.91
MW-8	28	18.5	28	94.79	1/22/2018	NA	21.86	NA	NA	72.93
					6/27/2017	NA	19.65	NA	NA	75.14
					10/19/2016	NA	19.70	NA	NA	75.09
					5/17/2016	NA	18.75	NA	NA	76.04
					11/3/2015	NA	19.19	NA	NA	75.60
					5/29/2015	NA	20.08	NA	NA	74.71
					11/11/2014	NA	21.43	NA	NA	73.36
					4/3/2014	NA	19.95	NA	NA	74.84
MW-9	30	20	30	92.30	1/22/2018	NA	22.22	NA	NA	70.08
					6/26/2017	Unable to Locate				
					10/19/2016	NA	20.30	NA	NA	72.00
					5/16/2016	NA	18.78	NA	NA	73.52
					11/3/2015	NA	20.04	NA	NA	72.26
					5/28/2015	NA	21.19	NA	NA	71.11
					11/11/2014	NA	21.69	NA	NA	70.61
					4/2/2014	NA	20.60	NA	NA	71.70

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-10	28	18	28	85.98	1/22/2018	NA	17.28	NA	NA	68.70
					6/28/2017	NA	15.33	NA	NA	70.65
					10/19/2016	NA	15.75	NA	NA	70.23
					5/18/2016	NA	14.52	NA	NA	71.46
					11/3/2015	NA	14.58	NA	NA	71.40
					5/28/2015	NA	16.64	NA	NA	69.34
					11/11/2014	Interface Probe Failure - 1.25-Feet of Product Observed in Bailer				
					4/1/2014	NA	17.69	NA	NA	68.29
MW-11	30	Unknown		88.46	1/24/2018	NA	20.91	NA	NA	67.55
					6/27/2017	NA	17.75	NA	NA	70.71
					10/19/2016	NA	18.19	NA	NA	70.27
					5/18/2016	NA	16.66	NA	NA	71.80
					11/3/2015	NA	17.16	NA	NA	71.30
					5/29/2015	NA	18.93	NA	NA	69.53
					11/11/2014	NA	19.38	NA	NA	69.08
					4/2/2014	NA	18.61	NA	NA	69.85
MW-12	24.65	Unknown		72.80	1/23/2018	Destroyed - Paved Over				
					6/26/2017					
					10/19/2016	NA	3.32	NA	NA	69.48
					5/18/2016	NA	2.73	NA	NA	70.07
					11/3/2015	NA	3.15	NA	NA	69.65
					5/28/2015	NA	4.38	NA	NA	68.42
					11/11/2014	NA	4.63	NA	NA	68.17
					4/2/2014	NA	4.20	NA	NA	68.60
MW-13	30.1	Unknown		80.44	1/23/2018	Destroyed - Paved Over				
					6/26/2017					
					10/19/2016	NA	10.83	NA	NA	69.61
					5/16/2016	NA	9.71	NA	NA	70.73
					11/3/2015	NA	9.82	NA	NA	70.62
					5/28/2015	NA	11.71	NA	NA	68.73
					11/11/2014	NA	12.15	NA	NA	68.29
					4/1/2014	NA	11.13	NA	NA	69.31
MW-15	25	15	25	86.44	1/22/2018	NA	17.29	NA	NA	69.15
					6/28/2017	NA	15.36	NA	NA	71.08
					10/19/2016	15.70	15.82	0.12	70.74	70.62
					5/18/2016	14.58	15.02	0.13	71.86	71.42
					11/3/2015	14.51	14.64	0.13	71.93	71.80
					5/29/2015	16.45	16.61	0.16	69.99	69.83
					11/11/2014	Interface Probe Failure - 0.25-Feet of Product Observed in Bailer				
					4/1/2014	16.60	16.00	0.60	69.84	70.88*
MW-16	25	15	25	88.19	1/22/2018	NA	19.36	NA	NA	68.83
					6/27/2017	NA	17.21	NA	NA	70.98
					10/19/2016	NA	17.55	NA	NA	68.89
					5/18/2016	NA	16.29	NA	NA	71.90
					11/3/2015	NA	16.29	NA	NA	70.15
					5/29/2015	Unable to Locate				
					11/12/2014	NA	18.98	NA	NA	69.21
					4/2/2014	NA	17.54	NA	NA	70.65
MW-17	22	20	30	92.45	1/22/2018	NA	23.87	NA	NA	68.58
					6/27/2017	NA	21.62	NA	NA	70.83
					10/19/2016	NA	21.58	NA	NA	70.87
					5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	NA	20.47	NA	NA	71.98
					5/28/2015	NA	22.70	NA	NA	69.75
					11/12/2014	NA	23.45	NA	NA	69.00
					4/2/2014	NA	22.00	NA	NA	70.45
MW-18	30	20	30	94.81	1/24/2018	NA	25.54	NA	NA	69.27
					6/26/2017	NA	23.16	NA	NA	71.35
					10/19/2016	NA	23.46	NA	NA	71.35
					5/15/2016	NA	22.04	NA	NA	72.77
					11/3/2015	NA	22.28	NA	NA	72.53
					5/28/2015	NA	24.41	NA	NA	70.40
					11/12/2014	NA	25.08	NA	NA	69.73
					4/2/2014	NA	23.68	NA	NA	71.13
MW-19	30	20	30	93.96	1/24/2018	NA	25.11	NA	NA	68.85
					6/27/2017	NA	22.80	NA	NA	71.16
					10/19/2016	NA	23.70	NA	NA	70.26
					5/18/2016	NA	21.76	NA	NA	72.20
					11/3/2015	NA	21.81	NA	NA	72.15
					5/28/2015	NA	24.00	NA	NA	69.96
					11/13/2014	NA	24.56	NA	NA	69.40
					4/3/2014	NA	23.33	NA	NA	70.63

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron | UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina | CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-20	25	15	25	94.12	1/24/2018	NA	23.83	NA	NA	70.29
					6/27/2017	NA	21.50	NA	NA	72.62
					10/19/2016	NA	21.89	NA	NA	72.23
					5/15/2016	NA	20.41	NA	NA	73.71
					11/3/2015	NA	20.18	NA	NA	73.94
					5/28/2015	22.67	22.61	0.06	71.45	71.51
					11/13/2014	NA	23.28	NA	NA	70.84
					4/3/2014	NA	21.95	NA	NA	72.17
MW-22	30	20	30	94.25	1/24/2018	NA	23.19	NA	NA	71.06
					6/27/2017	NA	20.77	NA	NA	73.48
					10/19/2016	NA	21.16	NA	NA	73.09
					5/15/2016	NA	19.61	NA	NA	74.64
					11/3/2015	NA	19.01	NA	NA	75.24
					5/28/2015	NA	21.85	NA	NA	72.40
					11/11/2014	NA	22.68	NA	NA	71.57
					4/3/2014	NA	21.11	NA	NA	73.14
MW-23	30	20	30	94.43	1/24/2018	NA	25.35	NA	NA	69.08
					6/27/2017	NA	23.60	NA	NA	70.83
					10/19/2016	NA	23.06	NA	NA	71.37
					5/18/2016	NA	21.95	NA	NA	72.48
					11/3/2015	NA	21.95	NA	NA	72.48
					5/28/2015	NA	24.25	NA	NA	70.18
					11/13/2014	NA	24.98	NA	NA	69.45
					4/3/2014	NA	23.65	NA	NA	70.78
MW-25	25.6	Unknown		93.09	1/24/2018	NA	22.06	NA	NA	71.03
					6/26/2017	Unable to Locate				
					10/19/2016	NA	19.96	NA	NA	73.13
					5/15/2016	Unable to Locate				
					11/3/2015	NA	17.73	NA	NA	75.36
					5/28/2015	NA	20.65	NA	NA	72.44
					11/10/2014	NA	21.60	NA	NA	71.49
					4/1/2014	NA	19.71	NA	NA	73.38
MW-26	30	Unknown		95.96	1/22/2018	NA	23.22	NA	NA	72.74
					6/28/2017	NA	21.44	NA	NA	74.52
					10/19/2016	Not Sampled due to Obstruction				
					5/17/2016	NA	20.24	NA	NA	75.72
					11/3/2015	NA	21.06	NA	NA	74.90
					6/5/2015	NA	22.49	NA	NA	73.47
					11/11/2014	NA	22.95	NA	NA	73.01
					4/3/2014	NA	20.01	NA	NA	75.95
MW-27	30	15	30	91.40	1/24/2018	NA	19.71	NA	NA	71.69
					6/27/2017	NA	17.31	NA	NA	74.09
					10/19/2016	NA	17.46	NA	NA	73.94
					5/17/2016	NA	15.62	NA	NA	75.78
					11/3/2015	NA	11.21	NA	NA	80.19
					5/28/2015	NA	17.75	NA	NA	73.65
					11/13/2014	NA	18.85	NA	NA	72.55
					4/1/2014	NA	14.65	NA	NA	76.75
MW-28	30	15	30	91.46	1/24/2018	NA	20.30	NA	NA	71.16
					6/27/2017	NA	16.97	NA	NA	74.49
					10/19/2016	NA	17.53	NA	NA	73.93
					5/17/2016	NA	15.90	NA	NA	75.56
					11/3/2015	NA	13.08	NA	NA	78.38
					5/28/2015	NA	17.97	NA	NA	73.49
					11/13/2014	NA	19.75	NA	NA	71.71
					4/1/2014	NA	15.63	NA	NA	75.83
MW-29	30	15	30	91.09	1/24/2018	NA	20.45	NA	NA	70.64
					6/27/2017	NA	16.95	NA	NA	74.14
					10/19/2016	NA	17.76	NA	NA	73.33
					5/17/2016	NA	15.88	NA	NA	75.21
					11/3/2015	NA	13.19	NA	NA	77.90
					5/28/2015	17.91	17.92	0.01	73.18	73.17
					11/13/2014	NA	19.92	NA	NA	71.17
					4/1/2014	NA	15.51	NA	NA	75.58
MW-30	30	15	30	92.77	1/24/2018	NA	23.22	NA	NA	69.55
					6/27/2017	NA	20.46	NA	NA	72.31
					10/19/2016	NA	29.20	NA	NA	63.57
					5/15/2016	NA	19.27	NA	NA	73.50
					11/3/2015	NA	17.43	NA	NA	75.34
					5/28/2015	NA	26.70	NA	NA	66.07
					11/10/2014	NA	22.90	NA	NA	69.87
					4/1/2014	NA	20.50	NA	NA	72.27

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-31	35	20	35	95.20	1/23/2018	NA	26.61	NA	NA	68.59
					6/27/2017	NA	24.12	NA	NA	71.08
					10/19/2016	NA	24.41	NA	NA	70.79
					5/17/2016	NA	22.98	NA	NA	72.22
					11/3/2015	NA	22.53	NA	NA	72.67
					5/28/2015	25.61	25.62	0.01	69.59	69.58
					11/12/2014	NA	26.36	NA	NA	68.84
					4/2/2014	NA	24.41	NA	NA	70.79
MW-32	30	15	30	92.87	1/24/2018	NA	23.54	NA	NA	69.33
					6/27/2017	NA	20.01	NA	NA	72.86
					10/19/2016	Not Sampled due to Obstruction				
					5/17/2016	NA	19.75	NA	NA	73.12
					11/3/2015	NA	19.12	NA	NA	73.75
					5/28/2015	NA	22.00	NA	NA	70.87
					11/12/2014	NA	23.16	NA	NA	69.71
					4/2/2014	NA	21.28	NA	NA	71.59
MW-33	35	20	35	93.84	1/23/2018	NA	25.02	NA	NA	68.82
					6/27/2017	NA	22.70	NA	NA	71.14
					10/19/2016	NA	23.00	NA	NA	70.84
					5/15/2016	NA	21.57	NA	NA	72.27
					11/3/2015	NA	21.48	NA	NA	72.36
					5/28/2015	NA	23.83	NA	NA	70.01
					11/12/2014	NA	24.65	NA	NA	69.19
					4/1/2014	NA	23.18	NA	NA	70.66
MW-34	35	20	35	94.77	1/24/2018	NA	25.84	NA	NA	68.93
					6/27/2017	NA	25.52	NA	NA	69.25
					10/19/2016	NA	23.81	NA	NA	70.96
					5/15/2016	NA	22.38	NA	NA	72.39
					11/3/2015	NA	21.52	NA	NA	73.25
					5/28/2015	NA	24.72	NA	NA	70.05
					11/12/2014	NA	25.49	NA	NA	69.28
					4/1/2014	NA	24.06	NA	NA	70.71
MW-35	35	20	35	93.71	1/24/2018	NA	24.88	NA	NA	68.83
					6/27/2017	NA	22.65	NA	NA	71.06
					10/19/2016	NA	22.89	NA	NA	70.82
					5/16/2016	NA	21.48	NA	NA	72.23
					11/3/2015	NA	21.37	NA	NA	72.34
					5/28/2015	NA	23.80	NA	NA	69.91
					11/12/2014	NA	24.66	NA	NA	69.05
					4/1/2014	NA	21.35	NA	NA	72.36
MW-36	35	20	35	93.89	1/23/2018	NA	25.02	NA	NA	68.87
					6/27/2017	NA	22.52	NA	NA	71.37
					10/19/2016	NA	22.91	NA	NA	70.98
					5/15/2016	NA	21.36	NA	NA	72.53
					11/3/2015	NA	21.36	NA	NA	72.53
					5/28/2015	NA	23.63	NA	NA	70.26
					11/12/2014	NA	24.72	NA	NA	69.17
					4/1/2014	NA	22.84	NA	NA	71.05
MW-37	35	20	35	93.78	1/23/2018	NA	25.17	NA	NA	68.61
					6/27/2017	NA	22.76	NA	NA	71.02
					10/19/2016	NA	23.04	NA	NA	70.74
					5/16/2016	NA	21.61	NA	NA	72.17
					11/3/2015	NA	21.36	NA	NA	72.42
					5/28/2015	NA	23.98	NA	NA	69.80
					11/12/2014	NA	24.87	NA	NA	68.91
					4/1/2014	NA	22.24	NA	NA	71.54
MW-38	35	20	35	95.53	1/23/2018	NA	26.42	NA	NA	69.11
					6/27/2017	NA	24.06	NA	NA	71.47
					10/19/2016	NA	24.32	NA	NA	71.21
					5/18/2016	NA	24.83	NA	NA	70.70
					11/3/2015	NA	22.89	NA	NA	72.64
					6/2/2015	NA	25.26	NA	NA	70.27
					11/12/2014	NA	26.17	NA	NA	69.36
					4/1/2014	NA	24.61	NA	NA	70.92
MW-39	35	20	35	96.19	1/23/2018	NA	27.68	NA	NA	68.51
					6/27/2017	NA	25.15	NA	NA	71.04
					10/19/2016	NA	25.37	NA	NA	70.82
					5/18/2016	NA	24.02	NA	NA	72.17
					11/3/2015	NA	23.79	NA	NA	72.40
					6/2/2015	NA	26.45	NA	NA	69.74
					11/12/2014	NA	27.36	NA	NA	68.83
					4/2/2014	NA	25.59	NA	NA	70.60

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-40	35	20	35	95.69	1/23/2018	NA	26.88	NA	NA	68.81
					6/27/2017	NA	24.47	NA	NA	71.22
					10/19/2016	NA	25.04	NA	NA	70.65
					5/18/2016	NA	25.25	NA	NA	70.44
					11/3/2015	NA	23.43	NA	NA	72.26
					6/2/2015	NA	26.12	NA	NA	69.57
					11/12/2014	NA	27.01	NA	NA	68.68
					4/2/2014	NA	25.29	NA	NA	70.40
MW-41	35	20	35	94.85	1/23/2018	NA	27.31	NA	NA	67.54
					6/27/2017	NA	24.91	NA	NA	69.94
					10/19/2016	NA	24.45	NA	NA	70.40
					5/18/2016	NA	23.71	NA	NA	71.14
					11/3/2015	NA	22.77	NA	NA	72.08
					6/2/2015	NA	25.69	NA	NA	69.16
					11/11/2014	NA	26.99	NA	NA	67.86
					4/1/2014	NA	24.70	NA	NA	70.15
MW-42	35	20	35	95.81	1/23/2018	NA	27.42	NA	NA	68.39
					6/27/2017	NA	25.00	NA	NA	70.81
					10/19/2016	NA	25.08	NA	NA	70.73
					5/18/2016	NA	23.73	NA	NA	72.08
					11/3/2015	NA	23.46	NA	NA	72.35
					6/2/2015	NA	26.25	NA	NA	69.56
					11/12/2014	NA	27.22	NA	NA	68.59
					4/1/2014	NA	25.35	NA	NA	70.46
MW-43	40	20	40	95.15	1/23/2018	NA	25.84	NA	NA	69.31
					6/27/2017	NA	23.32	NA	NA	71.83
					10/19/2016	NA	23.70	NA	NA	71.45
					5/18/2016	NA	22.04	NA	NA	73.11
					11/3/2015	NA	22.21	NA	NA	72.94
					5/28/2015	NA	24.66	NA	NA	70.49
					11/11/2014	NA	25.61	NA	NA	69.54
					4/2/2014	NA	24.00	NA	NA	71.15
MW-44	31	16	31	94.57	1/23/2018	NA	24.42	NA	NA	70.15
					6/27/2017	NA	21.57	NA	NA	73.00
					10/19/2016	NA	22.16	NA	NA	72.41
					5/18/2016	NA	20.11	NA	NA	74.46
					11/3/2015	NA	20.33	NA	NA	74.24
					5/28/2015	NA	22.70	NA	NA	71.87
					11/11/2014	NA	24.23	NA	NA	70.34
					4/1/2014	NA	24.42	NA	NA	70.15
MW-45	30	15	30	92.51	1/23/2018	NA	22.94	NA	NA	69.57
					6/27/2017	NA	20.56	NA	NA	71.95
					10/19/2016	NA	20.99	NA	NA	71.52
					5/18/2016	NA	19.43	NA	NA	73.08
					11/3/2015	NA	19.45	NA	NA	73.06
					5/28/2015	NA	21.75	NA	NA	70.76
					11/11/2014	NA	22.63	NA	NA	69.88
					4/1/2014	NA	21.22	NA	NA	71.29
MW-46	35	20	35	94.50	1/23/2018	NA	25.26	NA	NA	69.24
					6/27/2017	NA	22.82	NA	NA	71.68
					10/19/2016	NA	23.25	NA	NA	71.25
					5/16/2016	NA	21.70	NA	NA	72.80
					11/3/2015	NA	21.84	NA	NA	72.66
					5/28/2015	NA	24.19	NA	NA	70.31
					11/11/2014	NA	24.95	NA	NA	69.55
					4/1/2014	NA	23.55	NA	NA	70.95
MW-48	30	15	30	89.95	1/22/2018	Unable to Access - Locked Gate				
					6/26/2017	Unable to Access - Locked Gate				
					10/19/2016	Unable to Access - Locked Gate				
					5/18/2016	NA	18.21	NA	NA	71.74
					11/3/2015	Unable to Access - Locked Gate				
					5/29/2015	NA	19.63	NA	NA	70.32
					11/11/2014	Unable to Access - Locked Gate				
					4/2/2014	NA	19.70	NA	NA	70.25
MW-49	30	15	30	88.18	1/24/2018	NA	17.83	NA	NA	70.35
					6/26/2017	Unable to Access - Locked Gate				
					10/19/2016					
					5/15/2016					
					11/3/2015					
					5/29/2015					
					11/11/2014					
					4/2/2014					

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-50	30	15	30	84.09	1/24/2018	Unable to Access - Locked Gate				
					6/26/2017					
					10/19/2016					
					5/15/2016					
					11/3/2015					
					5/29/2015					
					11/11/2014					
					4/2/2014					
MW-51	35	20	35	93.91	1/22/2018	NA	24.82	NA	NA	69.09
					6/27/2017	NA	22.51	NA	NA	71.40
					10/19/2016	NA	22.78	NA	NA	71.13
					5/18/2016	NA	20.76	NA	NA	73.15
					11/3/2015	NA	21.87	NA	NA	72.04
					5/29/2015	NA	23.72	NA	NA	70.19
					11/11/2014	NA	24.29	NA	NA	69.62
					4/2/2014	NA	21.23	NA	NA	72.68
MW-53	20	5	20	79.60	1/22/2018	NA	11.32	NA	NA	68.28
					6/27/2017	NA	9.49	NA	NA	70.11
					10/19/2016	Unable to Locate- Overgrown Field				
					5/15/2016	Unable to Locate- Overgrown Field				
					11/3/2015	NA	8.49	NA	NA	71.11
					5/28/2015	NA	10.50	NA	NA	69.10
					11/11/2014	NA	11.02	NA	NA	68.58
					4/3/2014	NA	9.60	NA	NA	70.00
MW-54	20	5	20	77.58	1/23/2018	Destroyed - Paved Over				
					6/26/2017					
					10/19/2016	NA	10.66	NA	NA	66.92
					5/18/2016	NA	10.15	NA	NA	67.43
					11/3/2015	NA	9.83	NA	NA	67.75
					5/28/2015	NA	11.27	NA	NA	66.31
					11/11/2014	Unable to Locate - Overgrown Field				
					4/1/2014	NA	11.31	NA	NA	66.27
MW-55	14	4	14	71.22	1/22/2018	NA	3.51	NA	NA	67.71
					6/27/2017	NA	2.10	NA	NA	69.12
					10/19/2016	NA	4.26	NA	NA	66.96
					5/18/2016	NA	1.55	NA	NA	69.67
					11/3/2015	NA	1.19	NA	NA	70.03
					5/28/2015	NA	3.83	NA	NA	67.39
					11/11/2014	Unable to Locate - Overgrown Field				
					4/3/2014	NA	2.51	NA	NA	68.71
MW-56	20	5	20	76.39	1/22/2018	NA	8.69	NA	NA	67.70
					6/27/2017	NA	7.20	NA	NA	69.19
					10/19/2016	NA	7.45	NA	NA	68.94
					5/18/2016	NA	6.76	NA	NA	69.63
					11/3/2015	NA	6.40	NA	NA	69.99
					5/28/2015	NA	8.22	NA	NA	68.17
					11/11/2014	Unable to Locate - Overgrown Field				
					4/3/2014	NA	5.12	NA	NA	71.27
MW-58	19	4	19	76.37	1/24/2018	Not Sampled due to Obstruction				
					6/26/2017					
					10/19/2016					
					5/18/2016					
					11/3/2015	NA	4.52	NA	NA	71.85
					5/29/2015	NA	6.85	NA	NA	69.52
					11/11/2014	Abandoned				
					4/2/2014					
MW-59	17	2	17	68.02	1/22/2018	NA	6.55	NA	NA	61.47
					6/28/2017	NA	5.65	NA	NA	62.37
					10/19/2016	NA	5.84	NA	NA	62.18
					5/18/2016	NA	5.46	NA	NA	62.56
					11/3/2015	NA	5.04	NA	NA	62.98
					5/28/2015	NA	6.46	NA	NA	61.56
					11/11/2014	NA	6.69	NA	NA	61.33
					4/2/2014	NA	6.05	NA	NA	61.97
MW-60	14	4	14	67.94	1/22/2018	Unable to Locate				
					6/26/2017					
					10/19/2016					
					5/18/2016					
					11/3/2015					
					5/28/2015					
					11/11/2014					
					4/2/2014					

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-62	35	20	35	94.05	1/23/2018	NA	24.18	NA	NA	69.87
					6/27/2017	NA	22.44	NA	NA	71.61
					10/19/2016	NA	22.64	NA	NA	71.41
					5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	22.15	22.67	0.52	71.90	71.38
					5/28/2015	22.21	23.71	1.5	71.84	70.34
					11/12/2014	NA	24.75	NA	NA	69.30
					4/1/2014	NA	22.32	NA	NA	71.73
MW-63	35	20	35	94.65	1/23/2018	NA	25.45	NA	NA	69.20
					6/27/2017	NA	22.81	NA	NA	71.84
					10/19/2016	NA	22.84	NA	NA	71.81
					5/18/2016	NA	21.66	NA	NA	72.99
					11/3/2015	NA	24.05	NA	NA	70.60
					5/28/2015	24.04	24.05	0.01	70.61	70.60
					11/12/2015	Unable to Locate				
					4/2/2014	NA	23.07	NA	NA	71.58
MW-65	35	20	35	94.04	1/22/2018	Unable to Locate - Paved over				
					6/26/2017					
					10/19/2016					
					5/15/2016					
					11/3/2015					
					5/28/2015					
					11/11/2014					
					4/2/2014					
MW-67	35	20	35	96.10	1/23/2018	NA	27.44	NA	NA	68.66
					6/27/2017	NA	25.42	NA	NA	70.68
					10/19/2016	NA	25.18	NA	NA	70.92
					5/18/2016	NA	23.73	NA	NA	72.37
					11/3/2015	NA	23.52	NA	NA	72.58
					6/2/2015	NA	26.29	NA	NA	69.81
					11/12/2014	NA	27.28	NA	NA	68.82
					4/1/2014	NA	24.44	NA	NA	71.66
MW-70	35	20	35	95.49	1/23/2018	NA	26.36	NA	NA	69.13
					6/27/2017	NA	24.51	NA	NA	70.98
					10/19/2016	NA	24.43	NA	NA	71.06
					5/18/2016	NA	23.11	NA	NA	72.38
					11/3/2015	NA	22.89	NA	NA	72.60
					5/28/2015	NA	25.60	NA	NA	69.89
					11/11/2014	NA	26.22	NA	NA	69.27
					4/2/2014	NA	24.70	NA	NA	70.79
MW-5AR	28	18	28	94.18	1/24/2018	NA	23.16	NA	NA	71.02
					6/27/2017	NA	21.61	NA	NA	72.57
					10/19/2016	NA	21.04	NA	NA	73.14
					5/15/2016	NA	19.59	NA	NA	74.59
					11/3/2015	NA	16.39	NA	NA	77.79
					5/28/2015	NA	20.91	NA	NA	73.27
					11/13/2014	NA	22.64	NA	NA	71.54
					4/1/2014	NA	21.24	NA	NA	72.94
PW-1R	50	45	50	93.75	1/24/2018	NA	24.43	NA	NA	69.32
					6/28/2017	NA	22.16	NA	NA	71.59
					10/19/2016	NA	22.36	NA	NA	71.39
					5/18/2016	NA	21.03	NA	NA	72.72
					11/3/2015	NA	21.43	NA	NA	72.32
					5/29/2015	23.19	23.20	0.01	70.56	70.55
					11/13/2014	NA	23.92	NA	NA	69.83
					4/3/2014	NA	23.11	NA	NA	70.64
DW-1	70	65	70	94.66	1/22/2018	NA	43.95	NA	NA	50.71
					6/28/2017	NA	42.91	NA	NA	51.75
					10/19/2016	NA	42.32	NA	NA	52.34
					5/16/2016	NA	42.71	NA	NA	51.95
					11/3/2015	NA	46.28	NA	NA	48.38
					5/29/2015	NA	46.28	NA	NA	48.38
					11/10/2014	NA	45.42	NA	NA	49.24
					4/2/2014	NA	45.00	NA	NA	49.66
DW-2	75	70	75	94.02	1/22/2018	NA	43.23	NA	NA	50.79
					6/28/2017	NA	42.21	NA	NA	51.81
					10/19/2016	NA	43.05	NA	NA	50.97
					5/16/2016	NA	41.99	NA	NA	52.03
					11/3/2015	NA	43.07	NA	NA	50.95
					11/11/2014	NA	44.88	NA	NA	49.14
					4/2/2014	NA	44.34	NA	NA	49.68

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
DW-3	52	47	52	93.75	1/24/2018	NA	25.11	NA	NA	68.64
					6/28/2017	NA	22.85	NA	NA	70.90
					10/19/2016	NA	23.07	NA	NA	70.68
					5/18/2016	NA	21.70	NA	NA	72.05
					11/3/2015	NA	21.29	NA	NA	72.46
					5/28/2015	NA	23.93	NA	NA	69.82
					11/13/2014	NA	24.42	NA	NA	69.33
					4/3/2014	NA	24.40	NA	NA	69.35
DW-4	110	105	110	93.79	1/24/2018	NA	43.33	NA	NA	50.46
					6/28/2017	NA	38.96	NA	NA	54.83
					10/19/2016	NA	42.79	NA	NA	51.00
					5/18/2016	NA	42.31	NA	NA	51.48
					11/3/2015	NA	43.34	NA	NA	50.45
					5/28/2015	NA	44.51	NA	NA	49.28
					11/13/2014	NA	3.45	NA	NA	90.34
					4/3/2014	NA	44.60	NA	NA	49.19
DW-5	70	65	70	93.74	1/24/2018	NA	43.46	NA	NA	50.28
					6/28/2017	NA	42.34	NA	NA	51.40
					10/19/2016	NA	42.51	NA	NA	51.23
					5/16/2016	NA	42.12	NA	NA	51.62
					11/3/2015	NA	42.89	NA	NA	50.85
					5/28/2015	NA	44.45	NA	NA	49.29
					11/12/2014	NA	44.75	NA	NA	48.99
					4/1/2014	NA	44.22	NA	NA	49.52
DW-6	70	65	70	95.90	1/23/2018	NA	45.51	NA	NA	50.39
					6/28/2017	NA	44.31	NA	NA	51.59
					10/19/2016	NA	44.54	NA	NA	51.36
					5/18/2016	NA	44.10	NA	NA	51.80
					11/3/2015	NA	44.59	NA	NA	51.31
					6/2/2015	NA	46.16	NA	NA	49.74
					11/12/2014	NA	46.64	NA	NA	49.26
					4/1/2014	NA	45.86	NA	NA	50.04
DW-7	55	50	55	72.79	1/24/2018	Destroyed - Paved Over				
					6/26/2017					
					10/19/2016	NA	22.24	NA	NA	50.55
					5/18/2016	NA	21.82	NA	NA	50.97
					11/3/2015	NA	22.97	NA	NA	49.82
					5/28/2015	NA	24.32	NA	NA	48.47
					11/11/2014	NA	24.75	NA	NA	48.04
					4/3/2014	NA	24.00	NA	NA	48.79
DW-8	55	50	55	68.63	1/24/2018	Not Sampled due to Obstruction				
					6/26/2017					
					10/19/2016					
					5/18/2016					
					11/3/2015	NA	19.43	NA	NA	49.20
					5/29/2015	NA	5.37	NA	NA	63.26
					11/11/2014	Abandoned				
					4/2/2014					
DW-9	65	60	65	76.47	1/22/2018	NA	23.73	NA	NA	52.74
					6/28/2017	NA	22.73	NA	NA	53.74
					10/19/2016	NA	22.87	NA	NA	53.60
					5/18/2016	NA	22.42	NA	NA	54.05
					11/3/2015	NA	23.62	NA	NA	52.85
					5/28/2015	NA	24.90	NA	NA	51.57
					11/11/2014	NA	24.44	NA	NA	52.03
					4/2/2014	NA	25.00	NA	NA	51.47

INA = Information not available

* = GW Elevation Corrected for The Presence of Free Product

n/a = not applicable

CRAWFORD ENVIRONMENTAL SERVICES

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron | UST | 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina | Crawford Project No. | 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-1	4/2/2014	Dry								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/16/2016									
	6/26/2017									
	1/22/2018									
MW-2	4/2/2014	170	41	200	960	320	150	230	1	6.8
	11/4/2014	140	300	220	1300	410	160	210	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/4/2015	0.61	0.48	1.4	5.5	<1	2.6	<100	<10	<100
	5/16/2016	11	0.83 J	0.98 J	49	18	12	<100	<10	<100
	10/21/2016	34	4.9	23	60	56	18	68 J	<10	47 J
	6/27/2017	190	5.6	140	640	370	140	190	14	<100
	1/22/2018	450	10	270	960	520	190	430	23	<100
MW-3	4/2/2014	6900	18000	1200	16000	1800	600	980	560.000	340
	11/12/2014	4600	11000	620	8700	1300	280	<5000	310.000	<5000
	5/29/2015	0.09-Feet of Free Product								
	11/4/2015	3000	8700	600	7200	720	360	<2000	140	<2000
	5/16/2016	7800	22000	1800	21000	2500	870	<5000	410 J	<5000
	10/21/2016	480	1000	76	2100	67	61	210	29	330
	6/27/2017	3900	13000	1100	10000	370	560	<1000	210	<1000
	1/22/2018	8400	29000	2400	29000	1500	740	<1000	370 J	<10000
MW-4	4/2/2014	<1	<1	<1	<1	3.5	<5	<100	10.000	<100
	11/11/2014	<1	<1	<1	<1	1.6	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	0.87 J	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	0.73 J	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	2.2	<5	<100	<10	<100
MW-5	4/2/2014	Dry								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/16/2016	0.29 J	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	Dry								
	6/26/2017	Dry								
	1/22/2018	Dry								
MW-6	4/3/2014	2.6	<1	2.4	10	2.5	4.2	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	0.8	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	1.7	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	1.9 J	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	13	<5	<100	<10	<100
MW-7	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	0.71	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	1.3 J	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-8	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-9	4/2/2014	830	7500	1700	14000	50	590	1700	5000	5000
	11/11/2014	380	11000	1900	13000	5	650	1100	<10	<100
	5/28/2015	250	5700	1200	8200	<50	480	<5000	<500	<5000
	11/4/2015	520	6200	1100	8600	<50	470	3000	<500	<5000
	5/16/2016	78	1900	1000	4300	<1	440	200	<10	<100
	10/21/2016	60	1500	730	3800	<1	210	550	<10	<100
	6/26/2017	Unable to Locate								
	1/22/2018	150	5400	1700	13000	<50	680	<5000	<500	<5000
MW-10	4/1/2014	1800	5700	350	8500	50	690	5000	500	5000
	11/11/2014	1.25-Feet of Free Product								
	5/28/2015	66	76	67	860	<1	370	<100	<10	<100
	11/4/2015	10	18	4.5	120	<1	46	<100	<10	<100
	5/18/2016	88	11	22	97	<1	170	<100	<10	<100
	10/21/2016	27	7.1	11	93	<1	47	<100	<10	<100
	6/28/2017	27	3.3	17	59	<1	120	<100	<10	<100
	1/22/2018	40	15	94	690	<1	120	42 J	<10	<100
MW-11	4/2/2014	2.3	4.1	11	4.1	<1	4.4	120	<10	<100
	11/11/2014	0.53	<1	<1	<1	<1	<5	80	<10	58
	5/29/2015	0.51	<1	<1	3.8	<1	6.6	50	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-12	4/2/2014	2.9	0.67	1.6	0.91	18	4.7	630	9	<100
	11/11/2014	990	19	910	140	21	180	3600	14	<100
	5/28/2015	53	2.7	430	14	22	44	2300	<10	<100
	11/4/2015	110	2	53	25	<1	10	1800	8	<100
	5/18/2016	260	83	710	330	17	190	1300	<10	<100
	10/20/2016	180	18	420	300	13	110	4000	<10	<100
	6/26/2017	Destroyed - Paved Over								
	1/23/2018	Destroyed - Paved Over								
MW-13	4/1/2014	0.62	8.8	4.5	86	<1	31	10	<10	<100
	11/11/2014	<1	<1	<	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<1	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/26/2017	Destroyed - Paved Over								
	1/23/2018	Destroyed - Paved Over								
MW-15	4/1/2014	0.60-Feet of Free Product								
	11/11/2014	0.25-Feet of Free Product								
	5/29/2015	0.16-Feet of Free Product								
	11/3/2015	0.14-Feet of Free Product								
	5/15/2016	0.44-Feet of Free Product								
	10/19/2016	0.60-Feet of Free Product								
	6/28/2017	<1	300	320	7,500	<1	880	<100	<10	<100
	1/22/2018	0.74 J	490	250	6500	<1	<100	<100	<10	<100
MW-16	4/2/2014	<1	<1	<1	<1	<1	3.4	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	Unable to Locate								
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-17	4/2/2014	280	5100	450	13000	50	850	2200	500	5000
	11/12/2014	32	3000	450	8300	<10	690	270	<100	<1000
	5/28/2015	210	7500	480	12000	<50	830	2200	<500	<5000
	11/4/2015	280	10000	660	13000	<100	720	<10000	<1000	<10000
	5/15/2016	Not Sampled due to Obstruction								
	10/20/2016	<100	5500	510	11000	<100	560	<10000	<1000	<10000
	6/27/2017	10	5.8	190	26	<1	190	<100	<10	<100
	1/22/2018	35	13	430	150	<1	440	70 J	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-18	4/2/2014	1900	7200	630	8300	340	370	4900	70	5000
	11/12/2014	3100	11000	560	8700	510	290	12000	<1000	<10000
	5/28/2015	970	2500	180	4100	230	180	3000	33	<100
	11/3/2015	990	5800	600	8900	93	260	<10000	<1000	<10000
	5/15/2016	260	1900	220	4900	20	220	690	<10	<100
	10/20/2016	510	2400	230	3700	68	120	5500	48	1100
	6/27/2017	310	1800	300	4100	6.3	140	190	<10	<100
	1/24/2018	1800	11000	1400	12000	49	560	3300	<200	<2000
MW-19	4/3/2014	300	1800	490	12000	50	900	610	500	5000
	11/13/2014	1400	2800	1600	24000	<50	1400	1300	<50	<5000
	5/28/2015	2100	17000	330	16000	<50	1200	6200	<500	<5000
	11/3/2015	2900	19000	720	17000	<100	1100	5400	<1000	<10000
	5/18/2016	2900	19000	1100	22000	200	1400	4300 J	<500	<5000
	10/21/2016	2500	18000	1200	19000	<500	1200 J	<50000	<5000	<50000
	6/27/2017	3200	21000	1100	20000	130	950	6700 J	<1000	<10000
	1/24/2018	3100	23000	1100	17000	<500	770 J	<50000	<5000	<50000
MW-20	4/3/2014	1800	11000	460	11000	50	960	3100	65	5000
	11/13/2014	1400	12000	500	14000	120	1100	<10000	<1000	<10000
	5/29/2015	0.06-Feet of Free Product								
	11/3/2015	930	11000	1000	17000	<50	1400	<5000	<500	<5000
	5/15/2016	690	10000	2100	23000	<50	1600	<5000	<500	<5000
	10/21/2016	490	7000	1600	20000	<50	1200	4200 J	<500	<5000
	6/27/2017	390	10000	2000	26000	<50	1500	2500 J	<500	<5000
MW-22	4/3/2014	5700	12000	880	23000	50	990	3600	500	5000
	11/11/2014	6300	23000	700	21000	<20	1200	9600	<20	<140
	6/5/2015	4800	16000	760	26000	<100	840	<10000	<1000	<10000
	11/3/2015	6400	20000	740	24000	<100	1000	3900	<1000	<10000
	5/15/2016	1900	11000	1500	28000	<50	1400	<5000	<500	<5000
	10/21/2016	3400	20000	1600	20000	<500	720 J	<50000	<5000	<50000
	6/27/2017	2100	13000	1100	15000	<500	<2500	<50000	<5000	<50000
	1/24/2018	2500	18000	1600	29000	<100	850	2900 J	<1000	<10000
MW-23	4/3/2014	4200	16000	880	19000	120	1100	5900	500.000	5000
	11/13/2014	890	3600	450	16000	<50	1200	1500	<50	<340
	5/28/2015	570	1500	89	8300	<50	660	<5000	<500	<5000
	11/3/2015	2.9	8.5	1.5	190	<1	52	<100	<10	<100
	5/18/2016	280	990	110	4200	7.3	470	520	<10	<100
	10/21/2016	600	1900	130	4600	18	390	4000	<10	<100
	6/27/2017	400	1500	120	3800	6.3	370	1000	<10	<100
	1/24/2018	1100	4700	300	8500	11	1200	2700	11	<100
MW-25	4/1/2014	5.5	200	320	4400	<1	1300	170	<10	<100
	11/10/2014	38	140	200	2600	1.9	490	2800	<10	<100
	5/28/2015	29	140	190	3000	<1	560	430	<10	<100
	11/3/2015	14	150	200	2600	<1	340	390	<10	<100
	5/15/2016	Unable to Locate								
	10/19/2016	8.8	120	230	3400	<1	450	<100	<10	<100
	6/26/2017	Unable to Locate								
	1/24/2018	10	200	270	4700	<1	520	680	<10	<100
MW-26	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	Not Sampled due to Obstruction								
	6/28/2017	<1	<1	<1	<1	<1	1.1 J	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-27	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-28	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-29	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-30	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/10/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-31	4/2/2014	0.9	<1	<1	<1	2.7	<5	59	<10	<100
	11/12/2014	30	9.8	310	9.3	4.1	160	460	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	7.9	<1	6.1	<1	<1	130	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	8.5	<1	6.9	<1	<1	130	130	<10	<100
MW-32	4/2/2014	0.94	<1	1.9	2.4	<1	6.6	170	<10	<100
	11/12/2014	4	13	72	10	<1	45	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	2.8 J	<100	<10	<100
	10/19/2016	Not Sampled due to Obstruction								
	6/27/2017	<1	<1	<1	<1	<1	1.4 J	<100	<10	<100
	1/24/2018	2.5	0.41 J	1.9	1.2	<1	28	<100	<10	<100
MW-33	4/1/2014	560	5200	2500	6900	50	670	4100	500.000	5000
	11/12/2014	130	410	210	550	1.2	71	1000	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	29	<10	<100
	11/3/2015	240	7500	1600	11000	<50	430	<5000	<500	<5000
	5/15/2016	260	3200	1400	4700	4.3	390	210	<10	<100
	10/19/2016	120	620	480	1700	<1	95	980	<10	<100
	6/27/2017	80	250	100	1400	<1	210	860	<10	<100
	1/23/2018	310	4100	2100	11000	<1	940	3600	<10	<100
MW-34	4/1/2014	<1	<1	<1	<1	<1	<5	39	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	39	<10	<100
	5/28/2015	<1	1.1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/24/2018	<1	<1	0.26 J	<1	<1	<5	<100	<10	<100
MW-35	4/1/2014	3700	4300	2000	6200	160	550	5600	54	5000
	11/12/2014	6000	7200	2800	7400	330	700	4700	76	<100
	5/28/2015	3300	5100	1500	4700	<50	640	4400	<500	<5000
	11/3/2015	1900	2200	1100	3300	84	530	2300	28	<100
	5/16/2016	130	130	23	490	4.6	46	120	<10	<100
	10/20/2016	2200	3300	1300	4100	64	360	5800	63	<100
	6/27/2017	3100	3800	2400	4700	56	780	3000	29	<100
	1/24/2018	3600	6300	2900	6600	62	850	4100	<200	<2000

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-36	4/1/2014	5.1	<1	38	<1	<1	55	96	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	1.3	<1	2.3	<1	<5	<100	<10	<100
	11/3/2015	0.74	<1	1.6	<1	<1	16	<100	<10	<100
	5/15/2016	1	<1	14	0.47 J	<1	54	<100	<10	<100
	10/19/2016	1.8	<1	25	<1	<1	14	<100	<10	<100
	6/27/2017	1	<1	<1	<1	<1	47	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-37	4/1/2014	<1	<1	<1	<1	<1	3.7	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	3.5	<1	<1	5.4	<1	5.5	77	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	0.95 J	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	1.0 J	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-38	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-39	4/2/2014	<1	3.2	2.2	14	<1	3.3	<100	<10	<100
	11/12/2014	11	1500	1000	3700	<1	340	220	<10	<100
	6/2/2015	1.3	160	140	1100	<1	160	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	1.2	1.9	4.9	<1	<5	<100	<10	<100
	10/20/2016	1.5	390	780	2300	<1	320	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	0.48 J	220	480	2000	<1	370	56 J	<10	<100
MW-40	4/2/2014	5.8	14	2	580	<1	24	<100	<10	<100
	11/12/2014	140	970	300	2900	12	150	600	<10	<100
	6/2/2015	5.2	47	3.9	590	<1	38	<100	<10	<100
	11/4/2015	0.51	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	1.4	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	1.4	<1	<1	<5	<100	<10	<100
	6/27/2017	22	5.1	600	98	<1	480	<100	<10	<100
	1/23/2018	1.5	<1	9.8	<1	<1	6.1	<100	<10	<100
MW-41	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	26	3.2	510	15	<1	340	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	10	330	210	680	<1	110	65 J	<10	<100
MW-42	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	0.31 J	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	3.8	5.4	<1	4.9	<100	<10	<100
	1/23/2018	<1	0.41 J	57	48	<1	64	<100	<10	<100
MW-43	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-44	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-45	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-46	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-48	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	Unable to Access - Locked Gate								
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	Unable to Access - Locked Gate								
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/25/2016	Unable to Access - Locked Gate								
	6/26/2017	Unable to Access - Locked Gate								
	1/22/2018	Unable to Access - Locked Gate								
MW-49	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
	6/26/2017									
	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-50	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
	6/26/2017									
	1/24/2018									
MW-51	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-53	4/3/2014	<1	<1	<1	<1	<1	4.1	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	4.1	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/22/2018	<1	<1	0.36 J	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-54	4/1/2014	<1	<1	<1	<1	9.6	<5	<100	6.700	<100
	11/11/2014	Unable to Locate								
	5/28/2015	<1	<1	<1	<1	6.4	<5	140	<10	<100
	11/4/2015	<1	<1	<1	<1	1.5	<5	<100	<10	<100
	5/18/2016	0.60 J	<1	<1	<1	5.0	<5	60 J	<10	<100
	10/20/2016	<1	<1	<1	<1	2.0	<5	130	<10	<100
	6/26/2017	Destroyed - Paved Over								
	1/23/2018	Destroyed - Paved Over								
MW-55	4/3/2014	10	1	3.5	<1	24	3.9	98	6.400	<100
	11/11/2014	Unable to Locate								
	5/28/2015	1000	40	410	260	190	180	1700	15	<100
	11/4/2015	640	64	200	230	160	120	1200	11	56
	5/18/2016	950	44	320	210	220	130	2600	15	<100
	10/21/2016	1500	310	860	1100	210	240	6000	43	370
	6/27/2017	200	2.9	53	20	100	50	2000	15	<100
	1/22/2018	720	100	710	880	130	300	2800	11	<100
MW-56	4/3/2014	<1	<1	<1	<1	<1	<5	50	<10	<100
	11/11/2014	Unable to Locate								
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-58	4/2/2014	Abandoned								
	11/11/2014									
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	Not Sampled due to Obstruction								
	10/19/2016									
	6/27/2017									
	1/24/2018									
MW-59	4/2/2014	28	2.8	300	6.4	130	45	2600	42	160
	11/11/2014	81	3.6	730	14	91	96	4500	27	<100
	5/28/2015	1400	23	1100	620	89	290	3900	34	<100
	11/4/2015	1300	48	440	850	58	250	2800	19	<100
	5/18/2016	1900	51	950	760	96	260	4300	28	<100
	10/20/2016	2400	61	1400	2300	62	390	10000	63	300
	6/28/2017	2400	77	2000	3400	43	490	3600	32	<100
	1/22/2018	2500	130	1800	3100	35	530	4700	21	<100
MW-60	4/2/2014	Unable to Locate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
	6/26/2017									
	1/22/2018									
MW-62	4/1/2014	0.86	<1	<1	<1	3	3.3	260	<10	<100
	11/12/2014	51	<1	<1	0.93	2.6	65	730	<10	<100
	5/29/2015	1.50-Feet of Free Product								
	12/17/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	Not Sampled due to Obstruction								
	10/19/2016	Not Sampled due to Obstruction								
	6/27/2017	1.6	<1	<1	<1	0.69 J	2.4 J	93 J	<10	<100
	1/23/2018	33	<1	<1	<1	2.4	46	770	<10	<100
MW-63	4/2/2014	<1	<1	<1	<1	<1	5	120	<10	<100
	11/12/2014	Unable to Locate								
	5/29/2015	0.01-Feet of Free Product								
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-65	4/2/2014	Unable to Locate - Paved over								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
	6/26/2017									
	1/22/2018									
MW-67	4/1/2014	<1	<1	<1	<1	<1	5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-70	4/2/2014	<1	<1	<1	<1	<1	5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	1.5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	0.44 J	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-5AR	4/1/2014	12000	13000	2400	13000	70	1000	<5000	160.000	<5000
	11/13/2014	830	180	98	670	13	130	<100	13.000	<100
	5/28/2015	2500	1200	280	1300	43	460	650	52.000	<100
	11/3/2015	5200	10000	810	5300	<100	580	<10000	<1000	<10000
	5/15/2016	7000	6400	1200	8000	<100	890	<10000	<1000	<10000
	10/21/2016	6300	3000	1100	7200	<50	1100	<5000	<500	<5000
	6/27/2017	1900	92	330	1400	2.3	390	220	13	<100
	1/24/2018	7000	320	960	2700	19	1100	2700	49	<100
PW-1R	4/3/2014	460	3400	320	9200	<50	<250	710	<500	<5000
	11/13/2014	850	6900	580	18000	<50	1300	<5000	<500	<5000
	5/29/2015	0.01-Feet of Free Product								
	11/3/2015	830	20000	1200	14000	<500	600	<50000	<5000	<50000
	5/18/2016	210	1200	170	3200	6.8	200	380	<10	<100
	10/21/2016	410	5900	440	7200	<20	320	1900 J	<200	<2000
	6/28/2017	380	7900	510	9100	<50	320	<5000	<500	<5000
	1/24/2018	370	4300	480	13000	<100	340 J	<10000	<1000	<10000
DW-1	4/2/2014	0.45	1.2	1.7	7.2	<1.0	<5.0	<100	<10	<100
	11/10/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/28/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	<1	1.4 J	<100	<10	<100
DW-2	4/2/2014	<1.0	<1.0	<1.0	<1.0	7.1	4.1	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	10	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	8.7	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	2.9	<5	<100	<10	<100
	6/28/2017	<1	<1	<1	<1	2.4	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	3.7	<5	<100	<10	<100
DW-3	4/3/2014	9800	22000	3700	17000	990	780	10000	190	<5000
	11/13/2014	2000	20000	2800	10000	23	650	2700	<20	<140
	5/28/2015	310	4000	79	3100	6.5	130	750	<10	<100
	11/3/2015	4300	16000	2300	11000	230	800	2600	50	<2000
	5/18/2016	2600	10000	1400	8200	160	410	<5000	<500	<5000
	10/21/2016	4200	8300	1800	5200	240	450 J	8200 J	<1000	<10000
	6/28/2017	3400	8600	1600	5200	120	310	3400 J	370 J	<5000
	1/24/2018	700	960	210	410	44	68	790	10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron | UST | 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina | Crawford Project No. | 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
DW-4	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/13/2014	<1	1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/28/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/24/2018	5.6	1.4	<1	<1	<1	<5	<100	<10	<100
DW-5	4/1/2014	3300	68	37	1000	940	81	4300	83	<100
	11/12/2014	6700	380	240	3100	1400	190	5300	110	<100
	5/28/2015	6900	660	420	3800	1200	290	6300	<500	<5000
	11/4/2015	5900	490	200	1800	1100	170	4800	89	<100
	5/16/2016	9200	1600	750	5300	1400	470	4300	95 J	<100
	10/25/2016	5700	1200	460	2800	1000	200 J	17000	<1000	<10000
	6/28/2017	5200	1400	380	2400	890	130 J	7200	390 J	<5000
	1/24/2018	9400	3300	970	5300	1000	340	10000	<500	<5000
DW-6	4/1/2014	8.5	1.2	1.6	7.2	3	5	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/2/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/25/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/28/2017	<1	<1	0.37 J	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-7	4/3/2014	0.52	0.46	<1.0	1.4	2.6	4.2	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	1.2	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/26/2017	Destroyed - Paved Over								
	1/24/2017	Destroyed - Paved Over								
DW-8	4/2/2014	Abandoned								
	11/11/2014									
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	Not Sampled due to Obstruction								
	10/21/2016	Not Sampled due to Obstruction								
	6/26/2017	Not Sampled due to Obstruction								
	1/24/2018	Not Sampled due to Obstruction								
DW-9	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	2.8	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	42	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	3.1	<5	<100	<10	<100
	6/28/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
SW-1	4/2/2014	180	8.4	30	53	42	6.5	350	9.500	100
	11/12/2014	Unable to Access - Overgrown Brush								
	5/28/2015	230	18	89	160	30	24	590	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	44	<10	<100
	5/18/2016	130	18	53	92	12	16	430	<10	<100
	10/19/2016	Unable to Access - Overgrown Brush								
QUALITY CONTROL DATA										
MW-15 (Dup 1)	1/22/2018	0.76 J	480	220	6400	<1	720	120	<10	<100
MW-41 (Dup 3)	1/23/2018	10	330	200	650	<1	110	53 J	<10	<100
MW-33 (Dup 4)	1/23/2018	390	4500	2200	12000	<1	1000	3300	<10	<100
MW-23 (Dup 5)	1/24/2018	1100	4800	310	8600	12	1200	2500	10	<100
DW-3 (Dup 6)	1/24/2018	740	1000	220	420	41	67	730	10	<100
Trip Blank 1	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
Trip Blank 2	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
Trip Blank 3	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100

BDL= Below Detectable Limit

RBSL= Risk Based Screening Levels

NE= Not Established

1,2 DCA = 1,2 Dichloroethane

J = Estimated value detected below reporting limit

CRAWFORD ENVIRONMENTAL SERVICES

Table 3

Facility Name:	Handy Pantry #65 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address:	2367 Taylor Street Columbia, South Carolina	Crawford Project No.	7.0547

Site Specific Target Level Summary

Well ID:	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	Notes
MW-2	Initial	140.0	280.0	56.0	460.0	380.0	54.0	200.0	9.2	140.0	1719.2	
	SSTL	77.0	280.0	56.0	460.0	380.0	54.0	200.0	9.2	140.0	1656.2	
	Initial > SSTL	63.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	63.0	
	Subsequent	460.00	10.00	270.00	960.0	520.0	190.0	430.0	23.0	100.0	2963.0	
	SSTL	77.0	280.0	56.0	460.0	380.0	54.0	200.0	9.2	140.0	1656.2	
	Subsequent > SSTL	373.0	0.0	214.0	500.0	140.0	136.0	230.0	13.8	0.0	1606.8	
MW-3	Initial	3000.0	7400.0	260.0	4500.0	3300.0	260.0	2000.0	340.0	1300.0	22360.0	
	SSTL	111.0	7400.0	260.0	4500.0	1976.0	108.0	2000.0	340.0	1300.0	17995.0	
	Initial > SSTL	2889.0	0.0	0.0	0.0	1324.0	152.0	0.0	0.0	0.0	4365.0	
	Subsequent	8400.0	29000.0	3400.0	29000.0	1500.0	740.0	1000.0	370.0	10000.0	83410.0	
	SSTL	111.0	7400.0	260.0	4500.0	1976.0	108.0	2000.0	340.0	1300.0	17995.0	
	Subsequent > SSTL	8289.0	21600.0	3140.0	24500.0	0.0	632.0	0.0	30.0	8700.0	65891.0	
MW-5	Initial	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	Dry 1/22/2018 - Results from 5/16/2016
	SSTL	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Subsequent	0.29	1.0	1.0	1.0	1.0	5.0	100.0	10.0	100.0	219.3	
	SSTL	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-9	Initial	4100.0	27000.0	2500.0	19000.0	150.0	960.0	1800.0	2000.0	20000.0	77310.0	
	SSTL	35.0	7134.0	2500.0	19000.0	150.0	68.0	809.0	270.0	15628.0	45594.0	
	Initial > SSTL	4065.0	19866.0	0.0	0.0	0.0	892.0	791.0	1730.0	4372.0	31716.0	
	Subsequent	150	5400	1700	13000	50	680	5000	500	5000	31480.0	
	SSTL	35.0	7134.0	2500.0	19000.0	150.0	68.0	809.0	270.0	15628.0	45594.0	
	Subsequent > SSTL	115.0	0.0	0.0	0.0	0.0	612.0	4191.0	230.0	0.0	5146.0	
MW-10	Initial	740.0	7800.0	2500.0	15000.0	2500.0	950.0	50000.0	5000.0	50000.0	134490.0	
	SSTL	24.0	7800.0	2500.0	15000.0	294.0	53.0	793.0	707.0	11042.0	38213.0	
	Initial > SSTL	716.0	0.0	0.0	0.0	2206.0	897.0	49207.0	4293.0	38958.0	96277.0	
	Subsequent	40	15	94	690	1	120	42	10	109	1112.0	
	SSTL	24.0	7800.0	2500.0	15000.0	294.0	53.0	793.0	707.0	11042.0	38213.0	
	Subsequent > SSTL	16.0	0.0	0.0	0.0	0.0	67.0	0.0	0.0	0.0	83.0	
MW-12	Initial	1.7	5.0	11.0	5.0	5.6	4.7	370.0	1.5	19.0	423.5	NS January 2018 - Results from 10/20/2016
	SSTL	1.7	5.0	11.0	5.0	5.6	4.7	370.0	1.5	19.0	423.5	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	
	Subsequent	180	18	420	300	13	110	4000	10	100	5151.0	
	SSTL	1.7	5.0	11.0	5.0	5.6	4.7	370.0	1.5	19.0	423.5	
	Subsequent > SSTL	178.3	13.0	409.0	295.0	7.4	105.3	3630.0	8.5	81.0	4727.5	
MW-16	Initial	Free Product										
	SSTL	16.9	3198.0	3700.0	21680.0	730.0	45.0	492.0	199.0	5836.0	36898.0	
	Initial > SSTL											
	Subsequent	0.74	490.0	250.0	6500.0	1.0	100.0	100.0	10.0	100.0	7551.7	
	SSTL	16.9	3198.0	3700.0	21680.0	730.0	45.0	492.0	199.0	5836.0	36898.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	55.0	0.0	0.0	0.0	55.0	

Table 3

Facility Name:	Handy Pantry #65 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address:	2367 Taylor Street Columbia, South Carolina	Crawford Project No.	7.0547

Site Specific Target Level Summary

Well ID:	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-17	Initial	1400.0	26000.0	2590.0	23000.0	1000.0	1000.0	9400.0	2000.0	20000.0	86390.0	
	SSTL	32.0	6631.0	2590.0	21680.0	1000.0	66.0	773.0	263.0	14286.0	47231.0	
	Initial > SSTL	1368.0	19369.0	0.0	1320.0	0.0	934.0	8627.0	1737.0	5714.0	39069.0	
	Subsequent	35	13	430	150	1	440	70	10.0	100	1249.0	
	SSTL	32.0	6631.0	2590.0	21680.0	1000.0	66.0	773.0	263.0	14286.0	47231.0	
	Subsequent > SSTL	3.0	0.0	0.0	0.0	0.0	374.0	0.0	0.0	0.0	377.0	
MW-18	Initial	1900.0	7200.0	830.0	8300.0	340.0	370.0	4900.0	70.0	5000.0	28710.0	
	SSTL	40.0	19326.0	3700.0	21680.0	4260.0	348.0	938.0	4989.0	54462.0	109743.0	
	Initial > SSTL	1860.0	0.0	0.0	0.0	0.0	22.0	3962.0	0.0	0.0	5844.0	
	Subsequent	1800	11000	1400	12000	49	660	3300	200.00	2000	33309.0	
	SSTL	40.0	19326.0	3700.0	21680.0	4260.0	348.0	938.0	4989.0	54462.0	109743.0	
	Subsequent > SSTL	1760.0	0.0	0.0	0.0	0.0	312.0	2362.0	0.0	0.0	4434.0	
MW-19	Initial	300.0	1800.0	480.0	12000.0	50.0	900.0	610.0	500.0	5000.0	21650.0	
	SSTL	64.9	11081.0	3700.0	21680.0	16080.0	86.0	1065.0	320.0	26814.0	80860.0	
	Initial > SSTL	246.0	0.0	0.0	0.0	0.0	814.0	0.0	180.0	0.0	1240.0	
	Subsequent	3100	25000	1100	17000	500	770	50000	5000.00	50000	150470.0	
	SSTL	64.9	11081.0	3700.0	21680.0	16080.0	86.0	1065.0	320.0	26814.0	80860.0	
	Subsequent > SSTL	3046.0	11919.0	0.0	0.0	0.0	684.0	48935.0	4680.0	23186.0	92450.0	
MW-20	Initial	412.0	2930.0	728.0	8820.0	88.7	817.0	2859.0	200.0	2000.0	19845.7	
	SSTL	83.0	2830.0	728.0	8820.0	88.7	108.0	1403.0	200.0	2000.0	16360.7	
	Initial > SSTL	329.0	0.0	0.0	0.0	0.0	709.0	1447.0	0.0	0.0	3485.0	NS January 2018 - Results from 6/27/2017
	Subsequent	390.0	10000.0	2000.0	26000.0	50.0	1500.0	2500.0	500.0	5000.0	47940.0	
	SSTL	83.0	2830.0	728.0	8820.0	88.7	108.0	1403.0	200.0	2000.0	16360.7	
	Subsequent > SSTL	307.0	7070.0	1272.0	17180.0	0.0	1392.0	1097.0	300.0	3000.0	31618.0	
MW-22	Initial	3300.0	17000.0	2900.0	20000.0	1000.0	640.0	6200.0	130.0	20000.0	71170.0	
	SSTL	90.0	17000.0	2900.0	20000.0	1000.0	112.0	1469.0	130.0	20000.0	62701.0	
	Initial > SSTL	3210.0	0.0	0.0	0.0	0.0	528.0	4731.0	0.0	0.0	8469.0	
	Subsequent	2500	18000	1500	29000	100	850	2900	1000.00	10000	65850.0	
	SSTL	90.0	17000.0	2900.0	20000.0	1000.0	112.0	1469.0	130.0	20000.0	62701.0	
	Subsequent > SSTL	2410.0	1000.0	0.0	9000.0	0.0	738.0	1431.0	870.0	0.0	15449.0	
MW-23	Initial	4200.0	16000.0	880.0	19000.0	120.0	1100.0	5900.0	900.0	5000.0	52700.0	
	SSTL	72.0	14880.0	3700.0	21680.0	33366.0	100.0	1279.0	359.0	38475.0	113913.0	
	Initial > SSTL	4128.0	1120.0	0.0	0.0	0.0	1000.0	4621.0	141.0	0.0	11010.0	
	Subsequent	1100	4700	300	8500	11	1200	2700	11	100	18622.0	
	SSTL	72.0	14880.0	3700.0	21680.0	33366.0	100.0	1279.0	359.0	38475.0	113913.0	
	Subsequent > SSTL	1028.0	0.0	0.0	0.0	0.0	1100.0	1421.0	0.0	0.0	3549.0	
MW-25	Initial	5000.0	3000.0	1900.0	23000.0	5000.0	5000.0	100000.0	10000.0	100000.0	252900.0	
	SSTL	104.0	3000.0	1900.0	23000.0	5000.0	121.0	1612.0	415.0	60494.0	95646.0	
	Initial > SSTL	4896.0	0.0	0.0	0.0	0.0	4879.0	98388.0	9585.0	39506.0	157254.0	NS June 2017 - Results from 10/19/2016
	Subsequent	10	200	270	4700	1	520	680	10	100	6491.0	
	SSTL	104.0	3000.0	1900.0	23000.0	5000.0	121.0	1612.0	415.0	60494.0	95646.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	399.0	0.0	0.0	0.0	399.0	

Facility Name:	Handy Pantry #65 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address:	2367 Taylor Street Columbia, South Carolina	Crawford Project No.	7.0547

Site Specific Target Level Summary

Well ID:	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total
MW-31	Initial	57.0	90.0	620.0	250.0	12.0	210.0	610.0	50.0	500.0	2199.0
	SSTL	51.0	90.0	620.0	250.0	12.0	210.0	610.0	50.0	500.0	2193.0
	Initial > SSTL	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
	Subsequent	8.5	1.0	8.9	1.0	1.0	130.0	130.0	10.0	100.0	388.4
	SSTL	51.0	90.0	620.0	250.0	12.0	210.0	610.0	50.0	500.0	2193.0
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-33	Initial	520.0	7200.0	1590.0	7200.0	500.0	410.0	3200.0	1000.0	10000.0	31530.0
	SSTL	63.0	7200.0	1590.0	7200.0	500.0	410.0	1136.0	1000.0	10000.0	28999.0
	Initial > SSTL	457.0	0.0	0.0	0.0	0.0	0.0	2064.0	0.0	0.0	2531.0
	Subsequent	310	4100	2100	11000	1	840	3800	10.00	100	22161.0
	SSTL	53.0	7200.0	1590.0	7200.0	500.0	410.0	1136.0	1000.0	10000.0	28999.0
	Subsequent > SSTL	257.0	0.0	600.0	3800.0	0.0	530.0	2484.0	0.0	0.0	7851.0
MW-35	Initial	4400.0	2000.0	1700.0	3500.0	300.0	580.0	5300.0	51.0	5000.0	22831.0
	SSTL	66.9	2000.0	1700.0	3500.0	300.0	542.0	1181.0	51.0	5000.0	14330.0
	Initial > SSTL	4344.0	0.0	0.0	0.0	0.0	38.0	4119.0	0.0	0.0	8501.0
	Subsequent	3600	6300	2900	8800	62	850	4100	200	2000	28612.0
	SSTL	66.9	2000.0	1700.0	3500.0	300.0	542.0	1181.0	51.0	5000.0	14330.0
	Subsequent > SSTL	3544.0	4300.0	1200.0	3100.0	0.0	308.0	2919.0	149.0	0.0	15520.0
MW-37	Initial	240.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1959.0
	SSTL	90.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1809.0
	Initial > SSTL	150.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	150.0
	Subsequent	1	1	1	1	1	5	100	10	100	220.0
	SSTL	90.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1809.0
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	56.0	56.0
MW-39	Initial	13.0	1300.0	480.0	4200.0	250.0	330.0	5000.0	500.0	5000.0	17053.0
	SSTL	13.0	1300.0	480.0	4200.0	250.0	330.0	1807.0	500.0	5000.0	13690.0
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	3393.0	0.0	0.0	3393.0
	Subsequent	0.48	220	480	2000	1	370	56	10	100	3237.5
	SSTL	13.0	1300.0	480.0	4200.0	250.0	330.0	1807.0	500.0	5000.0	13690.0
	Subsequent > SSTL	0.0	0.0	20.0	0.0	0.0	40.0	0.0	0.0	0.0	60.0
MW-40	Initial	290.0	2900.0	850.0	7100.0	590.0	530.0	10000.0	1000.0	10000.0	32970.0
	SSTL	113.0	2900.0	660.0	7100.0	590.0	530.0	1876.0	1000.0	10000.0	24669.0
	Initial > SSTL	177.0	0.0	0.0	0.0	0.0	0.0	8124.0	0.0	0.0	8301.0
	Subsequent	1.5	1	9.8	1	1	6.1	100	10	100	230.4
	SSTL	113.0	2900.0	850.0	7100.0	590.0	530.0	1876.0	1000.0	10000.0	24669.0
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MW-41	Initial	260.0	1000.0	1100.0	1000.0	1000.0	420.0	20000.0	2000.0	20000.0	46780.0
	SSTL	257.0	1000.0	1100.0	1000.0	1000.0	420.0	3234.0	2000.0	20000.0	30011.0
	Initial > SSTL	3.0	0.0	0.0	0.0	0.0	0.0	16766.0	0.0	0.0	16769.0
	Subsequent	10	330	210	680	1	110	65	10	100	1516.0
	SSTL	257.0	1000.0	1100.0	1000.0	1000.0	420.0	3234.0	2000.0	20000.0	30011.0
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 3

Facility Name:	Handy Pantry #65 / University Mart & Clouds Chevron	UST	07584 / 07777 / 12352
Address:	2367 Taylor Street Columbia, South Carolina	Crawford Project No.	7.0547

Site Specific Target Level Summary

Well ID:	Item	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphth	TAA	TAME	TBA	Total	
MW-54	Initial	5.0	5.0	5.0	5.0	5.0	5.0	100.0	10.0	100.0	240.0	NS January 2018 - Results from 10/20/2016
	SSTL	5.0	5.0	5.0	5.0	5.0	5.0	110.0	2.0	14.0	166.0	
	Initial > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0	86.0	94.0	
	Subsequent	1	1	1	1	2	5	130	10	100	251.0	
	SSTL	5.0	5.0	5.0	5.0	5.0	5.0	110.0	2.0	14.0	166.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	20.0	8.0	86.0	114.0	
MW-58	Initial	4.8	25.0	29.0	25.0	93.0	11.0	1800.0	15.0	100.0	2083.8	NS January 2018 - Results from 11/4/2015
	SSTL	4.8	25.0	29.0	25.0	51.0	11.0	279.0	15.0	100.0	539.8	
	Initial > SSTL	0.0	0.0	0.0	0.0	42.0	0.0	1521.0	0.0	0.0	0.0	
	Subsequent	1	1	1	1	1	5	100	10	100	220.0	
	SSTL	1.0	1.0	1.0	1.0	1.0	5.0	100.0	10.0	100.0	220.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MW-85	Initial	420.0	398.0	234.0	262.0	16.4	168.0	648.0	50.0	500.0	2695.4	Unable to Locate - Paved Over
	SSTL	326.0	398.0	234.0	262.0	16.4	168.0	648.0	50.0	500.0	2602.4	
	Initial > SSTL	94.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Subsequent	Unable to Locate - Paved Over										
	SSTL	326.0	398.0	234.0	262.0	16.4	168.0	648.0	50.0	500.0	2602.4	
	Subsequent > SSTL	Unable to Locate - Paved Over										
MW-SAR	Initial	9200.0	1000.0	1400.0	4400.0	160.0	810.0	1300.0	1000.0	10000.0	29270.0	
	SSTL	83.0	1000.0	1400.0	4400.0	160.0	108.0	1300.0	381.0	10000.0	18832.0	
	Initial > SSTL	9117.0	0.0	0.0	0.0	0.0	702.0	0.0	619.0	0.0	10438.0	
	Subsequent	7000	320	960	2700	19	1100	2700	49.00	100	14948.0	
	SSTL	83.0	1000.0	1400.0	4400.0	160.0	108.0	1300.0	381.0	10000.0	18832.0	
	Subsequent > SSTL	6917.0	0.0	0.0	0.0	0.0	992.0	1400.0	0.0	0.0	9309.0	
PW-1R	Initial	460.0	3400.0	320.0	9200.0	50.0	250.0	710.0	500.0	5000.0	19890.0	
	SSTL	58.0	11928.0	3700.0	21680.0	290.0	19298.0	1114.0	330.0	29344.0	87742.0	
	Initial > SSTL	402.0	0.0	0.0	0.0	0.0	0.0	0.0	170.0	0.0	572.0	
	Subsequent	370.0	4300.0	490.0	13000.0	100.0	340.0	10000.0	1000.0	10000.0	39990.0	
	SSTL	58.0	11928.0	3700.0	21680.0	290.0	19298.0	1114.0	330.0	29344.0	87742.0	
	Subsequent > SSTL	312.0	0.0	0.0	0.0	0.0	0.0	8886.0	670.0	0.0	9868.0	
DW-3	Initial	2600.0	19000.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	61020.0	
	SSTL	45.0	8470.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	47935.0	
	Initial > SSTL	2555.0	10530.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13085.0	
	Subsequent	700	960	210	410	44	68	790	10.000	100	3292.0	
	SSTL	45.0	8470.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	47935.0	
	Subsequent > SSTL	655.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	655.0	
SW-1	Initial	130.0	2.8	23.0	36.0	17.0	6.5	340.0	2.8	23.0	580.9	NS January 2018 - Results from 5/18/2016
	SSTL	5.0	2.8	23.0	36.0	17.0	6.5	240.0	2.6	23.0	365.9	
	Initial > SSTL	125.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	0.0	225.0	
	Subsequent	130	18	53	82	12	16	430	10	100	861.0	
	SSTL	5.0	2.8	23.0	36.0	17.0	6.5	240.0	2.8	23.0	365.9	
	Subsequent > SSTL	125.0	15.2	30.0	56.0	0.0	9.5	190.0	7.4	77.0	510.1	

SSTL = Site Specific Target Level
RBSL= Risk Based Screening Levels
MtBE= Methyl Tert-Butyl Ether
n/a = not applicable
0.0 - Excluded from Calculations

CRAWFORD ENVIRONMENTAL SERVICES

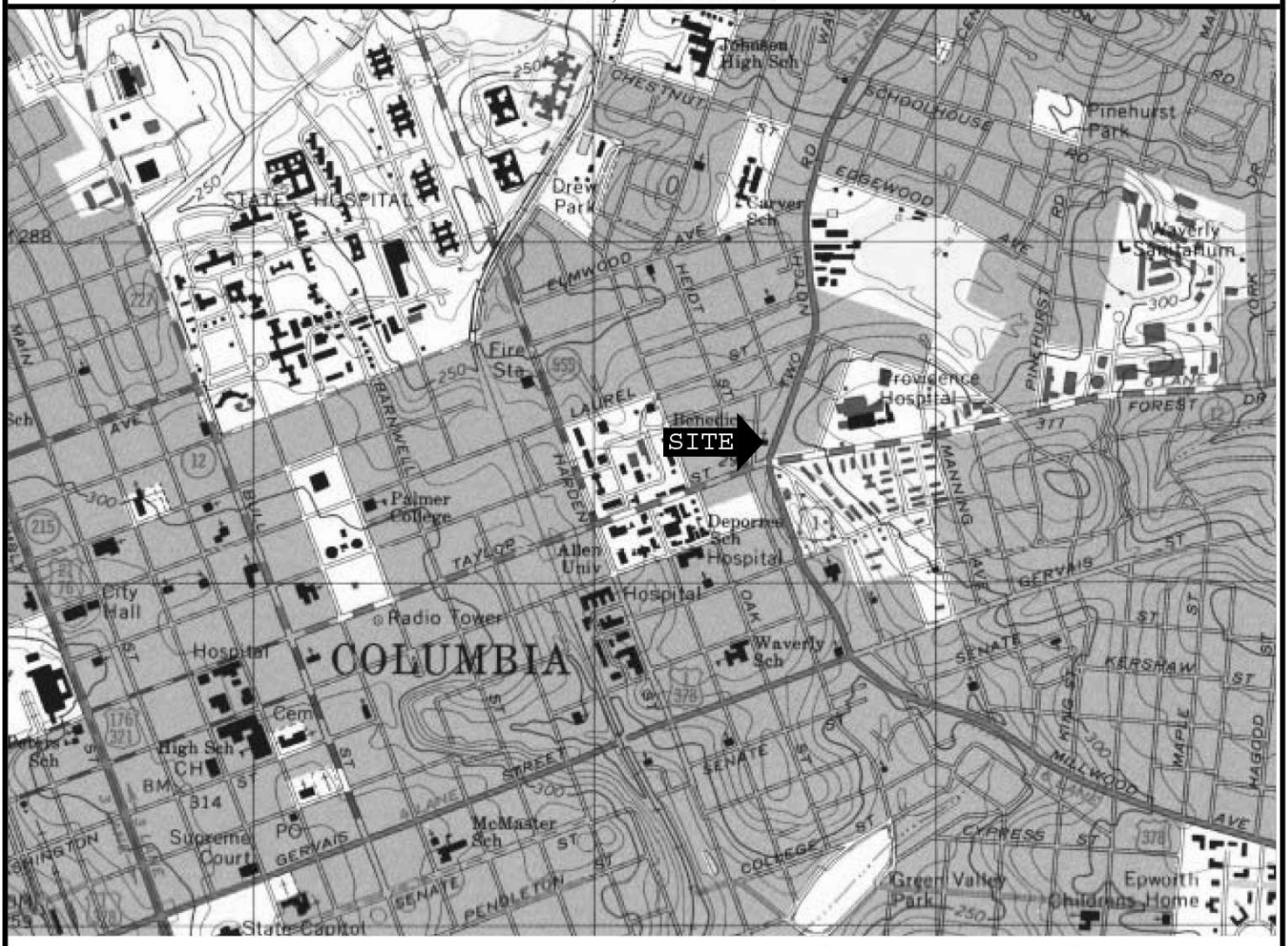
Initial>SSTL	d21858.00
Subsequent>SSTL	269375.40
COC Reduction	98.15%

Figures

Figure 1: Topographic Map
Figure 2: Site Facility Base Map
Figure 3: Chemicals of Concern Map
Figure 4: Groundwater Elevation Map

FIGURE 1

Site Location Map
Handy Pantry #65 / University Mart / Clouds Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina



CRAWFORD ENVIRONMENTAL SERVICES

1701 Shenandoah Avenue, NW
Roanoke Virginia, 24017

540-343-6256 (office) 540-343-6259 (fax)

NORTH COLUMBIA, SOUTH CAROLINA

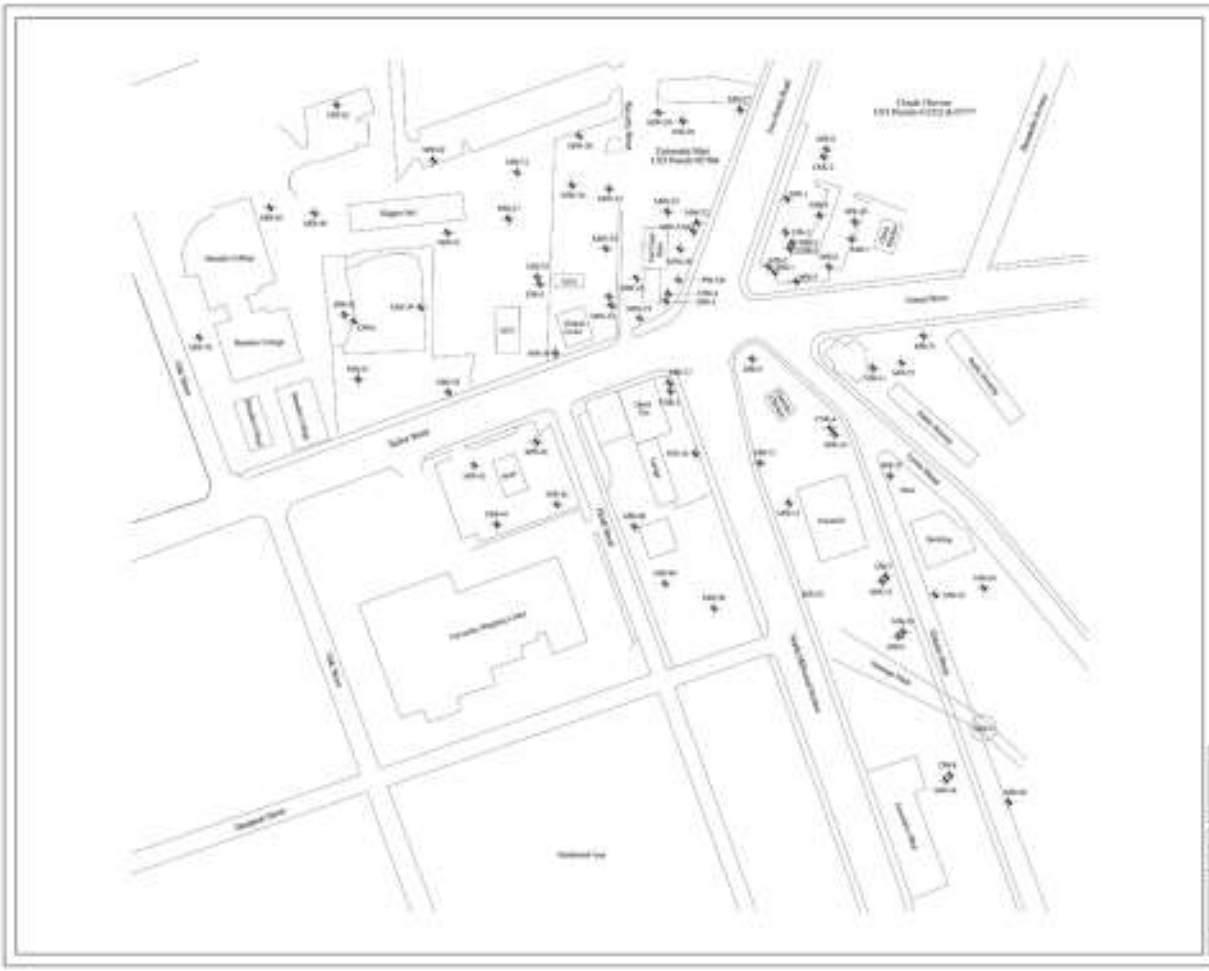
Source: U.S.G.S. Topographic Map of the Columbia North Quadrangle, Virginia, 7.5 Minute Series (1977, revised 1988)
Scale: 1:24,000 Contour Interval: 20 Feet
Vertical Datum: National Geodetic Vertical Datum 1929
Horizontal Datum: North American Datum1927

Project: January 2018 CASE Report

Client: SCDHEC

CES Job #: 7.0547

Latitude: 034°00'42.72"N
Longitude: 081°01'00.13"W



Legend

Monitoring Well (MW) Location

1 inch equals 150 feet

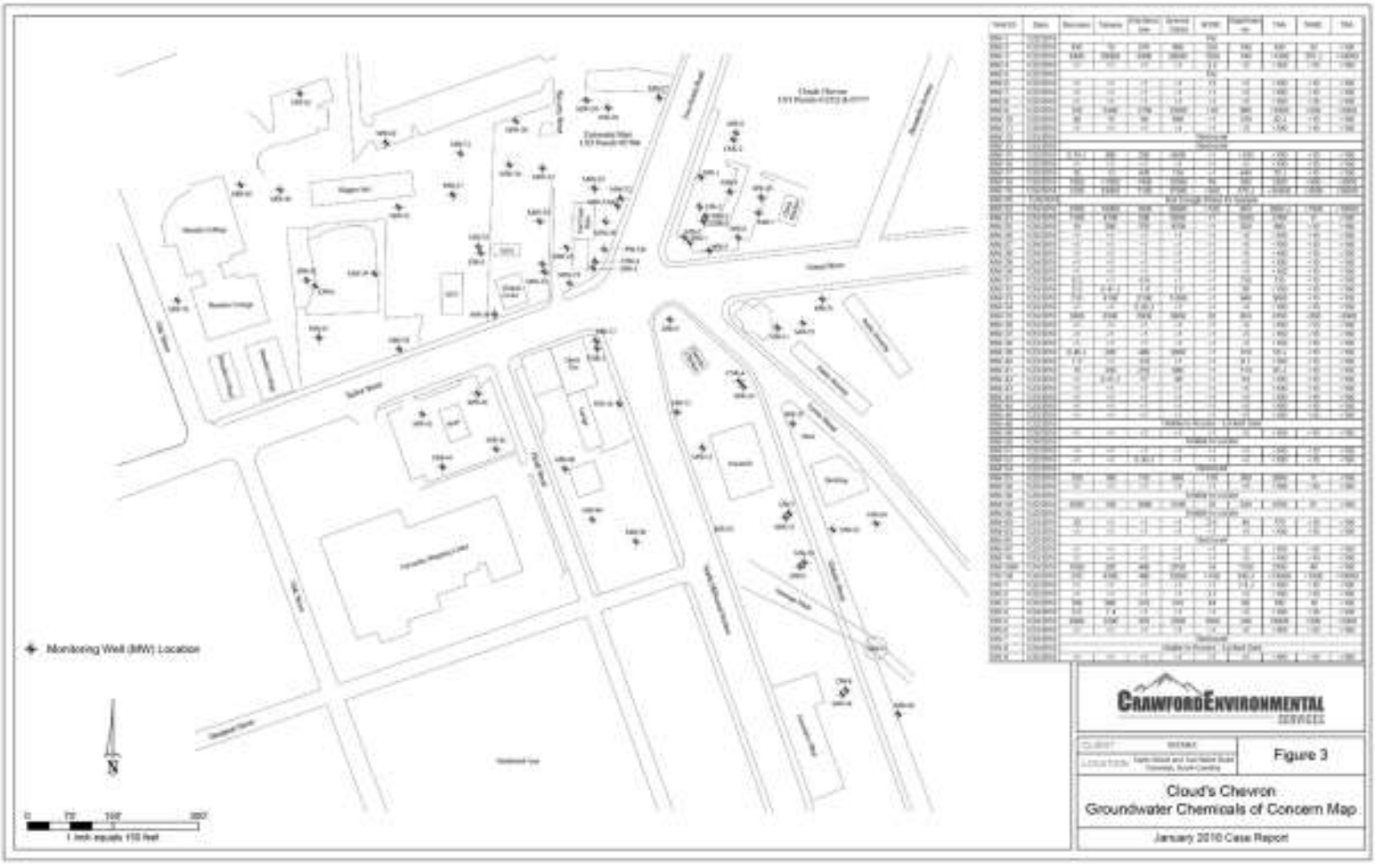
CRAWFORD ENVIRONMENTAL SERVICES

CLIENT:	[illegible]
LOCATION:	[illegible]

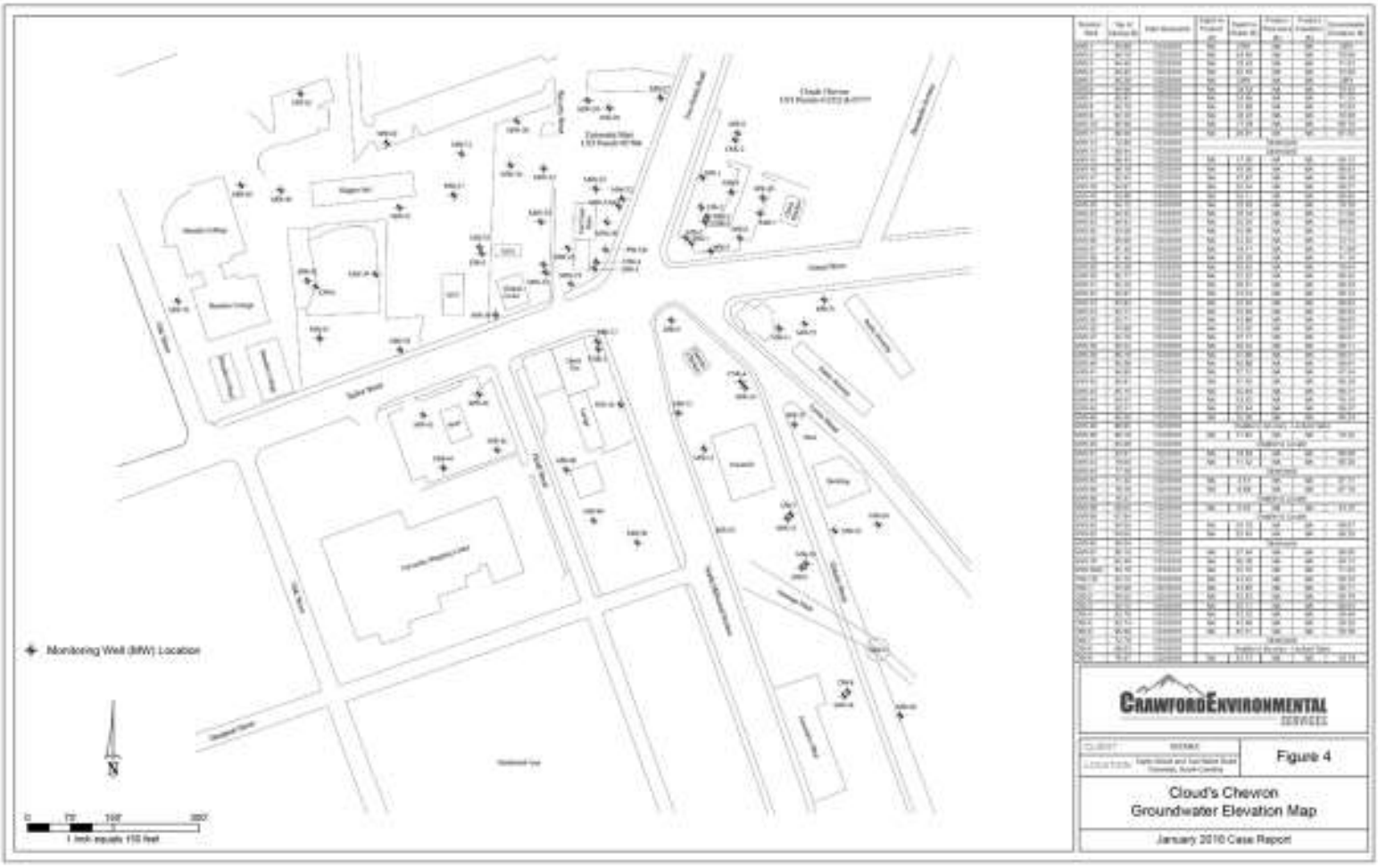
Figure 2

Cloud's Chevron
Site Facility Base Map

January 2010 Case Report



MW-1	6/30/2004									
MW-2	6/30/2004	640	70	220	860	1100	540	630	30	1100
MW-3	6/30/2004	5400	39000	5400	39000	1100	540	4300	910	14000
MW-4	6/30/2004	<1	<1	<1	<1	2.2	<1	<1	<1	<1
MW-5	6/30/2004					Dry				
MW-6	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-7	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-8	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-9	6/30/2004	310	5400	2700	13400	110	980	1400	1200	3300
MW-10	6/30/2004	80	10	50	1000	<1	270	210	<1	110
MW-11	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-12	6/30/2004					Destroyed				
MW-13	6/30/2004					Destroyed				
MW-14	6/30/2004	0.75J	600	120	1400	<1	1100	1100	<1	150
MW-15	6/30/2004	1100	1100	1100	1100	<1	1100	1100	<1	1100
MW-16	6/30/2004	80	20	40	1100	<1	440	1100	<1	1100
MW-17	6/30/2004	1100	1100	1100	1100	<1	440	1100	<1	1100
MW-18	6/30/2004	1100	1100	1100	1100	<1	440	1100	<1	1100
MW-19	6/30/2004	1100	1100	1100	1100	<1	440	1100	<1	1100
MW-20	6/30/2004					Not Enough Water to Sample				
MW-21	6/30/2004	1100	1100	1100	1100	<1	440	1100	<1	1100
MW-22	6/30/2004	1100	1100	1100	1100	<1	440	1100	<1	1100
MW-23	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-24	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-25	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-26	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-27	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-28	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-29	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-30	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-31	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-32	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-33	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-34	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-35	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-36	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-37	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-38	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-39	6/30/2004	<1	<1	<1	<1	<1	<1	<1	<1	<1
MW-40	6/30/2004	0.46J	1	0.5J	1.5	<1	1.1	1.6J	<1	0.5J
MW-41	6/30/2004	1.1	0.5J	1.1	1.6	<1	1.1	1.6J	<1	0.5J
MW-42	6/30/2004	1.1	0.5J	1.1	1.6	<1	1.1	1.6J	<1	0.5J
MW-43	6/30/2004	1.1	0.5J	1.1	1.6	<1	1.1	1.6J	<1	0.5J



CRAWFORD ENVIRONMENTAL SERVICES

Figure 4

Cloud's Chevron
Groundwater Elevation Map

January 2010 Case Report

Appendix A

Groundwater Laboratory Analytical Report

&

Chain-of-Custody Documentation

ACCESS ANALYTICAL, INC.

ANALYTICAL REPORT

CLIENT

Crawford Environmental Services
15 Church Ave, SW
Roanoke VA 24011

ATTENTION
Dan Fisher

PROJECT ID
Clouds Exxon

LABORATORY REPORT NUMBER
1801N71

DATE
February 05, 2018

Primary Data Review By

Chris Pafford
Project Manager, AES

Secondary Data Review By

Ashley Amick
Project Manager, Access Analytical
aamick@axs-inc.com

PLEASE NOTE:

- **Unless otherwise noted, all analysis on this report performed at Analytical Environmental Services Inc. (AES Inc), 3080 Presidential Drive, Atlanta, GA 30340.**
- **AES is SCDHEC certified laboratory # 98016, NCDENR certified lab # 562, GA certified lab # FL-E87582, NELAP certified laboratory # E87582**
- **AIHA-LAP,LLC Laboratory ID:100671 for Industrial Hygiene samples (Organics, Metals, PCM Asbestos, Gravimetric), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) Direct Examination.**
- Local support services for this project are provided by Access Analytical, Inc. Access Analytical is a representative of AES serving client in the SC/NC/GA areas. All questions regarding this report should be directed to your local Access Analytical representative at 803.781.4243 or toll fee at 883.315.4243

Access Lab Report #: _____
Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

Access Analytical, Inc.
15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.aas-inc.com

Chain of Custody Record

Clerk: Crawford Enviro
Attn: Dan Fichen
Address: 1701 Shenandoah Ave
City: Roanoke State: VA Zip Code: 24017
Phone: 540 343-6256 Fax: 540-343-6255
Email: DFichen@crawfordenvironmental.com
Project ID: Clouds Exxon
Sampled By: Billy Ewing

Preservatives (see codes): 1
Bottle Types (see codes): 6

REQUESTED LAB ANALYSIS: BTEX/MTBE/GRO/DRO

Lab ID	Sample Name	Date Collected	Time Collected	G=Grab C=Comp	# Containers per Test (1)	# Containers per Test (2)	# Containers per Test (3)	Total # Containers	# Containers per Test	Notes / Comments
	mw 2	1-22-18	1320	G	6	6	UST	3	3	
	DW 1		1350							
	pw 2		1430							
	mw 3		1440							
	mw 26		1450							
	mw 8		1500							
	mw 7		1510							
	mw 4		1520							
	mw 16		1315							
	mw 17	↓	1305	↓	↓	↓	↓	↓	↓	

Preservation Codes / Bottle Types:

*Preservative Codes:
0 = None, 1 = HCl, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAc, 8 = H_3PO_4, 9 = cooled to ≤6°C, 10 = cooled to ≤10°C, 11 = Ammi Cl, 12 = Ascorbic Acid / HCl, 13 = EDA

*Matrix Codes:
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section) NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:			Project Location		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice
Standard	X	Rush*	SC	X	William Ewing		1/26/18	1100	X Y N N/A
*Date Required			NC				1/26/18	1700	X Y N N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.			Other (Specify)			Linda Kolick (FEDEX)	1/30/18	10:20	Y N N/A
									Y N N/A

Chain of Custody Page 1 of 7

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: 4.0° (C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.

15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

1801N71

Client:	Crawford Enviro	Preservatives (see codes):	1
Attn:	Dan Fisher	Bottle Types (see codes):	G
Address:	1701 Shenandoah Ave		
City:	Roanoke	State: VA	Zip Code: 24017
Phone:	540 343 6256	Fax:	540 343-6259
Email:	DFisher@crawfordenvironmental.com		
Project ID:	Clouds Ext on		
Sampled By:	Billy Ewing		

REQUESTED LAB ANALYSIS: BTEX/N/m/Dual Ext

Lab ID:	Sample Name:	Date Collected:	Time Collected:	Certain C-Comp	Matrix (see codes)	Program Area (see codes)	Total # Containers	# Containers per Test	BTEX/N/m/Dual Ext	Notes / Comments
	MW10	1-22-18	1220	G	GW	UST	3	# Containers per Test	3	
	MW9		1255					# Containers per Test		
	MW56		1120					# Containers per Test		
	DW9		1100					# Containers per Test		
	MW59		1110					# Containers per Test		
	MW55		1200					# Containers per Test		
	MW53		1210					# Containers per Test		
	MW15		1240					# Containers per Test		
	DUP1		1245					# Containers per Test		
	MW6		1530					# Containers per Test		

Preservation Codes / Bottle Types

*Preservative Codes:
0 = None, 1 = HCL, 2 = HNO_3^{2}, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4, 9 = cooled to 6°C, 10 = cooled to 10°C, 11 = Amm Cl, 12 = Ascorbic Acid / HCL, 13 = EDA

*Matrix Codes
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section) NA = for non regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:		Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice:
Standard	X	SC	X	William Ewing	[signature]	1/26/18	1100	X Y N N/A
*Date Required		NC		[signature]	FEDEX	1/26/18	1700	X Y N N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.		Other (Specify):		FEDEX	[signature] (FEDEX)	1/30/18	10:20	✓ Y N N/A
								Y N N/A

Chain of Custody Page 2 of 7

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: 1.4 / 3.4 °C

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.

15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

1801N71

Client:	Crawford Enviro	Preservatives (see codes):	1
Attn:	Dan Fisher	Bottle Types (see codes):	G
Address:	1701 Shenandoah AVE		
City:	Roanoke	State: VA	Zip Code: 24017
Phone:	540 343-6256	Fax:	540-343-6259
Email:	DFisher@crawfordenvironmental.com		
Project ID:	Clouds Exxon		
Sampled By:	Billy Ewing		

REQUESTED LAB ANALYSIS: BTEX/N/m/pcs/oxy

Preservation Codes / Bottle Types:

*Preservative Codes:
0 = None, 1 = HCL, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4, 9 = cooled to 56°C, 10 = cooled to 500°C, 11 = Amm.Cl, 12 = Ascorbic Acid / HCL, 13 = EDA

*Matrix Codes:
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section) NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Lab ID	Sample Name	Date Collected	Time Collected	G-Grab C-Comp	Matrix (see codes)	Program Area (see codes)	Total # Containers	# Containers per Test	BTEX/N/m/pcs/oxy	Notes / Comments
	mw33	1-23-18	1225	G	GW	UST	3	3	3	
	DUP 4		1230							
	mw46		800							
	mw36		1245							
	mw41		940							
	DUP 3		945							
	mw40		930							
	mw37		1200							
	mw31		1145							
	mw62		1130							

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:		Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice:
Standard	X	SC	X	William Ewing	[signature]	1/26/18	1100	X Y N N/A
*Date Required		NC		[signature]	FEDEX	1/26/18	1700	X Y N N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.		Other (Specify):		FEDEX	[signature] (FEDEX)	1/30/18	10:20	✓ Y N N/A
								Y N N/A

Chain of Custody Page 3 of 7

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: 3.4° (C) 6.4°

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.

15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

1801N71

Client:	Crawford Environ	Preservatives (see codes):	1
Attn:	Dan Fisher	Bottle Types (see codes):	6
Address:	1701 Shenandoah AVE		
City:	Roanoke	State: VA	Zip Code: 24017
Phone:	540-343-6256	Fax:	540-343 6259
Email:	DFisher@crawfordenvironmental.com		
Project ID:	Clouds Exxon		
Sampled By:	Dilly Ewing		

REQUESTED LAB ANALYSIS: BTEX/N/m/Dca/Oxy

Preservation Codes / Bottle Types:

*Preservative Codes:
0 = None, 1 = HCL, 2 = HNO_3*, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4, 9 = cooled to 56°C, 10 = cooled to 100°C, 11 = Amm.Cl, 12 = Ascorbic Acid / HCL, 13 = EDA

*Matrix Codes:
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section) NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Lab ID:	Sample Name	Date Collected	Time Collected	G=Grab C=Comp	Matrix (see codes)	Program Area (see codes)	Total # Containers	REQUESTED LAB ANALYSIS	Notes / Comments
	mw 63	1-23-18	955	G	GW	UST	3	3	
	mw 70		1045						
	mw 39		1030						
	mw 42		955						
	Dw 6		910						
	mw 67		900						
	mw 38		840						
	mw 43		830						
	mw 44		820						
	mw 45		810						

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:		Project Location		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice:
Standard	X	SC	X	William Ewing	[signature]	1/26/18	1100	X Y N N/A
*Date Required		NC		[signature]	FEDEX	1/26/18	1700	X Y N N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.		Other (Specify)		FEDEX	Kristin Roberson (FEDEX)	1/30/18	10:20	✓ Y N N/A
								Y N N/A

Chain of Custody Page 4 of ____

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: 1.4* 3.4° (C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.

15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

1801N74

Client:	Crow Ford Enviro	Preservatives (see codes):	1
Attn:	Dan Fisher	Bottle Types (see codes):	G
Address:	1701 Shenandoah AVE		
City:	Roanoke	State: VA	Zip Code: 24017
Phone:	540 343 6256	Fax:	540 343 6259
Email:	Dfish@crowfordenvironmental.com		
Project ID:	Clouds Exxon		
Sampled By:	Billy Ewing		

REQUESTED LAB ANALYSIS: BTEX/N/m/DWA/DXY

Preservation Codes / Bottle Types:

*Preservative Codes:
0 = None, 1 = HCL, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4, 9 = cooled to 56°C, 10 = cooled to 510°C, 11 = Amm Cl, 12 = Ascorbic Acid / HCL, 13 = EDA

*Matrix Codes:
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section) NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Lab ID	Sample Name	Date Collected	Time Collected	Cl-Comp	Matrix (see codes)	Program Area (see codes)	Total # Containers	REQUESTED LAB ANALYSIS	Notes / Comments
	FB-1	1-22-18	1545	G	GW	UST	3	3	
	FB-2	1-23-18	1300	↓	↓	↓	↓	↓	
	FB-3	1-24-18	800	↓	↓	↓	↓	↓	
	MW 49	↓	1440	↓	↓	↓	↓	↓	
	PW1R	↓	1230	↓	↓	↓	↓	↓	
	MW 19	↓	840	↓	↓	↓	↓	↓	
	MW 11	↓	1420	↓	↓	↓	↓	↓	
	MW 51	↓	1210	↓	↓	↓	↓	↓	
	MW 34	↓	810	↓	↓	↓	↓	↓	
	MW 35	↓	750	↓	↓	↓	↓	↓	

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:		Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice:
Standard	X	SC	X	William Ewing	[signature]	1/26/18	1100	X Y N N/A
*Date Required		NC		[signature]	Fedex	1/26/18	1700	X Y N N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.		Other (Specify):		Fedex	Kristen Roduck (FEDEX)	1/30/18	10:20	✓ Y N N/A
								Y N N/A

Chain of Custody Page 5 of 7

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: 1.4° 3.4° (C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.

15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

1801NH

Client:	CRAWFORD ENVIRO	Preservatives (see codes):	1
Attn:	DAN Fisher	Bottle Types (see codes):	6
Address:	1701 Shenandoah Ave		
City:	Roanoke	State: VA	Zip Code: 24017
Phone:	540-343-6256	Fax:	540-343-6259
Email:	DFisher@crawfordenvironmental.com		
Project ID:	Clouds Exxon		
Sampled By:	Billy E		

REQUESTED LAB ANALYSIS: BTEX/MM/DUP/DW

Preservation Codes / Bottle Types

*Preservative Codes:
0 = None, 1 = HCL, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAc, 8 = H_3PO_4, 9 = cooled to 68°C, 10 = cooled to 610°C, 11 = AmmCl, 12 = Ascorbic Acid / HCL, 13 = EDA

*Matrix Codes:
DW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section) NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, groundwaters and waste samples)

*Container Type: G = Glass, P = Plastic

Lab ID:	Sample Name:	Date Collected:	Time Collected:	G-Grab Cntrlmp	Matrix (see codes)	Program Area (see codes)	Totals Containers	REQUESTED LAB ANALYSIS	Notes / Comments
	DW 5	1-26-18	790	G	GW	UST	3	3	
	MW 18		830						
	MW 23		850						
	DUP 5		855						
	MW 30		905						
	MW 32		915						
	MW 29		925						
	MW 28		935						
	MW 27		945						
	MW 25		955						

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:		Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice:
Standard	X	SC	X	Billy Ewing	[signature]	1/26/18	1100	X Y N N/A
*Date Required		NC		[signature]	FEDEX	1/26/18	1700	X Y N N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.		Other (Specify):		FEDEX	[signature] (FEDEX)	1/30/18	1020	✓ Y N N/A
								Y N N/A

Chain of Custody Page 6 of 7

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: 1.4K 3.4° (C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.

15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

180 IN FT

Client:	CRAWFORD ENVIRO	Preservatives (see codes):	1
Attn:	DAN Fisher	Bottle Types (see codes):	6
Address:	1701 Shenandoah Ave		
City:	Roan oke	State: VA	Zip Code: 24017
Phone:	540-343-6256	Fax:	540 343-6259
Email:	DFisher@crawfordenvironmental.com		
Project ID:	Clouds Exton		
Sampled By:	Billy Ewin		

REQUESTED LAB ANALYSIS: BTEX/N/M/OA/OS

Preservation Codes / Bottle Types:

*Preservative Codes:
0 = None, 1 = HCL, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4, 9 = cooled to 48°C, 10 = cooled to 610°C, 11 = Amm Cl, 12 = Ascorbic Acid / HCL, 13 = EDA

*Matrix Codes:
DW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section) NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, groundwaters and waste samples)

*Container Type: G = Glass, P = Plastic

Lab ID:	Sample Name:	Date Collected:	Time Collected:	G-Grab Or Comp	Matrix (see codes)	Program Area (see codes)	Locate Containers	# Containers per Test	BTEX/N/M/OA/OS	Notes / Comments
	MW2R	1-24-18	1005	G	GW	UST	3		3	
	MW 5 AR		1030							
	DW 4		1110							
	DW 3		1150							
	Dup 6		1155							

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:		Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice:
Standard	X	SC	X	Billy Ewin	[signature]	1/26/18	1100	X Y N N/A
*Date Required		NC		[signature]	FEDEX	1/26/18	1700	X Y N N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.		Other	(specify):	FEDEX	[signature] (FEDEX)	1/31/18	10:20	✓ Y N N/A
								Y N N/A

Chain of Custody Page 7 **of** 7

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: 1.6 / 3.6 ° (C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Analytical Environmental Services, Inc

Date: 6-Feb-18

Client: Crawford Environmental Services
Project: Clouds Exxon
Lab ID: 1801N71

Case Narrative

Sample Receiving Nonconformance:

Sample MW 51 has a collection time of "12:10" listed on the Chain of Custody (COC), however "14:10" was labeled on the vials. Samples were identified according to the COC.

For sample MW 15, one of the three vials was received broken. Laboratory proceeded with analysis using the remaining vials.

Trip Blanks were provided but not listed on the Chain of Custody.

Volatile Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1801N71-004, -012, -045, -046, -050, -051, -052 and -061 required dilution during preparation and/or analysis resulting in elevated reporting limits.

Toluene value for the QC sample 1801N71-004AMS/MSD is "E" qualified indicating estimated value over linear calibration range due to the level of target analyte present in the unspiked sample.

Toluene value for the QC sample 1801N71-061AMS/MSD is "E" qualified indicating estimated value over linear calibration range due to the level of target analyte present in the unspiked sample.

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 2
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 1:30:00 PM
Lab ID:	1801N71-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	13		0.37	1.0	ug/L	255082	1	01/31/2018 22:21	NP
Benzene	450		3.7	10	ug/L	255082	10	01/31/2018 22:45	NP
Ethylbenzene	270		2.6	10	ug/L	255082	10	01/31/2018 22:45	NP
Methyl tert-butyl ether	520		4.5	10	ug/L	255082	10	01/31/2018 22:45	NP
Naphthalene	190		9.3	50	ug/L	255082	10	01/31/2018 22:45	NP
Toluene	10		0.39	1.0	ug/L	255082	1	01/31/2018 22:21	NP
Xylenes, Total	960		7.7	10	ug/L	255082	10	01/31/2018 22:45	NP
Surr: 4-Bromofluorobenzene	99.9		0	70-130	%REC	255082	10	01/31/2018 22:45	NP
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	255082	1	01/31/2018 22:21	NP
Surr: Dibromofluoromethane	98.7		0	70-130	%REC	255082	1	01/31/2018 22:21	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	255082	10	01/31/2018 22:45	NP
Surr: Toluene-d8	104		0	70-130	%REC	255082	10	01/31/2018 22:45	NP
Surr: Toluene-d8	110		0	70-130	%REC	255082	1	01/31/2018 22:21	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	01/31/2018 22:21	NP
Ethanol	BRL		43	100	ug/L	255082	1	01/31/2018 22:21	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	01/31/2018 22:21	NP
Isopropyl ether	48		3.8	10	ug/L	255082	1	01/31/2018 22:21	NP
tert-Amyl alcohol	430		28	100	ug/L	255082	1	01/31/2018 22:21	NP
tert-Amyl methyl ether	23		3.4	10	ug/L	255082	1	01/31/2018 22:21	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	01/31/2018 22:21	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	01/31/2018 22:21	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 1
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 1:50:00 PM
Lab ID:	1801N71-002	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	01/31/2018 13:22	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	01/31/2018 13:22	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	01/31/2018 13:22	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	01/31/2018 13:22	NP
Naphthalene	1.4	J	0.93	5.0	ug/L	255085	1	01/31/2018 13:22	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	01/31/2018 13:22	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	01/31/2018 13:22	NP
Surr: 4-Bromofluorobenzene	88.3		0	70-130	%REC	255085	1	01/31/2018 13:22	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	255085	1	01/31/2018 13:22	NP
Surr: Toluene-d8	102		0	70-130	%REC	255085	1	01/31/2018 13:22	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	01/31/2018 13:22	NP
Ethanol	BRL		43	100	ug/L	255085	1	01/31/2018 13:22	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	01/31/2018 13:22	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	01/31/2018 13:22	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	01/31/2018 13:22	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	01/31/2018 13:22	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	01/31/2018 13:22	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	01/31/2018 13:22	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 2
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 2:30:00 PM
Lab ID:	1801N71-003	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	01/31/2018 15:19	NP
Benzene	BRL		0.37	1.0	ug/L	255082	1	01/31/2018 15:19	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255082	1	01/31/2018 15:19	NP
Methyl tert-butyl ether	3.7		0.45	1.0	ug/L	255082	1	01/31/2018 15:19	NP
Naphthalene	BRL		0.93	5.0	ug/L	255082	1	01/31/2018 15:19	NP
Toluene	BRL		0.39	1.0	ug/L	255082	1	01/31/2018 15:19	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255082	1	01/31/2018 15:19	NP
Surr: 4-Bromofluorobenzene	94.6		0	70-130	%REC	255082	1	01/31/2018 15:19	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	255082	1	01/31/2018 15:19	NP
Surr: Toluene-d8	108		0	70-130	%REC	255082	1	01/31/2018 15:19	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	01/31/2018 15:19	NP
Ethanol	BRL		43	100	ug/L	255082	1	01/31/2018 15:19	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	01/31/2018 15:19	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	01/31/2018 15:19	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255082	1	01/31/2018 15:19	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	01/31/2018 15:19	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	01/31/2018 15:19	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	01/31/2018 15:19	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 3
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 2:40:00 PM
Lab ID:	1801N71-004	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		37	100	ug/L	255082	100	01/31/2018 11:48	NP
Benzene	8400		37	100	ug/L	255082	100	01/31/2018 11:48	NP
Ethylbenzene	2400		26	100	ug/L	255082	100	01/31/2018 11:48	NP
Methyl tert-butyl ether	1500		45	100	ug/L	255082	100	01/31/2018 11:48	NP
Naphthalene	740		93	500	ug/L	255082	100	01/31/2018 11:48	NP
Toluene	29000		200	500	ug/L	255082	500	02/02/2018 02:45	NP
Xylenes, Total	29000		77	100	ug/L	255082	100	01/31/2018 11:48	NP
Surr: 4-Bromofluorobenzene	98.9		0	70-130	%REC	255082	500	02/02/2018 02:45	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	255082	100	01/31/2018 11:48	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	255082	500	02/02/2018 02:45	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	255082	100	01/31/2018 11:48	NP
Surr: Toluene-d8	104		0	70-130	%REC	255082	500	02/02/2018 02:45	NP
Surr: Toluene-d8	105		0	70-130	%REC	255082	100	01/31/2018 11:48	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		2400	10000	ug/L	255082	100	01/31/2018 11:48	NP
Ethanol	BRL		4300	10000	ug/L	255082	100	01/31/2018 11:48	NP
Ethyl tert-butyl ether	BRL		360	10000	ug/L	255082	100	01/31/2018 11:48	NP
Isopropyl ether	BRL		380	1000	ug/L	255082	100	01/31/2018 11:48	NP
tert-Amyl alcohol	BRL		2800	10000	ug/L	255082	100	01/31/2018 11:48	NP
tert-Amyl methyl ether	370	J	340	1000	ug/L	255082	100	01/31/2018 11:48	NP
tert-Butyl Alcohol	BRL		1300	10000	ug/L	255082	100	01/31/2018 11:48	NP
tert-Butyl formate	BRL		1300	10000	ug/L	255082	100	01/31/2018 11:48	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 26
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 2:50:00 PM
Lab ID:	1801N71-005	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	01/31/2018 23:08	NP
Benzene	BRL		0.37	1.0	ug/L	255082	1	01/31/2018 23:08	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255082	1	01/31/2018 23:08	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	01/31/2018 23:08	NP
Naphthalene	BRL		0.93	5.0	ug/L	255082	1	01/31/2018 23:08	NP
Toluene	BRL		0.39	1.0	ug/L	255082	1	01/31/2018 23:08	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255082	1	01/31/2018 23:08	NP
Surr: 4-Bromofluorobenzene	92.8		0	70-130	%REC	255082	1	01/31/2018 23:08	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	255082	1	01/31/2018 23:08	NP
Surr: Toluene-d8	104		0	70-130	%REC	255082	1	01/31/2018 23:08	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	01/31/2018 23:08	NP
Ethanol	BRL		43	100	ug/L	255082	1	01/31/2018 23:08	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	01/31/2018 23:08	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	01/31/2018 23:08	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255082	1	01/31/2018 23:08	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	01/31/2018 23:08	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	01/31/2018 23:08	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	01/31/2018 23:08	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 8
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 3:00:00 PM
Lab ID:	1801N71-006	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	01/31/2018 23:32	NP
Benzene	BRL		0.37	1.0	ug/L	255082	1	01/31/2018 23:32	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255082	1	01/31/2018 23:32	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	01/31/2018 23:32	NP
Naphthalene	BRL		0.93	5.0	ug/L	255082	1	01/31/2018 23:32	NP
Toluene	BRL		0.39	1.0	ug/L	255082	1	01/31/2018 23:32	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255082	1	01/31/2018 23:32	NP
Surr: 4-Bromofluorobenzene	99.5		0	70-130	%REC	255082	1	01/31/2018 23:32	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	255082	1	01/31/2018 23:32	NP
Surr: Toluene-d8	106		0	70-130	%REC	255082	1	01/31/2018 23:32	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	01/31/2018 23:32	NP
Ethanol	BRL		43	100	ug/L	255082	1	01/31/2018 23:32	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	01/31/2018 23:32	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	01/31/2018 23:32	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255082	1	01/31/2018 23:32	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	01/31/2018 23:32	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	01/31/2018 23:32	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	01/31/2018 23:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 7
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 3:10:00 PM
Lab ID:	1801N71-007	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	01/31/2018 23:55	NP
Benzene	BRL		0.37	1.0	ug/L	255082	1	01/31/2018 23:55	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255082	1	01/31/2018 23:55	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	01/31/2018 23:55	NP
Naphthalene	BRL		0.93	5.0	ug/L	255082	1	01/31/2018 23:55	NP
Toluene	BRL		0.39	1.0	ug/L	255082	1	01/31/2018 23:55	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255082	1	01/31/2018 23:55	NP
Surr: 4-Bromofluorobenzene	94		0	70-130	%REC	255082	1	01/31/2018 23:55	NP
Surr: Dibromofluoromethane	109		0	70-130	%REC	255082	1	01/31/2018 23:55	NP
Surr: Toluene-d8	105		0	70-130	%REC	255082	1	01/31/2018 23:55	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	01/31/2018 23:55	NP
Ethanol	BRL		43	100	ug/L	255082	1	01/31/2018 23:55	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	01/31/2018 23:55	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	01/31/2018 23:55	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255082	1	01/31/2018 23:55	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	01/31/2018 23:55	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	01/31/2018 23:55	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	01/31/2018 23:55	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 4
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 3:20:00 PM
Lab ID:	1801N71-008	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 00:19	NP
Benzene	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 00:19	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255082	1	02/01/2018 00:19	NP
Methyl tert-butyl ether	2.2		0.45	1.0	ug/L	255082	1	02/01/2018 00:19	NP
Naphthalene	BRL		0.93	5.0	ug/L	255082	1	02/01/2018 00:19	NP
Toluene	BRL		0.39	1.0	ug/L	255082	1	02/01/2018 00:19	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255082	1	02/01/2018 00:19	NP
Surr: 4-Bromofluorobenzene	93.9		0	70-130	%REC	255082	1	02/01/2018 00:19	NP
Surr: Dibromofluoromethane	112		0	70-130	%REC	255082	1	02/01/2018 00:19	NP
Surr: Toluene-d8	107		0	70-130	%REC	255082	1	02/01/2018 00:19	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/01/2018 00:19	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/01/2018 00:19	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/01/2018 00:19	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	02/01/2018 00:19	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255082	1	02/01/2018 00:19	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	02/01/2018 00:19	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/01/2018 00:19	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/01/2018 00:19	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 16
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 1:15:00 PM
Lab ID:	1801N71-009	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 00:42	NP
Benzene	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 00:42	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255082	1	02/01/2018 00:42	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	02/01/2018 00:42	NP
Naphthalene	BRL		0.93	5.0	ug/L	255082	1	02/01/2018 00:42	NP
Toluene	BRL		0.39	1.0	ug/L	255082	1	02/01/2018 00:42	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255082	1	02/01/2018 00:42	NP
Surr: 4-Bromofluorobenzene	97.6		0	70-130	%REC	255082	1	02/01/2018 00:42	NP
Surr: Dibromofluoromethane	113		0	70-130	%REC	255082	1	02/01/2018 00:42	NP
Surr: Toluene-d8	107		0	70-130	%REC	255082	1	02/01/2018 00:42	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/01/2018 00:42	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/01/2018 00:42	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/01/2018 00:42	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	02/01/2018 00:42	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255082	1	02/01/2018 00:42	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	02/01/2018 00:42	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/01/2018 00:42	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/01/2018 00:42	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 17
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 1:05:00 PM
Lab ID:	1801N71-010	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 01:05	NP
Benzene	35		0.37	1.0	ug/L	255082	1	02/01/2018 01:05	NP
Ethylbenzene	430		2.6	10	ug/L	255082	10	02/01/2018 01:28	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	02/01/2018 01:05	NP
Naphthalene	440		9.3	50	ug/L	255082	10	02/01/2018 01:28	NP
Toluene	13		0.39	1.0	ug/L	255082	1	02/01/2018 01:05	NP
Xylenes, Total	150		0.77	1.0	ug/L	255082	1	02/01/2018 01:05	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	255082	10	02/01/2018 01:28	NP
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	255082	1	02/01/2018 01:05	NP
Surr: Dibromofluoromethane	98.7		0	70-130	%REC	255082	1	02/01/2018 01:05	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	255082	10	02/01/2018 01:28	NP
Surr: Toluene-d8	104		0	70-130	%REC	255082	10	02/01/2018 01:28	NP
Surr: Toluene-d8	111		0	70-130	%REC	255082	1	02/01/2018 01:05	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/01/2018 01:05	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/01/2018 01:05	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/01/2018 01:05	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	02/01/2018 01:05	NP
tert-Amyl alcohol	70	J	28	100	ug/L	255082	1	02/01/2018 01:05	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	02/01/2018 01:05	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/01/2018 01:05	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/01/2018 01:05	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 10
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 12:20:00 PM
Lab ID:	1801N71-011	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 01:52	NP
Benzene	40		0.37	1.0	ug/L	255082	1	02/01/2018 01:52	NP
Ethylbenzene	94		0.26	1.0	ug/L	255082	1	02/01/2018 01:52	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	02/01/2018 01:52	NP
Naphthalene	120		9.3	50	ug/L	255082	10	02/02/2018 03:31	NP
Toluene	15		0.39	1.0	ug/L	255082	1	02/01/2018 01:52	NP
Xylenes, Total	690		7.7	10	ug/L	255082	10	02/02/2018 03:31	NP
Surr: 4-Bromofluorobenzene	99.4		0	70-130	%REC	255082	10	02/02/2018 03:31	NP
Surr: 4-Bromofluorobenzene	107		0	70-130	%REC	255082	1	02/01/2018 01:52	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	255082	1	02/01/2018 01:52	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	255082	10	02/02/2018 03:31	NP
Surr: Toluene-d8	106		0	70-130	%REC	255082	10	02/02/2018 03:31	NP
Surr: Toluene-d8	109		0	70-130	%REC	255082	1	02/01/2018 01:52	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/01/2018 01:52	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/01/2018 01:52	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/01/2018 01:52	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	02/01/2018 01:52	NP
tert-Amyl alcohol	42	J	28	100	ug/L	255082	1	02/01/2018 01:52	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	02/01/2018 01:52	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/01/2018 01:52	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/01/2018 01:52	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 9
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 12:55:00 PM
Lab ID:	1801N71-012	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		19	50	ug/L	255082	50	02/01/2018 02:15	NP
Benzene	150		19	50	ug/L	255082	50	02/01/2018 02:15	NP
Ethylbenzene	1700		13	50	ug/L	255082	50	02/01/2018 02:15	NP
Methyl tert-butyl ether	BRL		22	50	ug/L	255082	50	02/01/2018 02:15	NP
Naphthalene	680		46	250	ug/L	255082	50	02/01/2018 02:15	NP
Toluene	5400		20	50	ug/L	255082	50	02/01/2018 02:15	NP
Xylenes, Total	13000		38	50	ug/L	255082	50	02/01/2018 02:15	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	255082	50	02/01/2018 02:15	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	255082	50	02/01/2018 02:15	NP
Surr: Toluene-d8	104		0	70-130	%REC	255082	50	02/01/2018 02:15	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		1200	5000	ug/L	255082	50	02/01/2018 02:15	NP
Ethanol	BRL		2200	5000	ug/L	255082	50	02/01/2018 02:15	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	255082	50	02/01/2018 02:15	NP
Isopropyl ether	BRL		190	500	ug/L	255082	50	02/01/2018 02:15	NP
tert-Amyl alcohol	BRL		1400	5000	ug/L	255082	50	02/01/2018 02:15	NP
tert-Amyl methyl ether	BRL		170	500	ug/L	255082	50	02/01/2018 02:15	NP
tert-Butyl Alcohol	BRL		670	5000	ug/L	255082	50	02/01/2018 02:15	NP
tert-Butyl formate	BRL		650	5000	ug/L	255082	50	02/01/2018 02:15	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 56
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 11:20:00 AM
Lab ID:	1801N71-013	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 02:39	NP
Benzene	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 02:39	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255082	1	02/01/2018 02:39	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	02/01/2018 02:39	NP
Naphthalene	BRL		0.93	5.0	ug/L	255082	1	02/01/2018 02:39	NP
Toluene	BRL		0.39	1.0	ug/L	255082	1	02/01/2018 02:39	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255082	1	02/01/2018 02:39	NP
Surr: 4-Bromofluorobenzene	93.9		0	70-130	%REC	255082	1	02/01/2018 02:39	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	255082	1	02/01/2018 02:39	NP
Surr: Toluene-d8	103		0	70-130	%REC	255082	1	02/01/2018 02:39	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/01/2018 02:39	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/01/2018 02:39	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/01/2018 02:39	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	02/01/2018 02:39	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255082	1	02/01/2018 02:39	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	02/01/2018 02:39	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/01/2018 02:39	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/01/2018 02:39	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 9
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 11:00:00 AM
Lab ID:	1801N71-014	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 03:02	NP
Benzene	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 03:02	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255082	1	02/01/2018 03:02	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	02/01/2018 03:02	NP
Naphthalene	BRL		0.93	5.0	ug/L	255082	1	02/01/2018 03:02	NP
Toluene	BRL		0.39	1.0	ug/L	255082	1	02/01/2018 03:02	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255082	1	02/01/2018 03:02	NP
Surr: 4-Bromofluorobenzene	96.6		0	70-130	%REC	255082	1	02/01/2018 03:02	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	255082	1	02/01/2018 03:02	NP
Surr: Toluene-d8	103		0	70-130	%REC	255082	1	02/01/2018 03:02	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/01/2018 03:02	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/01/2018 03:02	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/01/2018 03:02	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	02/01/2018 03:02	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255082	1	02/01/2018 03:02	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	02/01/2018 03:02	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/01/2018 03:02	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/01/2018 03:02	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 59
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 11:10:00 AM
Lab ID:	1801N71-015	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/02/2018 02:21	NP
Benzene	2500		19	50	ug/L	255082	50	02/01/2018 03:26	NP
Ethylbenzene	1800		2.6	10	ug/L	255082	10	02/02/2018 03:08	NP
Methyl tert-butyl ether	35		0.45	1.0	ug/L	255082	1	02/02/2018 02:21	NP
Naphthalene	530		9.3	50	ug/L	255082	10	02/02/2018 03:08	NP
Toluene	130		0.39	1.0	ug/L	255082	1	02/02/2018 02:21	NP
Xylenes, Total	3100		7.7	10	ug/L	255082	10	02/02/2018 03:08	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	255082	50	02/01/2018 03:26	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	255082	10	02/02/2018 03:08	NP
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	255082	1	02/02/2018 02:21	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	255082	50	02/01/2018 03:26	NP
Surr: Dibromofluoromethane	98.7		0	70-130	%REC	255082	1	02/02/2018 02:21	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	255082	10	02/02/2018 03:08	NP
Surr: Toluene-d8	105		0	70-130	%REC	255082	50	02/01/2018 03:26	NP
Surr: Toluene-d8	109		0	70-130	%REC	255082	1	02/02/2018 02:21	NP
Surr: Toluene-d8	108		0	70-130	%REC	255082	10	02/02/2018 03:08	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/02/2018 02:21	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/02/2018 02:21	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/02/2018 02:21	NP
Isopropyl ether	130		3.8	10	ug/L	255082	1	02/02/2018 02:21	NP
tert-Amyl alcohol	4700		280	1000	ug/L	255082	10	02/02/2018 03:08	NP
tert-Amyl methyl ether	21		3.4	10	ug/L	255082	1	02/02/2018 02:21	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/02/2018 02:21	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/02/2018 02:21	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 55
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 12:00:00 PM
Lab ID:	1801N71-016	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	1.5		0.37	1.0	ug/L	255082	1	02/01/2018 03:49	NP
Benzene	720		3.7	10	ug/L	255082	10	02/01/2018 04:13	NP
Ethylbenzene	710		2.6	10	ug/L	255082	10	02/01/2018 04:13	NP
Methyl tert-butyl ether	130		0.45	1.0	ug/L	255082	1	02/01/2018 03:49	NP
Naphthalene	300		9.3	50	ug/L	255082	10	02/01/2018 04:13	NP
Toluene	100		0.39	1.0	ug/L	255082	1	02/01/2018 03:49	NP
Xylenes, Total	880		7.7	10	ug/L	255082	10	02/01/2018 04:13	NP
Surr: 4-Bromofluorobenzene	99.5		0	70-130	%REC	255082	10	02/01/2018 04:13	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	255082	1	02/01/2018 03:49	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	255082	1	02/01/2018 03:49	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	255082	10	02/01/2018 04:13	NP
Surr: Toluene-d8	106		0	70-130	%REC	255082	10	02/01/2018 04:13	NP
Surr: Toluene-d8	108		0	70-130	%REC	255082	1	02/01/2018 03:49	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/01/2018 03:49	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/01/2018 03:49	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/01/2018 03:49	NP
Isopropyl ether	50		3.8	10	ug/L	255082	1	02/01/2018 03:49	NP
tert-Amyl alcohol	2800		28	100	ug/L	255082	1	02/01/2018 03:49	NP
tert-Amyl methyl ether	11		3.4	10	ug/L	255082	1	02/01/2018 03:49	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/01/2018 03:49	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/01/2018 03:49	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 53
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 12:10:00 PM
Lab ID:	1801N71-017	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 04:36	NP
Benzene	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 04:36	NP
Ethylbenzene	0.36	J	0.26	1.0	ug/L	255082	1	02/01/2018 04:36	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	02/01/2018 04:36	NP
Naphthalene	BRL		0.93	5.0	ug/L	255082	1	02/01/2018 04:36	NP
Toluene	BRL		0.39	1.0	ug/L	255082	1	02/01/2018 04:36	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255082	1	02/01/2018 04:36	NP
Surr: 4-Bromofluorobenzene	92		0	70-130	%REC	255082	1	02/01/2018 04:36	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	255082	1	02/01/2018 04:36	NP
Surr: Toluene-d8	104		0	70-130	%REC	255082	1	02/01/2018 04:36	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/01/2018 04:36	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/01/2018 04:36	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/01/2018 04:36	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	02/01/2018 04:36	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255082	1	02/01/2018 04:36	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	02/01/2018 04:36	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/01/2018 04:36	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/01/2018 04:36	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 15
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 12:40:00 PM
Lab ID:	1801N71-018	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/02/2018 13:45	NP
Benzene	0.74	J	0.37	1.0	ug/L	255082	1	02/02/2018 13:45	NP
Ethylbenzene	250		5.1	20	ug/L	255082	20	02/01/2018 04:59	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	02/02/2018 13:45	NP
Naphthalene	870		19	100	ug/L	255082	20	02/01/2018 04:59	NP
Toluene	490		7.9	20	ug/L	255082	20	02/01/2018 04:59	NP
Xylenes, Total	6500		15	20	ug/L	255082	20	02/01/2018 04:59	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	255082	20	02/01/2018 04:59	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	255082	1	02/02/2018 13:45	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	255082	20	02/01/2018 04:59	NP
Surr: Dibromofluoromethane	96		0	70-130	%REC	255082	1	02/02/2018 13:45	NP
Surr: Toluene-d8	109		0	70-130	%REC	255082	20	02/01/2018 04:59	NP
Surr: Toluene-d8	108		0	70-130	%REC	255082	1	02/02/2018 13:45	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/02/2018 13:45	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/02/2018 13:45	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/02/2018 13:45	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	02/02/2018 13:45	NP
tert-Amyl alcohol	100		28	100	ug/L	255082	1	02/02/2018 13:45	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	02/02/2018 13:45	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/02/2018 13:45	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/02/2018 13:45	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 1
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 12:45:00 PM
Lab ID:	1801N71-019	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/02/2018 14:09	NP
Benzene	0.76	J	0.37	1.0	ug/L	255082	1	02/02/2018 14:09	NP
Ethylbenzene	220		5.1	20	ug/L	255082	20	02/01/2018 05:23	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	02/02/2018 14:09	NP
Naphthalene	720		19	100	ug/L	255082	20	02/01/2018 05:23	NP
Toluene	480		7.9	20	ug/L	255082	20	02/01/2018 05:23	NP
Xylenes, Total	6400		15	20	ug/L	255082	20	02/01/2018 05:23	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	255082	20	02/01/2018 05:23	NP
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	255082	1	02/02/2018 14:09	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	255082	20	02/01/2018 05:23	NP
Surr: Dibromofluoromethane	95.6		0	70-130	%REC	255082	1	02/02/2018 14:09	NP
Surr: Toluene-d8	106		0	70-130	%REC	255082	20	02/01/2018 05:23	NP
Surr: Toluene-d8	107		0	70-130	%REC	255082	1	02/02/2018 14:09	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/02/2018 14:09	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/02/2018 14:09	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/02/2018 14:09	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	02/02/2018 14:09	NP
tert-Amyl alcohol	120		28	100	ug/L	255082	1	02/02/2018 14:09	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	02/02/2018 14:09	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/02/2018 14:09	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/02/2018 14:09	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 6
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 3:30:00 PM
Lab ID:	1801N71-020	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 05:46	NP
Benzene	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 05:46	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255082	1	02/01/2018 05:46	NP
Methyl tert-butyl ether	13		0.45	1.0	ug/L	255082	1	02/01/2018 05:46	NP
Naphthalene	BRL		0.93	5.0	ug/L	255082	1	02/01/2018 05:46	NP
Toluene	BRL		0.39	1.0	ug/L	255082	1	02/01/2018 05:46	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255082	1	02/01/2018 05:46	NP
Surr: 4-Bromofluorobenzene	93.7		0	70-130	%REC	255082	1	02/01/2018 05:46	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	255082	1	02/01/2018 05:46	NP
Surr: Toluene-d8	104		0	70-130	%REC	255082	1	02/01/2018 05:46	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/01/2018 05:46	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/01/2018 05:46	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/01/2018 05:46	NP
Isopropyl ether	BRL		3.8	10	ug/L	255082	1	02/01/2018 05:46	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255082	1	02/01/2018 05:46	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	02/01/2018 05:46	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/01/2018 05:46	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/01/2018 05:46	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 33
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 12:25:00 PM
Lab ID:	1801N71-021	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255082	1	02/01/2018 06:09	NP
Benzene	310		3.7	10	ug/L	255082	10	02/01/2018 06:33	NP
Ethylbenzene	2100		26	100	ug/L	255082	100	02/02/2018 12:08	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255082	1	02/01/2018 06:09	NP
Naphthalene	940		9.3	50	ug/L	255082	10	02/01/2018 06:33	NP
Toluene	4100		39	100	ug/L	255082	100	02/02/2018 12:08	NP
Xylenes, Total	11000		77	100	ug/L	255082	100	02/02/2018 12:08	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	255082	100	02/02/2018 12:08	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	255082	10	02/01/2018 06:33	NP
Surr: 4-Bromofluorobenzene	112		0	70-130	%REC	255082	1	02/01/2018 06:09	NP
Surr: Dibromofluoromethane	95.9		0	70-130	%REC	255082	1	02/01/2018 06:09	NP
Surr: Dibromofluoromethane	96.2		0	70-130	%REC	255082	10	02/01/2018 06:33	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	255082	100	02/02/2018 12:08	NP
Surr: Toluene-d8	107		0	70-130	%REC	255082	1	02/01/2018 06:09	NP
Surr: Toluene-d8	104		0	70-130	%REC	255082	10	02/01/2018 06:33	NP
Surr: Toluene-d8	106		0	70-130	%REC	255082	100	02/02/2018 12:08	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255082	1	02/01/2018 06:09	NP
Ethanol	BRL		43	100	ug/L	255082	1	02/01/2018 06:09	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255082	1	02/01/2018 06:09	NP
Isopropyl ether	8.5	J	3.8	10	ug/L	255082	1	02/01/2018 06:09	NP
tert-Amyl alcohol	3600		28	100	ug/L	255082	1	02/01/2018 06:09	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255082	1	02/01/2018 06:09	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255082	1	02/01/2018 06:09	NP
tert-Butyl formate	BRL		13	100	ug/L	255082	1	02/01/2018 06:09	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 4
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 12:30:00 PM
Lab ID:	1801N71-022	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 07:44	NP
Benzene	390		3.7	10	ug/L	255085	10	02/01/2018 08:08	NP
Ethylbenzene	2200		26	100	ug/L	255085	100	02/02/2018 16:31	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/01/2018 07:44	NP
Naphthalene	1000		9.3	50	ug/L	255085	10	02/01/2018 08:08	NP
Toluene	4500		39	100	ug/L	255085	100	02/02/2018 16:31	NP
Xylenes, Total	12000		77	100	ug/L	255085	100	02/02/2018 16:31	NP
Surr: 4-Bromofluorobenzene	99.2		0	70-130	%REC	255085	100	02/02/2018 16:31	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	255085	10	02/01/2018 08:08	NP
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	255085	1	02/01/2018 07:44	NP
Surr: Dibromofluoromethane	95.4		0	70-130	%REC	255085	1	02/01/2018 07:44	NP
Surr: Dibromofluoromethane	97.9		0	70-130	%REC	255085	10	02/01/2018 08:08	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	255085	100	02/02/2018 16:31	NP
Surr: Toluene-d8	105		0	70-130	%REC	255085	10	02/01/2018 08:08	NP
Surr: Toluene-d8	106		0	70-130	%REC	255085	100	02/02/2018 16:31	NP
Surr: Toluene-d8	106		0	70-130	%REC	255085	1	02/01/2018 07:44	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 07:44	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 07:44	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 07:44	NP
Isopropyl ether	7.4	J	3.8	10	ug/L	255085	1	02/01/2018 07:44	NP
tert-Amyl alcohol	3300		28	100	ug/L	255085	1	02/01/2018 07:44	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 07:44	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 07:44	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 07:44	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 46
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 8:00:00 AM
Lab ID:	1801N71-023	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 17:18	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 17:18	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/02/2018 17:18	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/02/2018 17:18	NP
Naphthalene	BRL		0.93	5.0	ug/L	255085	1	02/02/2018 17:18	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/02/2018 17:18	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/02/2018 17:18	NP
Surr: 4-Bromofluorobenzene	91.7		0	70-130	%REC	255085	1	02/02/2018 17:18	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	255085	1	02/02/2018 17:18	NP
Surr: Toluene-d8	103		0	70-130	%REC	255085	1	02/02/2018 17:18	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 06:57	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 06:57	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 06:57	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 06:57	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 06:57	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 06:57	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 06:57	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 06:57	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 36
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 12:45:00 PM
Lab ID:	1801N71-024	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 17:42	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 17:42	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/02/2018 17:42	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/02/2018 17:42	NP
Naphthalene	BRL		0.93	5.0	ug/L	255085	1	02/02/2018 17:42	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/02/2018 17:42	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/02/2018 17:42	NP
Surr: 4-Bromofluorobenzene	92.8		0	70-130	%REC	255085	1	02/02/2018 17:42	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	255085	1	02/02/2018 17:42	NP
Surr: Toluene-d8	106		0	70-130	%REC	255085	1	02/02/2018 17:42	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 07:21	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 07:21	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 07:21	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 07:21	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 07:21	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 07:21	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 07:21	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 07:21	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 41
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 9:40:00 AM
Lab ID:	1801N71-025	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 08:32	NP
Benzene	10		0.37	1.0	ug/L	255085	1	02/01/2018 08:32	NP
Ethylbenzene	210		2.6	10	ug/L	255085	10	02/02/2018 16:55	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/01/2018 08:32	NP
Naphthalene	110		0.93	5.0	ug/L	255085	1	02/01/2018 08:32	NP
Toluene	330		3.9	10	ug/L	255085	10	02/02/2018 16:55	NP
Xylenes, Total	680		7.7	10	ug/L	255085	10	02/02/2018 16:55	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	255085	10	02/02/2018 16:55	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	255085	1	02/01/2018 08:32	NP
Surr: Dibromofluoromethane	97.5		0	70-130	%REC	255085	1	02/01/2018 08:32	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	255085	10	02/02/2018 16:55	NP
Surr: Toluene-d8	107		0	70-130	%REC	255085	1	02/01/2018 08:32	NP
Surr: Toluene-d8	107		0	70-130	%REC	255085	10	02/02/2018 16:55	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 08:32	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 08:32	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 08:32	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 08:32	NP
tert-Amyl alcohol	65	J	28	100	ug/L	255085	1	02/01/2018 08:32	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 08:32	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 08:32	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 08:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 3
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 9:45:00 AM
Lab ID:	1801N71-026	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 08:56	NP
Benzene	10		0.37	1.0	ug/L	255085	1	02/01/2018 08:56	NP
Ethylbenzene	200		2.6	10	ug/L	255085	10	02/02/2018 18:05	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/01/2018 08:56	NP
Naphthalene	110		0.93	5.0	ug/L	255085	1	02/01/2018 08:56	NP
Toluene	330		3.9	10	ug/L	255085	10	02/02/2018 18:05	NP
Xylenes, Total	650		7.7	10	ug/L	255085	10	02/02/2018 18:05	NP
Surr: 4-Bromofluorobenzene	98.5		0	70-130	%REC	255085	10	02/02/2018 18:05	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	255085	1	02/01/2018 08:56	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	255085	10	02/02/2018 18:05	NP
Surr: Dibromofluoromethane	97.6		0	70-130	%REC	255085	1	02/01/2018 08:56	NP
Surr: Toluene-d8	106		0	70-130	%REC	255085	1	02/01/2018 08:56	NP
Surr: Toluene-d8	108		0	70-130	%REC	255085	10	02/02/2018 18:05	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 08:56	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 08:56	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 08:56	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 08:56	NP
tert-Amyl alcohol	53	J	28	100	ug/L	255085	1	02/01/2018 08:56	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 08:56	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 08:56	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 08:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 40
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 9:30:00 AM
Lab ID:	1801N71-027	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 16:06	NP
Benzene	1.5		0.37	1.0	ug/L	255085	1	02/01/2018 16:06	NP
Ethylbenzene	9.8		0.26	1.0	ug/L	255085	1	02/01/2018 16:06	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/01/2018 16:06	NP
Naphthalene	6.1		0.93	5.0	ug/L	255085	1	02/01/2018 16:06	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/01/2018 16:06	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/01/2018 16:06	NP
Surr: 4-Bromofluorobenzene	92.8		0	70-130	%REC	255085	1	02/01/2018 16:06	NP
Surr: Dibromofluoromethane	113		0	70-130	%REC	255085	1	02/01/2018 16:06	NP
Surr: Toluene-d8	108		0	70-130	%REC	255085	1	02/01/2018 16:06	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 16:06	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 16:06	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 16:06	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 16:06	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 16:06	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 16:06	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 16:06	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 16:06	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 37
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 12:00:00 PM
Lab ID:	1801N71-028	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 16:33	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 16:33	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/01/2018 16:33	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/01/2018 16:33	NP
Naphthalene	BRL		0.93	5.0	ug/L	255085	1	02/01/2018 16:33	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/01/2018 16:33	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/01/2018 16:33	NP
Surr: 4-Bromofluorobenzene	92.7		0	70-130	%REC	255085	1	02/01/2018 16:33	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	255085	1	02/01/2018 16:33	NP
Surr: Toluene-d8	106		0	70-130	%REC	255085	1	02/01/2018 16:33	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 16:33	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 16:33	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 16:33	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 16:33	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 16:33	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 16:33	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 16:33	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 16:33	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 31
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 11:45:00 AM
Lab ID:	1801N71-029	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 16:56	NP
Benzene	8.5		0.37	1.0	ug/L	255085	1	02/01/2018 16:56	NP
Ethylbenzene	6.9		0.26	1.0	ug/L	255085	1	02/01/2018 16:56	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/01/2018 16:56	NP
Naphthalene	130		9.3	50	ug/L	255085	10	02/01/2018 17:20	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/01/2018 16:56	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/01/2018 16:56	NP
Surr: 4-Bromofluorobenzene	96.2		0	70-130	%REC	255085	10	02/01/2018 17:20	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	255085	1	02/01/2018 16:56	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	255085	1	02/01/2018 16:56	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	255085	10	02/01/2018 17:20	NP
Surr: Toluene-d8	108		0	70-130	%REC	255085	10	02/01/2018 17:20	NP
Surr: Toluene-d8	115		0	70-130	%REC	255085	1	02/01/2018 16:56	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 16:56	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 16:56	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 16:56	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 16:56	NP
tert-Amyl alcohol	130		28	100	ug/L	255085	1	02/01/2018 16:56	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 16:56	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 16:56	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 16:56	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 62
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 11:30:00 AM
Lab ID:	1801N71-030	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 17:44	NP
Benzene	33		0.37	1.0	ug/L	255085	1	02/01/2018 17:44	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/01/2018 17:44	NP
Methyl tert-butyl ether	2.4		0.45	1.0	ug/L	255085	1	02/01/2018 17:44	NP
Naphthalene	46		0.93	5.0	ug/L	255085	1	02/01/2018 17:44	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/01/2018 17:44	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/01/2018 17:44	NP
Surr: 4-Bromofluorobenzene	94.1		0	70-130	%REC	255085	1	02/01/2018 17:44	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	255085	1	02/01/2018 17:44	NP
Surr: Toluene-d8	107		0	70-130	%REC	255085	1	02/01/2018 17:44	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 17:44	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 17:44	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 17:44	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 17:44	NP
tert-Amyl alcohol	770		28	100	ug/L	255085	1	02/01/2018 17:44	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 17:44	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 17:44	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 17:44	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 63
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 9:55:00 AM
Lab ID:	1801N71-031	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 18:07	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 18:07	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/01/2018 18:07	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/01/2018 18:07	NP
Naphthalene	BRL		0.93	5.0	ug/L	255085	1	02/01/2018 18:07	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/01/2018 18:07	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/01/2018 18:07	NP
Surr: 4-Bromofluorobenzene	89.5		0	70-130	%REC	255085	1	02/01/2018 18:07	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	255085	1	02/01/2018 18:07	NP
Surr: Toluene-d8	106		0	70-130	%REC	255085	1	02/01/2018 18:07	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 18:07	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 18:07	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 18:07	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 18:07	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 18:07	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 18:07	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 18:07	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 18:07	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 70
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 10:45:00 AM
Lab ID:	1801N71-032	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 18:31	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 18:31	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/01/2018 18:31	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/01/2018 18:31	NP
Naphthalene	BRL		0.93	5.0	ug/L	255085	1	02/01/2018 18:31	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/01/2018 18:31	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/01/2018 18:31	NP
Surr: 4-Bromofluorobenzene	90.5		0	70-130	%REC	255085	1	02/01/2018 18:31	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	255085	1	02/01/2018 18:31	NP
Surr: Toluene-d8	106		0	70-130	%REC	255085	1	02/01/2018 18:31	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 18:31	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 18:31	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 18:31	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 18:31	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 18:31	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 18:31	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 18:31	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 18:31	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 39
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 10:30:00 AM
Lab ID:	1801N71-033	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 05:52	NP
Benzene	0.48	J	0.37	1.0	ug/L	255085	1	02/02/2018 05:52	NP
Ethylbenzene	480		2.6	10	ug/L	255085	10	02/02/2018 06:15	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/02/2018 05:52	NP
Naphthalene	370		9.3	50	ug/L	255085	10	02/02/2018 06:15	NP
Toluene	220		3.9	10	ug/L	255085	10	02/02/2018 06:15	NP
Xylenes, Total	2000		7.7	10	ug/L	255085	10	02/02/2018 06:15	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	255085	10	02/02/2018 06:15	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	255085	1	02/02/2018 05:52	NP
Surr: Dibromofluoromethane	97.7		0	70-130	%REC	255085	1	02/02/2018 05:52	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	255085	10	02/02/2018 06:15	NP
Surr: Toluene-d8	105		0	70-130	%REC	255085	10	02/02/2018 06:15	NP
Surr: Toluene-d8	107		0	70-130	%REC	255085	1	02/02/2018 05:52	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/02/2018 05:52	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/02/2018 05:52	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/02/2018 05:52	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/02/2018 05:52	NP
tert-Amyl alcohol	56	J	28	100	ug/L	255085	1	02/02/2018 05:52	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/02/2018 05:52	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/02/2018 05:52	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/02/2018 05:52	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 42
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 9:55:00 AM
Lab ID:	1801N71-034	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 06:38	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 06:38	NP
Ethylbenzene	57		0.26	1.0	ug/L	255085	1	02/02/2018 06:38	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/02/2018 06:38	NP
Naphthalene	64		0.93	5.0	ug/L	255085	1	02/02/2018 06:38	NP
Toluene	0.41	J	0.39	1.0	ug/L	255085	1	02/02/2018 06:38	NP
Xylenes, Total	48		0.77	1.0	ug/L	255085	1	02/02/2018 06:38	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	255085	1	02/02/2018 06:38	NP
Surr: Dibromofluoromethane	95.7		0	70-130	%REC	255085	1	02/02/2018 06:38	NP
Surr: Toluene-d8	106		0	70-130	%REC	255085	1	02/02/2018 06:38	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/02/2018 06:38	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/02/2018 06:38	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/02/2018 06:38	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/02/2018 06:38	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/02/2018 06:38	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/02/2018 06:38	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/02/2018 06:38	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/02/2018 06:38	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 6
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 9:10:00 AM
Lab ID:	1801N71-035	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 18:52	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 18:52	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/02/2018 18:52	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/02/2018 18:52	NP
Naphthalene	BRL		0.93	5.0	ug/L	255085	1	02/02/2018 18:52	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/02/2018 18:52	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/02/2018 18:52	NP
Surr: 4-Bromofluorobenzene	88.8		0	70-130	%REC	255085	1	02/02/2018 18:52	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	255085	1	02/02/2018 18:52	NP
Surr: Toluene-d8	103		0	70-130	%REC	255085	1	02/02/2018 18:52	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 19:41	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 19:41	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 19:41	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 19:41	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 19:41	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 19:41	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 19:41	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 19:41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 67
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 9:00:00 AM
Lab ID:	1801N71-036	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 19:16	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 19:16	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/02/2018 19:16	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/02/2018 19:16	NP
Naphthalene	BRL		0.93	5.0	ug/L	255085	1	02/02/2018 19:16	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/02/2018 19:16	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/02/2018 19:16	NP
Surr: 4-Bromofluorobenzene	89.3		0	70-130	%REC	255085	1	02/02/2018 19:16	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	255085	1	02/02/2018 19:16	NP
Surr: Toluene-d8	105		0	70-130	%REC	255085	1	02/02/2018 19:16	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 20:05	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 20:05	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 20:05	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 20:05	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 20:05	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 20:05	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 20:05	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 20:05	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 38
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 8:40:00 AM
Lab ID:	1801N71-037	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 20:28	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 20:28	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/01/2018 20:28	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/01/2018 20:28	NP
Naphthalene	BRL		0.93	5.0	ug/L	255085	1	02/01/2018 20:28	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/01/2018 20:28	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/01/2018 20:28	NP
Surr: 4-Bromofluorobenzene	96.7		0	70-130	%REC	255085	1	02/01/2018 20:28	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	255085	1	02/01/2018 20:28	NP
Surr: Toluene-d8	107		0	70-130	%REC	255085	1	02/01/2018 20:28	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 20:28	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 20:28	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 20:28	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 20:28	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 20:28	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 20:28	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 20:28	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 20:28	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 43
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 8:30:00 AM
Lab ID:	1801N71-038	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 20:52	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 20:52	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/01/2018 20:52	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/01/2018 20:52	NP
Naphthalene	BRL		0.93	5.0	ug/L	255085	1	02/01/2018 20:52	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/01/2018 20:52	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/01/2018 20:52	NP
Surr: 4-Bromofluorobenzene	97.8		0	70-130	%REC	255085	1	02/01/2018 20:52	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	255085	1	02/01/2018 20:52	NP
Surr: Toluene-d8	106		0	70-130	%REC	255085	1	02/01/2018 20:52	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 20:52	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 20:52	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 20:52	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 20:52	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 20:52	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 20:52	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 20:52	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 20:52	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 44
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 8:20:00 AM
Lab ID:	1801N71-039	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 21:15	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/01/2018 21:15	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/01/2018 21:15	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/01/2018 21:15	NP
Naphthalene	BRL		0.93	5.0	ug/L	255085	1	02/01/2018 21:15	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/01/2018 21:15	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/01/2018 21:15	NP
Surr: 4-Bromofluorobenzene	93.3		0	70-130	%REC	255085	1	02/01/2018 21:15	NP
Surr: Dibromofluoromethane	109		0	70-130	%REC	255085	1	02/01/2018 21:15	NP
Surr: Toluene-d8	107		0	70-130	%REC	255085	1	02/01/2018 21:15	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 21:15	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 21:15	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 21:15	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 21:15	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 21:15	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 21:15	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 21:15	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 21:15	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 45
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 8:10:00 AM
Lab ID:	1801N71-040	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 20:50	NP
Benzene	BRL		0.37	1.0	ug/L	255085	1	02/02/2018 20:50	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255085	1	02/02/2018 20:50	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255085	1	02/02/2018 20:50	NP
Naphthalene	BRL		0.93	5.0	ug/L	255085	1	02/02/2018 20:50	NP
Toluene	BRL		0.39	1.0	ug/L	255085	1	02/02/2018 20:50	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255085	1	02/02/2018 20:50	NP
Surr: 4-Bromofluorobenzene	93.6		0	70-130	%REC	255085	1	02/02/2018 20:50	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	255085	1	02/02/2018 20:50	NP
Surr: Toluene-d8	106		0	70-130	%REC	255085	1	02/02/2018 20:50	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255085	1	02/01/2018 22:26	NP
Ethanol	BRL		43	100	ug/L	255085	1	02/01/2018 22:26	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255085	1	02/01/2018 22:26	NP
Isopropyl ether	BRL		3.8	10	ug/L	255085	1	02/01/2018 22:26	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255085	1	02/01/2018 22:26	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255085	1	02/01/2018 22:26	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255085	1	02/01/2018 22:26	NP
tert-Butyl formate	BRL		13	100	ug/L	255085	1	02/01/2018 22:26	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	FB-1
Project Name:	Clouds Exxon	**Collection Date:**	1/22/2018 3:45:00 PM
Lab ID:	1801N71-041	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/01/2018 14:55	NP
Benzene	BRL		0.37	1.0	ug/L	255089	1	02/01/2018 14:55	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255089	1	02/01/2018 14:55	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/01/2018 14:55	NP
Naphthalene	BRL		0.93	5.0	ug/L	255089	1	02/01/2018 14:55	NP
Toluene	BRL		0.39	1.0	ug/L	255089	1	02/01/2018 14:55	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255089	1	02/01/2018 14:55	NP
Surr: 4-Bromofluorobenzene	82.4		0	70-130	%REC	255089	1	02/01/2018 14:55	NP
Surr: Dibromofluoromethane	112		0	70-130	%REC	255089	1	02/01/2018 14:55	NP
Surr: Toluene-d8	93.2		0	70-130	%REC	255089	1	02/01/2018 14:55	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/01/2018 14:55	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/01/2018 14:55	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/01/2018 14:55	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/01/2018 14:55	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/01/2018 14:55	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/01/2018 14:55	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/01/2018 14:55	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/01/2018 14:55	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	FB-2
Project Name:	Clouds Exxon	**Collection Date:**	1/23/2018 1:00:00 PM
Lab ID:	1801N71-042	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/01/2018 15:19	NP
Benzene	BRL		0.37	1.0	ug/L	255089	1	02/01/2018 15:19	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255089	1	02/01/2018 15:19	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/01/2018 15:19	NP
Naphthalene	BRL		0.93	5.0	ug/L	255089	1	02/01/2018 15:19	NP
Toluene	BRL		0.39	1.0	ug/L	255089	1	02/01/2018 15:19	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255089	1	02/01/2018 15:19	NP
Surr: 4-Bromofluorobenzene	82.8		0	70-130	%REC	255089	1	02/01/2018 15:19	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	255089	1	02/01/2018 15:19	NP
Surr: Toluene-d8	89.1		0	70-130	%REC	255089	1	02/01/2018 15:19	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/01/2018 15:19	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/01/2018 15:19	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/01/2018 15:19	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/01/2018 15:19	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/01/2018 15:19	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/01/2018 15:19	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/01/2018 15:19	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/01/2018 15:19	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	FB-3
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 8:00:00 AM
Lab ID:	1801N71-043	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/01/2018 15:43	NP
Benzene	BRL		0.37	1.0	ug/L	255089	1	02/01/2018 15:43	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255089	1	02/01/2018 15:43	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/01/2018 15:43	NP
Naphthalene	BRL		0.93	5.0	ug/L	255089	1	02/01/2018 15:43	NP
Toluene	BRL		0.39	1.0	ug/L	255089	1	02/01/2018 15:43	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255089	1	02/01/2018 15:43	NP
Surr: 4-Bromofluorobenzene	82.1		0	70-130	%REC	255089	1	02/01/2018 15:43	NP
Surr: Dibromofluoromethane	112		0	70-130	%REC	255089	1	02/01/2018 15:43	NP
Surr: Toluene-d8	90.8		0	70-130	%REC	255089	1	02/01/2018 15:43	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/01/2018 15:43	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/01/2018 15:43	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/01/2018 15:43	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/01/2018 15:43	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/01/2018 15:43	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/01/2018 15:43	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/01/2018 15:43	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/01/2018 15:43	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 49
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 2:40:00 PM
Lab ID:	1801N71-044	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 21:14	NP
Benzene	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 21:14	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255089	1	02/02/2018 21:14	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/02/2018 21:14	NP
Naphthalene	BRL		0.93	5.0	ug/L	255089	1	02/02/2018 21:14	NP
Toluene	BRL		0.39	1.0	ug/L	255089	1	02/02/2018 21:14	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255089	1	02/02/2018 21:14	NP
Surr: 4-Bromofluorobenzene	87.6		0	70-130	%REC	255089	1	02/02/2018 21:14	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	255089	1	02/02/2018 21:14	NP
Surr: Toluene-d8	106		0	70-130	%REC	255089	1	02/02/2018 21:14	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/01/2018 22:50	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/01/2018 22:50	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/01/2018 22:50	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/01/2018 22:50	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/01/2018 22:50	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/01/2018 22:50	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/01/2018 22:50	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/01/2018 22:50	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	PW 1R
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 12:30:00 PM
Lab ID:	1801N71-045	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		37	100	ug/L	255089	100	01/31/2018 16:30	NP
Benzene	370		37	100	ug/L	255089	100	01/31/2018 16:30	NP
Ethylbenzene	480		26	100	ug/L	255089	100	01/31/2018 16:30	NP
Methyl tert-butyl ether	BRL		45	100	ug/L	255089	100	01/31/2018 16:30	NP
Naphthalene	340	J	93	500	ug/L	255089	100	01/31/2018 16:30	NP
Toluene	4300		39	100	ug/L	255089	100	01/31/2018 16:30	NP
Xylenes, Total	13000		77	100	ug/L	255089	100	01/31/2018 16:30	NP
Surr: 4-Bromofluorobenzene	97.8		0	70-130	%REC	255089	100	01/31/2018 16:30	NP
Surr: Dibromofluoromethane	111		0	70-130	%REC	255089	100	01/31/2018 16:30	NP
Surr: Toluene-d8	107		0	70-130	%REC	255089	100	01/31/2018 16:30	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		2400	10000	ug/L	255089	100	01/31/2018 16:30	NP
Ethanol	BRL		4300	10000	ug/L	255089	100	01/31/2018 16:30	NP
Ethyl tert-butyl ether	BRL		360	10000	ug/L	255089	100	01/31/2018 16:30	NP
Isopropyl ether	BRL		380	1000	ug/L	255089	100	01/31/2018 16:30	NP
tert-Amyl alcohol	BRL		2800	10000	ug/L	255089	100	01/31/2018 16:30	NP
tert-Amyl methyl ether	BRL		340	1000	ug/L	255089	100	01/31/2018 16:30	NP
tert-Butyl Alcohol	BRL		1300	10000	ug/L	255089	100	01/31/2018 16:30	NP
tert-Butyl formate	BRL		1300	10000	ug/L	255089	100	01/31/2018 16:30	NP

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 19
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 8:40:00 AM
Lab ID:	1801N71-046	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		190	500	ug/L	255089	500	02/01/2018 23:13	NP
Benzene	3100		190	500	ug/L	255089	500	02/01/2018 23:13	NP
Ethylbenzene	1100		130	500	ug/L	255089	500	02/01/2018 23:13	NP
Methyl tert-butyl ether	BRL		220	500	ug/L	255089	500	02/01/2018 23:13	NP
Naphthalene	770	J	460	2500	ug/L	255089	500	02/01/2018 23:13	NP
Toluene	23000		200	500	ug/L	255089	500	02/01/2018 23:13	NP
Xylenes, Total	17000		380	500	ug/L	255089	500	02/01/2018 23:13	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	255089	500	02/01/2018 23:13	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	255089	500	02/01/2018 23:13	NP
Surr: Toluene-d8	106		0	70-130	%REC	255089	500	02/01/2018 23:13	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		12000	50000	ug/L	255089	500	02/01/2018 23:13	NP
Ethanol	BRL		22000	50000	ug/L	255089	500	02/01/2018 23:13	NP
Ethyl tert-butyl ether	BRL		1800	50000	ug/L	255089	500	02/01/2018 23:13	NP
Isopropyl ether	BRL		1900	5000	ug/L	255089	500	02/01/2018 23:13	NP
tert-Amyl alcohol	BRL		14000	50000	ug/L	255089	500	02/01/2018 23:13	NP
tert-Amyl methyl ether	BRL		1700	5000	ug/L	255089	500	02/01/2018 23:13	NP
tert-Butyl Alcohol	BRL		6700	50000	ug/L	255089	500	02/01/2018 23:13	NP
tert-Butyl formate	BRL		6500	50000	ug/L	255089	500	02/01/2018 23:13	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 11
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 2:20:00 PM
Lab ID:	1801N71-047	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/01/2018 23:37	NP
Benzene	BRL		0.37	1.0	ug/L	255089	1	02/01/2018 23:37	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255089	1	02/01/2018 23:37	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/01/2018 23:37	NP
Naphthalene	BRL		0.93	5.0	ug/L	255089	1	02/01/2018 23:37	NP
Toluene	BRL		0.39	1.0	ug/L	255089	1	02/01/2018 23:37	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255089	1	02/01/2018 23:37	NP
Surr: 4-Bromofluorobenzene	96.1		0	70-130	%REC	255089	1	02/01/2018 23:37	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	255089	1	02/01/2018 23:37	NP
Surr: Toluene-d8	104		0	70-130	%REC	255089	1	02/01/2018 23:37	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/01/2018 23:37	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/01/2018 23:37	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/01/2018 23:37	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/01/2018 23:37	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/01/2018 23:37	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/01/2018 23:37	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/01/2018 23:37	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/01/2018 23:37	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 51
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 12:10:00 PM
Lab ID:	1801N71-048	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 00:00	NP
Benzene	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 00:00	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255089	1	02/02/2018 00:00	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/02/2018 00:00	NP
Naphthalene	BRL		0.93	5.0	ug/L	255089	1	02/02/2018 00:00	NP
Toluene	BRL		0.39	1.0	ug/L	255089	1	02/02/2018 00:00	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255089	1	02/02/2018 00:00	NP
Surr: 4-Bromofluorobenzene	94.2		0	70-130	%REC	255089	1	02/02/2018 00:00	NP
Surr: Dibromofluoromethane	108		0	70-130	%REC	255089	1	02/02/2018 00:00	NP
Surr: Toluene-d8	107		0	70-130	%REC	255089	1	02/02/2018 00:00	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/02/2018 00:00	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/02/2018 00:00	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/02/2018 00:00	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/02/2018 00:00	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/02/2018 00:00	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/02/2018 00:00	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/02/2018 00:00	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/02/2018 00:00	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 34
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 8:10:00 AM
Lab ID:	1801N71-049	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 03:54	NP
Benzene	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 03:54	NP
Ethylbenzene	0.26	J	0.26	1.0	ug/L	255089	1	02/02/2018 03:54	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/02/2018 03:54	NP
Naphthalene	BRL		0.93	5.0	ug/L	255089	1	02/02/2018 03:54	NP
Toluene	BRL		0.39	1.0	ug/L	255089	1	02/02/2018 03:54	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255089	1	02/02/2018 03:54	NP
Surr: 4-Bromofluorobenzene	95.9		0	70-130	%REC	255089	1	02/02/2018 03:54	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	255089	1	02/02/2018 03:54	NP
Surr: Toluene-d8	105		0	70-130	%REC	255089	1	02/02/2018 03:54	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/02/2018 03:54	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/02/2018 03:54	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/02/2018 03:54	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/02/2018 03:54	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/02/2018 03:54	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/02/2018 03:54	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/02/2018 03:54	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/02/2018 03:54	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 35
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 7:50:00 AM
Lab ID:	1801N71-050	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		7.5	20	ug/L	255089	20	02/02/2018 04:41	NP
Benzene	3600		7.5	20	ug/L	255089	20	02/02/2018 04:41	NP
Ethylbenzene	2900		5.1	20	ug/L	255089	20	02/02/2018 04:41	NP
Methyl tert-butyl ether	62		8.9	20	ug/L	255089	20	02/02/2018 04:41	NP
Naphthalene	850		19	100	ug/L	255089	20	02/02/2018 04:41	NP
Toluene	6300		39	100	ug/L	255089	100	02/02/2018 21:37	NP
Xylenes, Total	6600		15	20	ug/L	255089	20	02/02/2018 04:41	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	255089	20	02/02/2018 04:41	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	255089	100	02/02/2018 21:37	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	255089	20	02/02/2018 04:41	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	255089	100	02/02/2018 21:37	NP
Surr: Toluene-d8	107		0	70-130	%REC	255089	20	02/02/2018 04:41	NP
Surr: Toluene-d8	106		0	70-130	%REC	255089	100	02/02/2018 21:37	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		470	2000	ug/L	255089	20	02/02/2018 04:41	NP
Ethanol	BRL		860	2000	ug/L	255089	20	02/02/2018 04:41	NP
Ethyl tert-butyl ether	BRL		72	2000	ug/L	255089	20	02/02/2018 04:41	NP
Isopropyl ether	170	J	76	200	ug/L	255089	20	02/02/2018 04:41	NP
tert-Amyl alcohol	4100		560	2000	ug/L	255089	20	02/02/2018 04:41	NP
tert-Amyl methyl ether	BRL		67	200	ug/L	255089	20	02/02/2018 04:41	NP
tert-Butyl Alcohol	BRL		270	2000	ug/L	255089	20	02/02/2018 04:41	NP
tert-Butyl formate	BRL		260	2000	ug/L	255089	20	02/02/2018 04:41	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 5
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 7:40:00 AM
Lab ID:	1801N71-051	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		19	50	ug/L	255089	50	02/02/2018 05:04	NP
Benzene	9400		19	50	ug/L	255089	50	02/02/2018 05:04	NP
Ethylbenzene	970		13	50	ug/L	255089	50	02/02/2018 05:04	NP
Methyl tert-butyl ether	1000		22	50	ug/L	255089	50	02/02/2018 05:04	NP
Naphthalene	340		46	250	ug/L	255089	50	02/02/2018 05:04	NP
Toluene	3300		20	50	ug/L	255089	50	02/02/2018 05:04	NP
Xylenes, Total	5300		38	50	ug/L	255089	50	02/02/2018 05:04	NP
Surr: 4-Bromofluorobenzene	97.7		0	70-130	%REC	255089	50	02/02/2018 05:04	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	255089	50	02/02/2018 05:04	NP
Surr: Toluene-d8	105		0	70-130	%REC	255089	50	02/02/2018 05:04	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		1200	5000	ug/L	255089	50	02/02/2018 05:04	NP
Ethanol	BRL		2200	5000	ug/L	255089	50	02/02/2018 05:04	NP
Ethyl tert-butyl ether	BRL		180	5000	ug/L	255089	50	02/02/2018 05:04	NP
Isopropyl ether	710		190	500	ug/L	255089	50	02/02/2018 05:04	NP
tert-Amyl alcohol	10000		1400	5000	ug/L	255089	50	02/02/2018 05:04	NP
tert-Amyl methyl ether	BRL		170	500	ug/L	255089	50	02/02/2018 05:04	NP
tert-Butyl Alcohol	BRL		670	5000	ug/L	255089	50	02/02/2018 05:04	NP
tert-Butyl formate	BRL		650	5000	ug/L	255089	50	02/02/2018 05:04	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 18
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 8:30:00 AM
Lab ID:	1801N71-052	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		7.5	20	ug/L	255089	20	02/02/2018 05:28	NP
Benzene	1800		7.5	20	ug/L	255089	20	02/02/2018 05:28	NP
Ethylbenzene	1400		5.1	20	ug/L	255089	20	02/02/2018 05:28	NP
Methyl tert-butyl ether	49		8.9	20	ug/L	255089	20	02/02/2018 05:28	NP
Naphthalene	560		19	100	ug/L	255089	20	02/02/2018 05:28	NP
Toluene	11000		39	100	ug/L	255089	100	02/02/2018 22:01	NP
Xylenes, Total	12000		77	100	ug/L	255089	100	02/02/2018 22:01	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	255089	20	02/02/2018 05:28	NP
Surr: 4-Bromofluorobenzene	95.9		0	70-130	%REC	255089	100	02/02/2018 22:01	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	255089	20	02/02/2018 05:28	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	255089	100	02/02/2018 22:01	NP
Surr: Toluene-d8	108		0	70-130	%REC	255089	20	02/02/2018 05:28	NP
Surr: Toluene-d8	106		0	70-130	%REC	255089	100	02/02/2018 22:01	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		470	2000	ug/L	255089	20	02/02/2018 05:28	NP
Ethanol	BRL		860	2000	ug/L	255089	20	02/02/2018 05:28	NP
Ethyl tert-butyl ether	BRL		72	2000	ug/L	255089	20	02/02/2018 05:28	NP
Isopropyl ether	BRL		76	200	ug/L	255089	20	02/02/2018 05:28	NP
tert-Amyl alcohol	3300		560	2000	ug/L	255089	20	02/02/2018 05:28	NP
tert-Amyl methyl ether	BRL		67	200	ug/L	255089	20	02/02/2018 05:28	NP
tert-Butyl Alcohol	BRL		270	2000	ug/L	255089	20	02/02/2018 05:28	NP
tert-Butyl formate	BRL		260	2000	ug/L	255089	20	02/02/2018 05:28	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 23
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 8:50:00 AM
Lab ID:	1801N71-053	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/01/2018 18:54	NP
Benzene	1100		3.7	10	ug/L	255089	10	02/01/2018 19:18	NP
Ethylbenzene	300		2.6	10	ug/L	255089	10	02/01/2018 19:18	NP
Methyl tert-butyl ether	11		0.45	1.0	ug/L	255089	1	02/01/2018 18:54	NP
Naphthalene	1200		9.3	50	ug/L	255089	10	02/01/2018 19:18	NP
Toluene	4700		20	50	ug/L	255089	50	02/02/2018 18:28	NP
Xylenes, Total	8500		38	50	ug/L	255089	50	02/02/2018 18:28	NP
Surr: 4-Bromofluorobenzene	96.5		0	70-130	%REC	255089	50	02/02/2018 18:28	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	255089	10	02/01/2018 19:18	NP
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	255089	1	02/01/2018 18:54	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	255089	50	02/02/2018 18:28	NP
Surr: Dibromofluoromethane	96.8		0	70-130	%REC	255089	1	02/01/2018 18:54	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	255089	10	02/01/2018 19:18	NP
Surr: Toluene-d8	108		0	70-130	%REC	255089	50	02/02/2018 18:28	NP
Surr: Toluene-d8	107		0	70-130	%REC	255089	10	02/01/2018 19:18	NP
Surr: Toluene-d8	110		0	70-130	%REC	255089	1	02/01/2018 18:54	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/01/2018 18:54	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/01/2018 18:54	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/01/2018 18:54	NP
Isopropyl ether	46		3.8	10	ug/L	255089	1	02/01/2018 18:54	NP
tert-Amyl alcohol	2700		28	100	ug/L	255089	1	02/01/2018 18:54	NP
tert-Amyl methyl ether	11		3.4	10	ug/L	255089	1	02/01/2018 18:54	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/01/2018 18:54	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/01/2018 18:54	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 5
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 8:55:00 AM
Lab ID:	1801N71-054	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/01/2018 21:39	NP
Benzene	1100		3.7	10	ug/L	255089	10	02/01/2018 22:03	NP
Ethylbenzene	310		2.6	10	ug/L	255089	10	02/01/2018 22:03	NP
Methyl tert-butyl ether	12		0.45	1.0	ug/L	255089	1	02/01/2018 21:39	NP
Naphthalene	1200		9.3	50	ug/L	255089	10	02/01/2018 22:03	NP
Toluene	4800		20	50	ug/L	255089	50	02/02/2018 19:39	NP
Xylenes, Total	8600		38	50	ug/L	255089	50	02/02/2018 19:39	NP
Surr: 4-Bromofluorobenzene	96.7		0	70-130	%REC	255089	50	02/02/2018 19:39	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	255089	10	02/01/2018 22:03	NP
Surr: 4-Bromofluorobenzene	109		0	70-130	%REC	255089	1	02/01/2018 21:39	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	255089	50	02/02/2018 19:39	NP
Surr: Dibromofluoromethane	95.5		0	70-130	%REC	255089	1	02/01/2018 21:39	NP
Surr: Dibromofluoromethane	98.8		0	70-130	%REC	255089	10	02/01/2018 22:03	NP
Surr: Toluene-d8	107		0	70-130	%REC	255089	50	02/02/2018 19:39	NP
Surr: Toluene-d8	106		0	70-130	%REC	255089	10	02/01/2018 22:03	NP
Surr: Toluene-d8	109		0	70-130	%REC	255089	1	02/01/2018 21:39	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/01/2018 21:39	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/01/2018 21:39	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/01/2018 21:39	NP
Isopropyl ether	45		3.8	10	ug/L	255089	1	02/01/2018 21:39	NP
tert-Amyl alcohol	2500		28	100	ug/L	255089	1	02/01/2018 21:39	NP
tert-Amyl methyl ether	10		3.4	10	ug/L	255089	1	02/01/2018 21:39	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/01/2018 21:39	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/01/2018 21:39	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 30
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 9:05:00 AM
Lab ID:	1801N71-055	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 04:18	NP
Benzene	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 04:18	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255089	1	02/02/2018 04:18	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/02/2018 04:18	NP
Naphthalene	BRL		0.93	5.0	ug/L	255089	1	02/02/2018 04:18	NP
Toluene	BRL		0.39	1.0	ug/L	255089	1	02/02/2018 04:18	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255089	1	02/02/2018 04:18	NP
Surr: 4-Bromofluorobenzene	93.8		0	70-130	%REC	255089	1	02/02/2018 04:18	NP
Surr: Dibromofluoromethane	106		0	70-130	%REC	255089	1	02/02/2018 04:18	NP
Surr: Toluene-d8	104		0	70-130	%REC	255089	1	02/02/2018 04:18	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/02/2018 04:18	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/02/2018 04:18	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/02/2018 04:18	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/02/2018 04:18	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/02/2018 04:18	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/02/2018 04:18	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/02/2018 04:18	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/02/2018 04:18	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 32
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 9:15:00 AM
Lab ID:	1801N71-056	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 07:26	NP
Benzene	2.5		0.37	1.0	ug/L	255089	1	02/02/2018 07:26	NP
Ethylbenzene	1.9		0.26	1.0	ug/L	255089	1	02/02/2018 07:26	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/02/2018 07:26	NP
Naphthalene	28		0.93	5.0	ug/L	255089	1	02/02/2018 07:26	NP
Toluene	0.41	J	0.39	1.0	ug/L	255089	1	02/02/2018 07:26	NP
Xylenes, Total	1.2		0.77	1.0	ug/L	255089	1	02/02/2018 07:26	NP
Surr: 4-Bromofluorobenzene	98.4		0	70-130	%REC	255089	1	02/02/2018 07:26	NP
Surr: Dibromofluoromethane	99.9		0	70-130	%REC	255089	1	02/02/2018 07:26	NP
Surr: Toluene-d8	105		0	70-130	%REC	255089	1	02/02/2018 07:26	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/02/2018 07:26	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/02/2018 07:26	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/02/2018 07:26	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/02/2018 07:26	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/02/2018 07:26	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/02/2018 07:26	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/02/2018 07:26	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/02/2018 07:26	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 29
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 9:25:00 AM
Lab ID:	1801N71-057	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 07:49	NP
Benzene	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 07:49	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255089	1	02/02/2018 07:49	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/02/2018 07:49	NP
Naphthalene	BRL		0.93	5.0	ug/L	255089	1	02/02/2018 07:49	NP
Toluene	BRL		0.39	1.0	ug/L	255089	1	02/02/2018 07:49	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255089	1	02/02/2018 07:49	NP
Surr: 4-Bromofluorobenzene	96.1		0	70-130	%REC	255089	1	02/02/2018 07:49	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	255089	1	02/02/2018 07:49	NP
Surr: Toluene-d8	104		0	70-130	%REC	255089	1	02/02/2018 07:49	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/02/2018 07:49	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/02/2018 07:49	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/02/2018 07:49	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/02/2018 07:49	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/02/2018 07:49	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/02/2018 07:49	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/02/2018 07:49	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/02/2018 07:49	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 28
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 9:35:00 AM
Lab ID:	1801N71-058	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 08:13	NP
Benzene	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 08:13	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255089	1	02/02/2018 08:13	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/02/2018 08:13	NP
Naphthalene	BRL		0.93	5.0	ug/L	255089	1	02/02/2018 08:13	NP
Toluene	BRL		0.39	1.0	ug/L	255089	1	02/02/2018 08:13	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255089	1	02/02/2018 08:13	NP
Surr: 4-Bromofluorobenzene	93.2		0	70-130	%REC	255089	1	02/02/2018 08:13	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	255089	1	02/02/2018 08:13	NP
Surr: Toluene-d8	104		0	70-130	%REC	255089	1	02/02/2018 08:13	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/02/2018 08:13	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/02/2018 08:13	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/02/2018 08:13	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/02/2018 08:13	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/02/2018 08:13	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/02/2018 08:13	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/02/2018 08:13	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/02/2018 08:13	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 27
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 9:45:00 AM
Lab ID:	1801N71-059	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 22:25	NP
Benzene	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 22:25	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255089	1	02/02/2018 22:25	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/02/2018 22:25	NP
Naphthalene	BRL		0.93	5.0	ug/L	255089	1	02/02/2018 22:25	NP
Toluene	BRL		0.39	1.0	ug/L	255089	1	02/02/2018 22:25	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255089	1	02/02/2018 22:25	NP
Surr: 4-Bromofluorobenzene	90.8		0	70-130	%REC	255089	1	02/02/2018 22:25	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	255089	1	02/02/2018 22:25	NP
Surr: Toluene-d8	105		0	70-130	%REC	255089	1	02/02/2018 22:25	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/02/2018 09:23	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/02/2018 09:23	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/02/2018 09:23	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/02/2018 09:23	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255089	1	02/02/2018 09:23	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/02/2018 09:23	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/02/2018 09:23	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/02/2018 09:23	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 25
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 9:55:00 AM
Lab ID:	1801N71-060	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255089	1	02/02/2018 08:36	NP
Benzene	10		0.37	1.0	ug/L	255089	1	02/02/2018 08:36	NP
Ethylbenzene	270		2.6	10	ug/L	255089	10	02/02/2018 09:00	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255089	1	02/02/2018 08:36	NP
Naphthalene	520		9.3	50	ug/L	255089	10	02/02/2018 09:00	NP
Toluene	200		3.9	10	ug/L	255089	10	02/02/2018 09:00	NP
Xylenes, Total	4700		7.7	10	ug/L	255089	10	02/02/2018 09:00	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	255089	10	02/02/2018 09:00	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	255089	1	02/02/2018 08:36	NP
Surr: Dibromofluoromethane	97.5		0	70-130	%REC	255089	1	02/02/2018 08:36	NP
Surr: Dibromofluoromethane	97		0	70-130	%REC	255089	10	02/02/2018 09:00	NP
Surr: Toluene-d8	105		0	70-130	%REC	255089	10	02/02/2018 09:00	NP
Surr: Toluene-d8	108		0	70-130	%REC	255089	1	02/02/2018 08:36	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255089	1	02/02/2018 08:36	NP
Ethanol	BRL		43	100	ug/L	255089	1	02/02/2018 08:36	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255089	1	02/02/2018 08:36	NP
Isopropyl ether	BRL		3.8	10	ug/L	255089	1	02/02/2018 08:36	NP
tert-Amyl alcohol	680		28	100	ug/L	255089	1	02/02/2018 08:36	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255089	1	02/02/2018 08:36	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255089	1	02/02/2018 08:36	NP
tert-Butyl formate	BRL		13	100	ug/L	255089	1	02/02/2018 08:36	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 22
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 10:05:00 AM
Lab ID:	1801N71-061	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
1,2-Dichloroethane	BRL		37	100	ug/L	255094	100	01/31/2018 18:27	NP
Benzene	2500		37	100	ug/L	255094	100	01/31/2018 18:27	NP
Ethylbenzene	1600		26	100	ug/L	255094	100	01/31/2018 18:27	NP
Methyl tert-butyl ether	BRL		45	100	ug/L	255094	100	01/31/2018 18:27	NP
Naphthalene	850		93	500	ug/L	255094	100	01/31/2018 18:27	NP
Toluene	18000		200	500	ug/L	255094	500	02/02/2018 11:44	NP
Xylenes, Total	29000		77	100	ug/L	255094	100	01/31/2018 18:27	NP
Surr: 4-Bromofluorobenzene	98.8		0	70-130	%REC	255094	500	02/02/2018 11:44	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	255094	100	01/31/2018 18:27	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	255094	500	02/02/2018 11:44	NP
Surr: Dibromofluoromethane	107		0	70-130	%REC	255094	100	01/31/2018 18:27	NP
Surr: Toluene-d8	105		0	70-130	%REC	255094	500	02/02/2018 11:44	NP
Surr: Toluene-d8	106		0	70-130	%REC	255094	100	01/31/2018 18:27	NP
Oxygenates SW8260B					**(SW5030B)**				
3,3-Dimethyl-1-butanol	BRL		2400	10000	ug/L	255094	100	01/31/2018 18:27	NP
Ethanol	BRL		4300	10000	ug/L	255094	100	01/31/2018 18:27	NP
Ethyl tert-butyl ether	BRL		360	10000	ug/L	255094	100	01/31/2018 18:27	NP
Isopropyl ether	BRL		380	1000	ug/L	255094	100	01/31/2018 18:27	NP
tert-Amyl alcohol	2900	J	2800	10000	ug/L	255094	100	01/31/2018 18:27	NP
tert-Amyl methyl ether	BRL		340	1000	ug/L	255094	100	01/31/2018 18:27	NP
tert-Butyl Alcohol	BRL		1300	10000	ug/L	255094	100	01/31/2018 18:27	NP
tert-Butyl formate	BRL		1300	10000	ug/L	255094	100	01/31/2018 18:27	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 5 AR
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 10:30:00 AM
Lab ID:	1801N71-062	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255094	1	02/02/2018 10:10	NP
Benzene	7000		37	100	ug/L	255094	100	02/02/2018 14:32	NP
Ethylbenzene	960		2.6	10	ug/L	255094	10	02/02/2018 10:34	NP
Methyl tert-butyl ether	19		0.45	1.0	ug/L	255094	1	02/02/2018 10:10	NP
Naphthalene	1100		9.3	50	ug/L	255094	10	02/02/2018 10:34	NP
Toluene	320		3.9	10	ug/L	255094	10	02/02/2018 10:34	NP
Xylenes, Total	2700		7.7	10	ug/L	255094	10	02/02/2018 10:34	NP
Surr: 4-Bromofluorobenzene	98.9		0	70-130	%REC	255094	100	02/02/2018 14:32	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	255094	1	02/02/2018 10:10	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	255094	10	02/02/2018 10:34	NP
Surr: Dibromofluoromethane	95.7		0	70-130	%REC	255094	1	02/02/2018 10:10	NP
Surr: Dibromofluoromethane	96.7		0	70-130	%REC	255094	10	02/02/2018 10:34	NP
Surr: Dibromofluoromethane	98.6		0	70-130	%REC	255094	100	02/02/2018 14:32	NP
Surr: Toluene-d8	104		0	70-130	%REC	255094	100	02/02/2018 14:32	NP
Surr: Toluene-d8	105		0	70-130	%REC	255094	10	02/02/2018 10:34	NP
Surr: Toluene-d8	108		0	70-130	%REC	255094	1	02/02/2018 10:10	NP
Oxygenates SW8260B					(SW5030B)				
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255094	1	02/02/2018 10:10	NP
Ethanol	BRL		43	100	ug/L	255094	1	02/02/2018 10:10	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255094	1	02/02/2018 10:10	NP
Isopropyl ether	150		3.8	10	ug/L	255094	1	02/02/2018 10:10	NP
tert-Amyl alcohol	2700		28	100	ug/L	255094	1	02/02/2018 10:10	NP
tert-Amyl methyl ether	49		3.4	10	ug/L	255094	1	02/02/2018 10:10	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255094	1	02/02/2018 10:10	NP
tert-Butyl formate	BRL		13	100	ug/L	255094	1	02/02/2018 10:10	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 4
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 11:10:00 AM
Lab ID:	1801N71-063	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255094	1	02/02/2018 22:48	NP
Benzene	5.6		0.37	1.0	ug/L	255094	1	02/02/2018 22:48	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255094	1	02/02/2018 22:48	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255094	1	02/02/2018 22:48	NP
Naphthalene	BRL		0.93	5.0	ug/L	255094	1	02/02/2018 22:48	NP
Toluene	1.4		0.39	1.0	ug/L	255094	1	02/02/2018 22:48	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255094	1	02/02/2018 22:48	NP
Surr: 4-Bromofluorobenzene	84.9		0	70-130	%REC	255094	1	02/02/2018 22:48	NP
Surr: Dibromofluoromethane	109		0	70-130	%REC	255094	1	02/02/2018 22:48	NP
Surr: Toluene-d8	105		0	70-130	%REC	255094	1	02/02/2018 22:48	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255094	1	02/02/2018 09:47	NP
Ethanol	BRL		43	100	ug/L	255094	1	02/02/2018 09:47	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255094	1	02/02/2018 09:47	NP
Isopropyl ether	BRL		3.8	10	ug/L	255094	1	02/02/2018 09:47	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255094	1	02/02/2018 09:47	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255094	1	02/02/2018 09:47	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255094	1	02/02/2018 09:47	NP
tert-Butyl formate	BRL		13	100	ug/L	255094	1	02/02/2018 09:47	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 3
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 11:50:00 AM
Lab ID:	1801N71-064	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255094	1	02/02/2018 20:03	NP
Benzene	700		3.7	10	ug/L	255094	10	02/02/2018 20:27	NP
Ethylbenzene	210		2.6	10	ug/L	255094	10	02/02/2018 20:27	NP
Methyl tert-butyl ether	44		0.45	1.0	ug/L	255094	1	02/02/2018 20:03	NP
Naphthalene	68		0.93	5.0	ug/L	255094	1	02/02/2018 20:03	NP
Toluene	960		3.9	10	ug/L	255094	10	02/02/2018 20:27	NP
Xylenes, Total	410		0.77	1.0	ug/L	255094	1	02/02/2018 20:03	NP
Surr: 4-Bromofluorobenzene	96.6		0	70-130	%REC	255094	1	02/02/2018 20:03	NP
Surr: 4-Bromofluorobenzene	99.5		0	70-130	%REC	255094	10	02/02/2018 20:27	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	255094	1	02/02/2018 20:03	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	255094	10	02/02/2018 20:27	NP
Surr: Toluene-d8	105		0	70-130	%REC	255094	10	02/02/2018 20:27	NP
Surr: Toluene-d8	107		0	70-130	%REC	255094	1	02/02/2018 20:03	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255094	1	02/02/2018 20:03	NP
Ethanol	BRL		43	100	ug/L	255094	1	02/02/2018 20:03	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255094	1	02/02/2018 20:03	NP
Isopropyl ether	41		3.8	10	ug/L	255094	1	02/02/2018 20:03	NP
tert-Amyl alcohol	790		28	100	ug/L	255094	1	02/02/2018 20:03	NP
tert-Amyl methyl ether	10		3.4	10	ug/L	255094	1	02/02/2018 20:03	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255094	1	02/02/2018 20:03	NP
tert-Butyl formate	BRL		13	100	ug/L	255094	1	02/02/2018 20:03	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 6
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018 11:55:00 AM
Lab ID:	1801N71-065	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255094	1	02/02/2018 23:11	NP
Benzene	740		3.7	10	ug/L	255094	10	02/02/2018 23:35	NP
Ethylbenzene	220		2.6	10	ug/L	255094	10	02/02/2018 23:35	NP
Methyl tert-butyl ether	41		0.45	1.0	ug/L	255094	1	02/02/2018 23:11	NP
Naphthalene	67		0.93	5.0	ug/L	255094	1	02/02/2018 23:11	NP
Toluene	1000		3.9	10	ug/L	255094	10	02/02/2018 23:35	NP
Xylenes, Total	420		0.77	1.0	ug/L	255094	1	02/02/2018 23:11	NP
Surr: 4-Bromofluorobenzene	94		0	70-130	%REC	255094	10	02/02/2018 23:35	NP
Surr: 4-Bromofluorobenzene	98.4		0	70-130	%REC	255094	1	02/02/2018 23:11	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	255094	1	02/02/2018 23:11	NP
Surr: Dibromofluoromethane	105		0	70-130	%REC	255094	10	02/02/2018 23:35	NP
Surr: Toluene-d8	105		0	70-130	%REC	255094	10	02/02/2018 23:35	NP
Surr: Toluene-d8	108		0	70-130	%REC	255094	1	02/02/2018 23:11	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255094	1	02/02/2018 23:11	NP
Ethanol	BRL		43	100	ug/L	255094	1	02/02/2018 23:11	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255094	1	02/02/2018 23:11	NP
Isopropyl ether	40		3.8	10	ug/L	255094	1	02/02/2018 23:11	NP
tert-Amyl alcohol	730		28	100	ug/L	255094	1	02/02/2018 23:11	NP
tert-Amyl methyl ether	10		3.4	10	ug/L	255094	1	02/02/2018 23:11	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255094	1	02/02/2018 23:11	NP
tert-Butyl formate	BRL		13	100	ug/L	255094	1	02/02/2018 23:11	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	TRIP BLANK 1
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018
Lab ID:	1801N71-066	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255094	1	02/01/2018 13:45	NP
Benzene	BRL		0.37	1.0	ug/L	255094	1	02/01/2018 13:45	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255094	1	02/01/2018 13:45	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255094	1	02/01/2018 13:45	NP
Naphthalene	BRL		0.93	5.0	ug/L	255094	1	02/01/2018 13:45	NP
Toluene	BRL		0.39	1.0	ug/L	255094	1	02/01/2018 13:45	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255094	1	02/01/2018 13:45	NP
Surr: 4-Bromofluorobenzene	86.4		0	70-130	%REC	255094	1	02/01/2018 13:45	NP
Surr: Dibromofluoromethane	109		0	70-130	%REC	255094	1	02/01/2018 13:45	NP
Surr: Toluene-d8	103		0	70-130	%REC	255094	1	02/01/2018 13:45	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255094	1	02/01/2018 13:45	NP
Ethanol	BRL		43	100	ug/L	255094	1	02/01/2018 13:45	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255094	1	02/01/2018 13:45	NP
Isopropyl ether	BRL		3.8	10	ug/L	255094	1	02/01/2018 13:45	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255094	1	02/01/2018 13:45	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255094	1	02/01/2018 13:45	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255094	1	02/01/2018 13:45	NP
tert-Butyl formate	BRL		13	100	ug/L	255094	1	02/01/2018 13:45	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	TRIP BLANK 2
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018
Lab ID:	1801N71-067	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255094	1	02/01/2018 14:08	NP
Benzene	BRL		0.37	1.0	ug/L	255094	1	02/01/2018 14:08	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255094	1	02/01/2018 14:08	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255094	1	02/01/2018 14:08	NP
Naphthalene	BRL		0.93	5.0	ug/L	255094	1	02/01/2018 14:08	NP
Toluene	BRL		0.39	1.0	ug/L	255094	1	02/01/2018 14:08	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255094	1	02/01/2018 14:08	NP
Surr: 4-Bromofluorobenzene	90.4		0	70-130	%REC	255094	1	02/01/2018 14:08	NP
Surr: Dibromofluoromethane	110		0	70-130	%REC	255094	1	02/01/2018 14:08	NP
Surr: Toluene-d8	107		0	70-130	%REC	255094	1	02/01/2018 14:08	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255094	1	02/01/2018 14:08	NP
Ethanol	BRL		43	100	ug/L	255094	1	02/01/2018 14:08	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255094	1	02/01/2018 14:08	NP
Isopropyl ether	BRL		3.8	10	ug/L	255094	1	02/01/2018 14:08	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255094	1	02/01/2018 14:08	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255094	1	02/01/2018 14:08	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255094	1	02/01/2018 14:08	NP
tert-Butyl formate	BRL		13	100	ug/L	255094	1	02/01/2018 14:08	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Analytical Environmental Services, Inc **Date:** 5-Feb-18

Client:	Crawford Environmental Services	**Client Sample ID:**	TRIP BLANK 3
Project Name:	Clouds Exxon	**Collection Date:**	1/24/2018
Lab ID:	1801N71-068	**Matrix:**	Aqueous

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
1,2-Dichloroethane	BRL		0.37	1.0	ug/L	255094	1	02/01/2018 14:32	NP
Benzene	BRL		0.37	1.0	ug/L	255094	1	02/01/2018 14:32	NP
Ethylbenzene	BRL		0.26	1.0	ug/L	255094	1	02/01/2018 14:32	NP
Methyl tert-butyl ether	BRL		0.45	1.0	ug/L	255094	1	02/01/2018 14:32	NP
Naphthalene	BRL		0.93	5.0	ug/L	255094	1	02/01/2018 14:32	NP
Toluene	BRL		0.39	1.0	ug/L	255094	1	02/01/2018 14:32	NP
Xylenes, Total	BRL		0.77	1.0	ug/L	255094	1	02/01/2018 14:32	NP
Surr: 4-Bromofluorobenzene	91		0	70-130	%REC	255094	1	02/01/2018 14:32	NP
Surr: Dibromofluoromethane	109		0	70-130	%REC	255094	1	02/01/2018 14:32	NP
Surr: Toluene-d8	108		0	70-130	%REC	255094	1	02/01/2018 14:32	NP
Oxygenates SW8260B (SW5030B)									
3,3-Dimethyl-1-butanol	BRL		24	100	ug/L	255094	1	02/01/2018 14:32	NP
Ethanol	BRL		43	100	ug/L	255094	1	02/01/2018 14:32	NP
Ethyl tert-butyl ether	BRL		3.6	100	ug/L	255094	1	02/01/2018 14:32	NP
Isopropyl ether	BRL		3.8	10	ug/L	255094	1	02/01/2018 14:32	NP
tert-Amyl alcohol	BRL		28	100	ug/L	255094	1	02/01/2018 14:32	NP
tert-Amyl methyl ether	BRL		3.4	10	ug/L	255094	1	02/01/2018 14:32	NP
tert-Butyl Alcohol	BRL		13	100	ug/L	255094	1	02/01/2018 14:32	NP
tert-Butyl formate	BRL		13	100	ug/L	255094	1	02/01/2018 14:32	NP

Qualifiers:

- * Value exceeds maximum contaminant level
- BRL Not detected at MDL
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- B Analyte detected in the associated method blank
- NC Not confirmed
- E Estimated value above quantitation range
- S Spike Recovery outside limits due to matrix
- J Estimated value detected below Reporting Limit
- > Greater than Result value
- < Less than Result value
- Narr See case narrative

Clear Save as

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

SAMPLE/COOLER RECEIPT CHECKLIST

1. Client Name: **Access Analytical, Inc.** AES Work Order Number: **1801N71**

2. Carrier: FedEx ■ UPS ☐ USPS ☐ Client ☐ Courier ☐ Other: _____

		Yes	No	N/A	Details	Comments
3.	Shipping container/cooler received in good condition?	⊙	○	○	damaged ☐ leaking ☐ other ☐	
4.	Custody seals present on shipping container?	○	⊙	○		
5.	Custody seals intact on shipping container?	○	○	⊙		
6.	Temperature blanks present?	○	⊙	○		
7.	Cooler temperature(s) within limits of 0-6°C? (See item 13 and 14 for temperature recordings.)	⊙	○	○	Cooling initiated for recently collected samples / ice present ☐	
8.	Chain of Custody (COC) present?	⊙	○	○		
9.	Chain of Custody signed, dated, and timed when relinquished and received?	⊙	○	○		
10.	Sampler name and/or signature on COC?	⊙	○	○		
11.	Were all samples received within holding time?	⊙	○	○		
12.	TAT marked on the COC?	⊙	○	○	If no TAT indicated, proceeded with standard TAT per Terms & Conditions. ☐	

13. Cooler 1 Temperature 1.6 °C Cooler 2 Temperature 3.6 °C Cooler 3 Temperature _____ °C Cooler 4 Temperature _____ °C

14. Cooler 5 Temperature _____ °C Cooler 6 Temperature _____ °C Cooler 7 Temperature _____ °C Cooler 8 Temperature _____ °C

15. Comments: _____

I certify that I have completed sections 1-15 (dated initials). MDP 1/30/18

		Yes	No	N/A	Details	Comments
16.	Were sample containers intact upon receipt?	○	⊙	○		
17.	Custody seals present on sample containers?	○	⊙	○		
18.	Custody seals intact on sample containers?	○	○	⊙		
19.	Do sample container labels match the COC?	○	⊙	○	incomplete info ☐ illegible ☐ no label ☐ other ■	
20.	Are analyses requested indicated on the COC?	⊙	○	○		
21.	Were all of the samples listed on the COC received?	⊙	○	○	samples received but not listed on COC ☐ samples listed on COC not received ☐	
22.	Was the sample collection date/time noted?	⊙	○	○		
23.	Did we receive sufficient sample volume for indicated analyses?	⊙	○	○		
24.	Were samples received in appropriate containers?	⊙	○	○		
25.	Were VOA samples received without headspace (< 1/4" bubble)?	⊙	○	○		
26.	Were trip blanks submitted?	⊙	○	○	listed on COC ☐ not listed on COC ■	

27. Comments: _____

I certify that I have completed sections 16-27 (dated initials). MDP 1/30/18

This section only applies to samples where pH can be checked at Sample Receipt.

		Yes	No	N/A	Details	Comments
28.	Have containers needing chemical preservation been checked? *	○	○	⊙		
29.	Containers meet preservation guidelines?	○	○	⊙		
30.	Was pH adjusted at Sample Receipt?	○	○	⊙		

* Note: Certain analyses require chemical preservation but must be checked in the laboratory and not upon Sample Receipt such as Coliforms, VOCs and Oil & Grease/TPH.

I certify that I have completed sections 28-30 (dated initials). MDP 1/30/18

Checklist 6.9.17 Rev 2

Locked

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255082

Sample ID: MB-255082	Client ID:		Units: ug/L	Prep Date: 01/31/2018	Run No: 362046
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B		BatchID: 255082	Analysis Date: 01/31/2018	Seq No: 7996344

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	45.60	0	50.00		91.2	70	130				
Surr: Dibromofluoromethane	53.66	0	50.00		107	70	130				
Surr: Toluene-d8	51.97	0	50.00		104	70	130				

Sample ID: MB-255082	Client ID:		Units: ug/L	Prep Date: 01/31/2018	Run No: 362046
SampleType: MBLK	TestCode: Oxygenates SW8260B		BatchID: 255082	Analysis Date: 01/31/2018	Seq No: 7996817

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: LCS-255082	Client ID:		Units: ug/L	Prep Date: 01/31/2018	Run No: 362046
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B		BatchID: 255082	Analysis Date: 01/31/2018	Seq No: 7996352

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:					
	> Greater than Result value	< Less than Result value	B Analyte detected in the associated method Blank		
	BRL Below reporting limit	E Estimated (value above quantitation range)	H Holding times for preparation or analysis exceeded		
	J Estimated value detected below Reporting Limit	N Analyte not NELAC certified	R RPD outside limits due to matrix		
	Rpt Lim Reporting Limit	S Spike Recovery outside limits due to matrix			

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255082

Sample ID: **LCS-255082**	Client ID:	Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **255082**	Analysis Date: **01/31/2018**	Seq No: **7996352**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	25.40	1.0	20.00		127	70	130				
Benzene	24.62	1.0	20.00		123	70	130				
Ethylbenzene	23.86	1.0	20.00		119	70	130				
Naphthalene	17.37	5.0	20.00		86.8	70	130				
Toluene	23.99	1.0	20.00		120	70	130				
Xylenes, Total	75.42	1.0	60.00		126	70	130				
Surr: 4-Bromofluorobenzene	49.95	0	50.00		99.9	70	130				
Surr: Dibromofluoromethane	55.52	0	50.00		111	70	130				
Surr: Toluene-d8	53.77	0	50.00		108	70	130				

Sample ID: **LCS-255082**	Client ID:	Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**	BatchID: **255082**	Analysis Date: **01/31/2018**	Seq No: **7996816**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	438.3	100	500.0		87.7	70	130				
Ethanol	417.4	100	500.0		83.5	70	130				
Ethyl tert-butyl ether	93.12	20	100.0		93.1	70	130				
Isopropyl ether	91.95	10	100.0		92.0	70	130				
tert-Amyl alcohol	449.0	100	500.0		89.8	70	130				
tert-Amyl methyl ether	93.71	10	100.0		93.7	70	130				
tert-Butyl Alcohol	445.0	100	500.0		89.0	70	130				
tert-Butyl formate	525.6	100	500.0		105	70	130				

Sample ID: **1801N71-004AMS**	Client ID: **MW 3**	Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **255082**	Analysis Date: **01/31/2018**	Seq No: **7996358**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	2101	100	2000		105	67	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255082

Sample ID: 1801N71-004AMS	Client ID: MW 3	Units: ug/L	Prep Date: 01/31/2018	Run No: 362046
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 255082	Analysis Date: 01/31/2018	Seq No: 7996358

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	10290	100	2000	8392	94.8	66.1	137				
Ethylbenzene	4522	100	2000	2431	105	74	134				
Naphthalene	2430	500	2000	738.0	84.6	56.5	132				
Toluene	40070	100	2000	39210	43.3	63.8	141				SE
Xylenes, Total	34480	100	6000	28670	96.8	77.9	138				
Surr: 4-Bromofluorobenzene	5085	0	5000		102	70	130				
Surr: Dibromofluoromethane	5399	0	5000		108	70	130				
Surr: Toluene-d8	5319	0	5000		106	70	130				

Sample ID: 1801N71-004AMS	Client ID: MW 3	Units: ug/L	Prep Date: 01/31/2018	Run No: 362046
SampleType: MS	TestCode: Oxygenates SW8260B	BatchID: 255082	Analysis Date: 01/31/2018	Seq No: 7996821

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	49180	10000	50000		98.4	62.1	130				
Ethanol	40230	10000	50000		80.5	61.6	132				
Ethyl tert-butyl ether	10790	2000	10000		108	69.8	129				
Isopropyl ether	11010	1000	10000		110	69.9	129				
tert-Amyl alcohol	56170	10000	50000		112	69.7	131				
tert-Amyl methyl ether	11290	1000	10000	371.0	109	69.9	130				
tert-Butyl Alcohol	51200	10000	50000		102	65.2	135				
tert-Butyl formate	62790	10000	50000		126	60	128				

Sample ID: 1801N71-004AMSD	Client ID: MW 3	Units: ug/L	Prep Date: 01/31/2018	Run No: 362046
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 255082	Analysis Date: 01/31/2018	Seq No: 7996361

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	2005	100	2000		100	67	133	2101	4.68	20	
Benzene	9661	100	2000	8392	63.4	66.1	137	10290	6.30	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255082

Sample ID: **1801N71-004AMSD**	Client ID: **MW 3**			Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **255082**	Analysis Date: **01/31/2018**	Seq No: **7996361**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	4403	100	2000	2431	98.6	74	134	4522	2.67	20	
Naphthalene	2397	500	2000	738.0	83.0	56.5	132	2430	1.37	41.6	
Toluene	37980	100	2000	39210	-61.5	63.8	141	40070	5.37	20	SE
Xylenes, Total	33400	100	6000	28670	78.8	77.9	138	34480	3.18	20	
Surr: 4-Bromofluorobenzene	5022	0	5000		100	70	130	5085	0	0	
Surr: Dibromofluoromethane	5254	0	5000		105	70	130	5399	0	0	
Surr: Toluene-d8	5226	0	5000		105	70	130	5319	0	0	

Sample ID: **1801N71-004AMSD**	Client ID: **MW 3**			Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **MSD**	TestCode: **Oxygenates SW8260B**			BatchID: **255082**	Analysis Date: **01/31/2018**	Seq No: **7996822**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	51910	10000	50000		104	62.1	130	49180	5.40	23.1	
Ethanol	38160	10000	50000		76.3	61.6	132	40230	5.27	30.3	
Ethyl tert-butyl ether	10320	2000	10000		103	69.8	129	10790	4.45	17.6	
Isopropyl ether	10480	1000	10000		105	69.9	129	11010	4.98	17.6	
tert-Amyl alcohol	55350	10000	50000		111	69.7	131	56170	1.47	24.6	
tert-Amyl methyl ether	10680	1000	10000	371.0	103	69.9	130	11290	5.52	17.8	
tert-Butyl Alcohol	51700	10000	50000		103	65.2	135	51200	0.974	30.9	
tert-Butyl formate	59450	10000	50000		119	60	128	62790	5.46	18.1	

Qualifiers:

>	Greater than Result value	<	Less than Result value
BRL	Below reporting limit	E	Estimated (value above quantitation range)
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix
B	Analyte detected in the associated method blank		
H	Holding times for preparation or analysis exceeded		
R	RPD outside limits due to matrix		

Analytical Environmental Services, Inc Date: 5-Feb-18

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255085

Sample ID: **MB-255085**	Client ID:			Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **255085**	Analysis Date: **01/31/2018**	Seq No: **7996347**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	45.42	0	50.00		90.8	70	130				
Surr: Dibromofluoromethane	53.73	0	50.00		107	70	130				
Surr: Toluene-d8	52.54	0	50.00		105	70	130				

Sample ID: **MB-255085**	Client ID:			Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **MBLK**	TestCode: **Oxygenates SW8260B**			BatchID: **255085**	Analysis Date: **01/31/2018**	Seq No: **7996818**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-255085**	Client ID:			Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **255085**	Analysis Date: **01/31/2018**	Seq No: **7996350**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255085

Sample ID: **LCS-255085** Client ID: Units: **ug/L** Prep Date: **01/31/2018** Run No: **362046**
SampleType: **LCS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **255085** Analysis Date: **01/31/2018** Seq No: **7996350**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	22.22	1.0	20.00		111	70	130				
Benzene	21.22	1.0	20.00		106	70	130				
Ethylbenzene	21.10	1.0	20.00		106	70	130				
Naphthalene	15.38	5.0	20.00		76.9	70	130				
Toluene	20.35	1.0	20.00		102	70	130				
Xylenes, Total	66.43	1.0	60.00		111	70	130				
Surr: 4-Bromofluorobenzene	49.85	0	50.00		99.7	70	130				
Surr: Dibromofluoromethane	54.46	0	50.00		109	70	130				
Surr: Toluene-d8	52.48	0	50.00		105	70	130				

Sample ID: **LCS-255085** Client ID: Units: **ug/L** Prep Date: **01/31/2018** Run No: **362046**
SampleType: **LCS** TestCode: **Oxygenates SW8260B** BatchID: **255085** Analysis Date: **01/31/2018** Seq No: **7996819**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	399.6	100	500.0		79.9	70	130				
Ethanol	447.6	100	500.0		89.5	70	130				
Ethyl tert-butyl ether	102.0	20	100.0		102	70	130				
Isopropyl ether	104.1	10	100.0		104	70	130				
tert-Amyl alcohol	460.9	100	500.0		92.2	70	130				
tert-Amyl methyl ether	100.8	10	100.0		101	70	130				
tert-Butyl Alcohol	421.0	100	500.0		84.2	70	130				
tert-Butyl formate	595.3	100	500.0		119	70	130				

Sample ID: **1801N71-002AMS** Client ID: **DW 1** Units: **ug/L** Prep Date: **01/31/2018** Run No: **362046**
SampleType: **MS** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **255085** Analysis Date: **01/31/2018** Seq No: **7996371**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	23.60	1.0	20.00		118	67	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255085

Sample ID: 1801N71-002AMS	Client ID: DW 1			Units: ug/L		Prep Date: 01/31/2018		Run No: 362046	
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B			BatchID: 255085		Analysis Date: 01/31/2018		Seq No: 7996371	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	22.53	1.0	20.00		113	66.1	137				
Ethylbenzene	22.66	1.0	20.00		113	74	134				
Naphthalene	15.90	5.0	20.00	1.360	72.7	56.5	132				
Toluene	22.12	1.0	20.00		111	63.8	141				
Xylenes, Total	69.78	1.0	60.00		116	77.9	138				
Surr: 4-Bromofluorobenzene	50.63	0	50.00		101	70	130				
Surr: Dibromofluoromethane	52.70	0	50.00		105	70	130				
Surr: Toluene-d8	52.44	0	50.00		105	70	130				

Sample ID: 1801N71-002AMS	Client ID: DW 1			Units: ug/L		Prep Date: 01/31/2018		Run No: 362046	
SampleType: MS	TestCode: Oxygenates SW8260B			BatchID: 255085		Analysis Date: 01/31/2018		Seq No: 7996824	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	407.9	100	500.0		81.6	62.1	130				
Ethanol	373.9	100	500.0		74.8	61.6	132				
Ethyl tert-butyl ether	108.1	20	100.0		108	69.8	129				
Isopropyl ether	111.9	10	100.0		112	69.9	129				
tert-Amyl alcohol	494.8	100	500.0		99.0	69.7	131				
tert-Amyl methyl ether	106.0	10	100.0		106	69.9	130				
tert-Butyl Alcohol	563.7	100	500.0		113	65.2	135				
tert-Butyl formate	349.3	100	500.0		69.9	60	128				

Sample ID: 1801N71-002AMSD	Client ID: DW 1			Units: ug/L		Prep Date: 01/31/2018		Run No: 362046	
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B			BatchID: 255085		Analysis Date: 01/31/2018		Seq No: 7996372	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	22.34	1.0	20.00		112	67	133	23.60	5.49	20	
Benzene	21.28	1.0	20.00		106	66.1	137	22.53	5.71	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255085

Sample ID: **1801N71-002AMSD**	Client ID: **DW 1**			Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **255085**	Analysis Date: **01/31/2018**	Seq No: **7996372**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	21.82	1.0	20.00		109	74	134	22.66	3.78	20	
Naphthalene	15.30	5.0	20.00	1.360	69.7	56.5	132	15.90	3.85	41.6	
Toluene	20.81	1.0	20.00		104	63.8	141	22.12	6.10	20	
Xylenes, Total	68.40	1.0	60.00		114	77.9	138	69.78	2.00	20	
Surr: 4-Bromofluorobenzene	50.42	0	50.00		101	70	130	50.63	0	0	
Surr: Dibromofluoromethane	53.05	0	50.00		106	70	130	52.70	0	0	
Surr: Toluene-d8	52.06	0	50.00		104	70	130	52.44	0	0	

Sample ID: **1801N71-002AMSD**	Client ID: **DW 1**			Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **MSD**	TestCode: **Oxygenates SW8260B**			BatchID: **255085**	Analysis Date: **01/31/2018**	Seq No: **7996825**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	486.5	100	500.0		97.3	62.1	130	407.9	17.6	23.1	
Ethanol	391.4	100	500.0		78.3	61.6	132	373.9	4.56	30.3	
Ethyl tert-butyl ether	102.0	20	100.0		102	69.8	129	108.1	5.85	17.6	
Isopropyl ether	105.8	10	100.0		106	69.9	129	111.9	5.57	17.6	
tert-Amyl alcohol	531.4	100	500.0		106	69.7	131	494.8	7.13	24.6	
tert-Amyl methyl ether	101.8	10	100.0		102	69.9	130	106.0	4.04	17.8	
tert-Butyl Alcohol	648.5	100	500.0		130	65.2	135	563.7	14.0	30.9	
tert-Butyl formate	276.2	100	500.0		55.2	60	128	349.3	23.4	18.1	SR

Qualifiers:

>	Greater than Result value	<	Less than Result value
B	Analyte detected in the associated method Blank	BRL	Below reporting limit
E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified
R	RPD outside limits due to matrix	Rpt Lim	Reporting Limit
S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc Date: 5-Feb-18

Client: Crowford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255089

Sample ID: MB-255089	Client ID:				Units: ug/L		Prep Date: 01/31/2018		Run No: 362046
SampleType: MBLK	TestCode: Volatile Organic Compounds by GC/MS SW8260B				BatchID: 255089		Analysis Date: 01/31/2018		Seq No: 7996738
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	45.87	0	50.00		91.7	70	130				
Surr: Dibromofluoromethane	54.30	0	50.00		109	70	130				
Surr: Toluene-d8	52.44	0	50.00		105	70	130				

Sample ID: MB-255089	Client ID:				Units: ug/L		Prep Date: 01/31/2018		Run No: 362046
SampleType: MBLK	TestCode: Oxygenates SW8260B				BatchID: 255089		Analysis Date: 01/31/2018		Seq No: 7996827
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: LCS-255089	Client ID:				Units: ug/L		Prep Date: 01/31/2018		Run No: 362046
SampleType: LCS	TestCode: Volatile Organic Compounds by GC/MS SW8260B				BatchID: 255089		Analysis Date: 01/31/2018		Seq No: 7996743
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255089

Sample ID: **LCS-255089**	Client ID:		Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **255089**	Analysis Date: **01/31/2018**	Seq No: **7996743**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	19.90	1.0	20.00		99.5	70	130				
Benzene	19.23	1.0	20.00		96.2	70	130				
Ethylbenzene	18.72	1.0	20.00		93.6	70	130				
Naphthalene	16.37	5.0	20.00		81.8	70	130				
Toluene	18.84	1.0	20.00		94.2	70	130				
Xylenes, Total	60.36	1.0	60.00		101	70	130				
Surr: 4-Bromofluorobenzene	50.83	0	50.00		102	70	130				
Surr: Dibromofluoromethane	54.10	0	50.00		108	70	130				
Surr: Toluene-d8	51.75	0	50.00		104	70	130				

Sample ID: **LCS-255089**	Client ID:		Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**		BatchID: **255089**	Analysis Date: **01/31/2018**	Seq No: **7996832**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	563.0	100	500.0		113	70	130				
Ethanol	600.6	100	500.0		120	70	130				
Ethyl tert-butyl ether	110.0	20	100.0		110	70	130				
Isopropyl ether	113.9	10	100.0		114	70	130				
tert-Amyl alcohol	612.0	100	500.0		122	70	130				
tert-Amyl methyl ether	114.3	10	100.0		114	70	130				
tert-Butyl Alcohol	616.8	100	500.0		123	70	130				
tert-Butyl formate	640.2	100	500.0		128	70	130				

Sample ID: **1801N71-045AMS**	Client ID: **PW 1R**		Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **255089**	Analysis Date: **01/31/2018**	Seq No: **7996741**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	2170	100	2000		108	67	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255089

Sample ID: **1801N71-045AMS**	Client ID: **PW 1R**			Units: **ug/L**		Prep Date: **01/31/2018**		Run No: **362046**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **255089**		Analysis Date: **01/31/2018**		Seq No: **7996741**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	2219	100	2000	366.0	92.6	66.1	137				
Ethylbenzene	2393	100	2000	479.0	95.7	74	134				
Naphthalene	2003	500	2000	344.0	83.0	56.5	132				
Toluene	5467	100	2000	4315	57.6	63.8	141				S
Xylenes, Total	17660	100	6000	13170	74.9	77.9	138				S
Surr: 4-Bromofluorobenzene	5320	0	5000		106	70	130				
Surr: Dibromofluoromethane	5349	0	5000		107	70	130				
Surr: Toluene-d8	5316	0	5000		106	70	130				

Sample ID: **1801N71-045AMS**	Client ID: **PW 1R**			Units: **ug/L**		Prep Date: **01/31/2018**		Run No: **362046**	
SampleType: **MS**	TestCode: **Oxygenates SW8260B**			BatchID: **255089**		Analysis Date: **01/31/2018**		Seq No: **7996830**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	53880	10000	50000		108	62.1	130				
Ethanol	40550	10000	50000		81.1	61.6	132				
Ethyl tert-butyl ether	10170	2000	10000		102	69.8	129				
Isopropyl ether	10590	1000	10000		106	69.9	129				
tert-Amyl alcohol	54550	10000	50000		109	69.7	131				
tert-Amyl methyl ether	10130	1000	10000		101	69.9	130				
tert-Butyl Alcohol	51160	10000	50000		102	65.2	135				
tert-Butyl formate	61870	10000	50000		124	60	128				

Sample ID: **1801N71-045AMSD**	Client ID: **PW 1R**			Units: **ug/L**		Prep Date: **01/31/2018**		Run No: **362046**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**			BatchID: **255089**		Analysis Date: **01/31/2018**		Seq No: **7996742**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	1905	100	2000		95.2	67	133	2170	13.0	20	
Benzene	2169	100	2000	366.0	90.2	66.1	137	2219	2.28	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255089

Sample ID: **1801N71-045AMSD** Client ID: **PW 1R** Units: **ug/L** Prep Date: **01/31/2018** Run No: **362046**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **255089** Analysis Date: **01/31/2018** Seq No: **7996742**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	2342	100	2000	479.0	93.2	74	134	2393	2.15	20	
Naphthalene	1955	500	2000	344.0	80.6	56.5	132	2003	2.43	41.6	
Toluene	5299	100	2000	4315	49.2	63.8	141	5467	3.12	20	S
Xylenes, Total	16990	100	6000	13170	63.7	77.9	138	17660	3.87	20	S
Surr: 4-Bromofluorobenzene	5177	0	5000		104	70	130	5320	0	0	
Surr: Dibromofluoromethane	5401	0	5000		108	70	130	5349	0	0	
Surr: Toluene-d8	5299	0	5000		106	70	130	5316	0	0	

Sample ID: **1801N71-045AMSD** Client ID: **PW 1R** Units: **ug/L** Prep Date: **01/31/2018** Run No: **362046**
SampleType: **MSD** TestCode: **Oxygenates SW8260B** BatchID: **255089** Analysis Date: **01/31/2018** Seq No: **7996831**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	47980	10000	50000		96.0	62.1	130	53880	11.6	23.1	
Ethanol	48820	10000	50000		97.6	61.6	132	40550	18.5	30.3	
Ethyl tert-butyl ether	10170	2000	10000		102	69.8	129	10170	0.010	17.6	
Isopropyl ether	10570	1000	10000		106	69.9	129	10590	0.246	17.6	
tert-Amyl alcohol	55730	10000	50000		111	69.7	131	54550	2.15	24.6	
tert-Amyl methyl ether	10270	1000	10000		103	69.9	130	10130	1.30	17.8	
tert-Butyl Alcohol	52840	10000	50000		106	65.2	135	51160	3.23	30.9	
tert-Butyl formate	61050	10000	50000		122	60	128	61870	1.32	18.1	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method Blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Crowford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255094

Sample ID: **MB-255094**	Client ID:		Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **255094**	Analysis Date: **01/31/2018**	Seq No: **7996739**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	BRL	1.0									
Benzene	BRL	1.0									
Ethylbenzene	BRL	1.0									
Methyl tert-butyl ether	BRL	1.0									
Naphthalene	BRL	5.0									
Toluene	BRL	1.0									
Xylenes, Total	BRL	1.0									
Surr: 4-Bromofluorobenzene	45.60	0	50.00		91.2	70	130				
Surr: Dibromofluoromethane	54.93	0	50.00		110	70	130				
Surr: Toluene-d8	52.69	0	50.00		105	70	130				

Sample ID: **MB-255094**	Client ID:		Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **MBLK**	TestCode: **Oxygenates SW8260B**		BatchID: **255094**	Analysis Date: **01/31/2018**	Seq No: **7996828**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	BRL	100									
Ethanol	BRL	100									
Ethyl tert-butyl ether	BRL	100									
Isopropyl ether	BRL	10									
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									
tert-Butyl formate	BRL	100									

Sample ID: **LCS-255094**	Client ID:		Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**		BatchID: **255094**	Analysis Date: **01/31/2018**	Seq No: **7996748**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:
- `>` Greater than Result value
- `<` Less than Result value
- B Analyte detected in the associated method Blank
- BRL Below reporting limit
- E Estimated (value above quantitation range)
- H Holding times for preparation or analysis exceeded
- J Estimated value detected below Reporting Limit
- N Analyte not NELAC certified
- R RPD outside limits due to matrix
- Rpt Lim Reporting Limit
- S Spike Recovery outside limits due to matrix

Client: Crowford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255094

Sample ID: **LCS-255094**	Client ID:	Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **255094**	Analysis Date: **01/31/2018**	Seq No: **7996748**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	20.75	1.0	20.00		104	70	130				
Benzene	21.41	1.0	20.00		107	70	130				
Ethylbenzene	21.33	1.0	20.00		107	70	130				
Naphthalene	18.36	5.0	20.00		91.8	70	130				
Toluene	20.95	1.0	20.00		105	70	130				
Xylenes, Total	68.53	1.0	60.00		114	70	130				
Surr: 4-Bromofluorobenzene	51.57	0	50.00		103	70	130				
Surr: Dibromofluoromethane	53.73	0	50.00		107	70	130				
Surr: Toluene-d8	53.31	0	50.00		107	70	130				

Sample ID: **LCS-255094**	Client ID:	Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**	BatchID: **255094**	Analysis Date: **01/31/2018**	Seq No: **7996836**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	529.7	100	500.0		106	70	130				
Ethanol	536.2	100	500.0		107	70	130				
Ethyl tert-butyl ether	100.3	20	100.0		100	70	130				
Isopropyl ether	103.8	10	100.0		104	70	130				
tert-Amyl alcohol	583.3	100	500.0		117	70	130				
tert-Amyl methyl ether	99.95	10	100.0		100.0	70	130				
tert-Butyl Alcohol	555.8	100	500.0		111	70	130				
tert-Butyl formate	593.6	100	500.0		119	70	130				

Sample ID: **1801N71-061AMS**	Client ID: **MW 22**	Units: **ug/L**	Prep Date: **01/31/2018**	Run No: **362046**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**	BatchID: **255094**	Analysis Date: **01/31/2018**	Seq No: **7996746**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	1903	100	2000		95.2	67	133				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc Date: 5-Feb-18

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255094

Sample ID: 1801N71-061AMS	Client ID: MW 22	Units: ug/L	Prep Date: 01/31/2018	Run No: 362046
SampleType: MS	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 255094	Analysis Date: 01/31/2018	Seq No: 7996746

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	4354	100	2000	2504	92.5	66.1	137				
Ethylbenzene	3522	100	2000	1568	97.7	74	134				
Naphthalene	2736	500	2000	846.0	94.5	56.5	132				
Toluene	24570	100	2000	23990	28.9	63.8	141				SE
Xylenes, Total	34290	100	6000	29230	84.2	77.9	138				
Surr: 4-Bromofluorobenzene	5130	0	5000		103	70	130				
Surr: Dibromofluoromethane	5383	0	5000		108	70	130				
Surr: Toluene-d8	5282	0	5000		106	70	130				

Sample ID: 1801N71-061AMS	Client ID: MW 22	Units: ug/L	Prep Date: 01/31/2018	Run No: 362046
SampleType: MS	TestCode: Oxygenates SW8260B	BatchID: 255094	Analysis Date: 01/31/2018	Seq No: 7996834

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	50120	10000	50000		100	62.1	130				
Ethanol	37970	10000	50000		75.9	61.6	132				
Ethyl tert-butyl ether	10000	2000	10000		100	69.8	129				
Isopropyl ether	10360	1000	10000		104	69.9	129				
tert-Amyl alcohol	55490	10000	50000	2895	105	69.7	131				
tert-Amyl methyl ether	9912	1000	10000		99.1	69.9	130				
tert-Butyl Alcohol	47890	10000	50000		95.8	65.2	135				
tert-Butyl formate	60400	10000	50000		121	60	128				

Sample ID: 1801N71-061AMSD	Client ID: MW 22	Units: ug/L	Prep Date: 01/31/2018	Run No: 362046
SampleType: MSD	TestCode: Volatile Organic Compounds by GC/MS SW8260B	BatchID: 255094	Analysis Date: 01/31/2018	Seq No: 7996747

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,2-Dichloroethane	1833	100	2000		91.6	67	133	1903	3.75	20	
Benzene	4254	100	2000	2504	87.5	66.1	137	4354	2.32	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method Blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc Date: 5-Feb-18

Client: Crawford Environmental Services
Project Name: Clouds Exxon
Workorder: 1801N71

ANALYTICAL QC SUMMARY REPORT

BatchID: 255094

Sample ID: **1801N71-061AMSD** Client ID: **MW 22** Units: **ug/L** Prep Date: **01/31/2018** Run No: **362046**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **255094** Analysis Date: **01/31/2018** Seq No: **7996747**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Ethylbenzene	3432	100	2000	1568	93.2	74	134	3522	2.59	20	
Naphthalene	2772	500	2000	846.0	96.3	56.5	132	2736	1.31	41.6	
Toluene	23880	100	2000	23990	-5.60	63.8	141	24570	2.85	20	SE
Xylenes, Total	33540	100	6000	29230	71.7	77.9	138	34290	2.21	20	S
Surr: 4-Bromofluorobenzene	5149	0	5000		103	70	130	5130	0	0	
Surr: Dibromofluoromethane	5258	0	5000		105	70	130	5383	0	0	
Surr: Toluene-d8	5291	0	5000		106	70	130	5282	0	0	

Sample ID: **1801N71-061AMSD** Client ID: **MW 22** Units: **ug/L** Prep Date: **01/31/2018** Run No: **362046**
SampleType: **MSD** TestCode: **Oxygenates SW8260B** BatchID: **255094** Analysis Date: **01/31/2018** Seq No: **7996835**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
3,3-Dimethyl-1-butanol	51400	10000	50000		103	62.1	130	50120	2.53	23.1	
Ethanol	40710	10000	50000		81.4	61.6	132	37970	6.96	30.3	
Ethyl tert-butyl ether	9940	2000	10000		99.4	69.8	129	10000	0.632	17.6	
Isopropyl ether	10260	1000	10000		103	69.9	129	10360	0.951	17.6	
tert-Amyl alcohol	58310	10000	50000	2895	111	69.7	131	55490	4.95	24.6	
tert-Amyl methyl ether	9886	1000	10000		98.9	69.9	130	9912	0.263	17.8	
tert-Butyl Alcohol	51020	10000	50000		102	65.2	135	47890	6.33	30.9	
tert-Butyl formate	59480	10000	50000		119	60	128	60400	1.53	18.1	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Appendix B

Groundwater Sampling Data Sheets

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO# _____

ACCESS ANALYTICAL, INC.
15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

Client:	Crawford Enviro	Preservatives (see codes):	
Attn:	Dan Fields	Bottle Types (see codes):	
Address:	1701 Stevenson Ave		
City:	Pomona	State: VA	Zip Code: 23017
Phone:	540-343-6256	Fax:	540-343-6255
Email:	[illegible]		
Project ID:	Cloudy Creek		
Sampled By:	Billy Fenny		

REQUESTED LAB ANALYSIS

Preservation Codes / Bottle Types

*Preservative Codes:
0 = None, 1 = HCl, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4, 9 = cooled to 50°C, 10 = cooled to 130°C, 11 = Amm.Cl, 12 = Ascorbic Acid / HCL, 13 = EDA

*Matrix Codes:
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section), NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Waste (for soils, ground waters and waste samples)

*Container Type: G = Glass, F = Plastic

Lab ID:	Sample Name:	Date Collected:	Time Collected:	Sr-Sub C-Comp	Matrix (see codes)	Program Area (see codes)	Total # Containers		Notes / Comments
	MW 2	[illegible]	1350	G	GW	UST	3	# Containers per Test ↓	3
	DW 1		1350					# Containers per Test ↓	
	DW 2		1430					# Containers per Test ↓	
	MW 3		1440					# Containers per Test ↓	
	MW 36		1450					# Containers per Test ↓	
	MW 8		1500					# Containers per Test ↓	
	MW 7		1510					# Containers per Test ↓	
	MW 4		1520					# Containers per Test ↓	
	MW 16		1515					# Containers per Test ↓	
	MW 17		1505					# Containers per Test ↓	

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:		Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice
Standard	X	SC	X	William Fenny	[signature]	[illegible]	1100	X Y N N/A
*Date Required		NC						Y N N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.		Other (Specify):						Y N N/A
								Y N N/A

Chain of Custody Page 1 **of** 7

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: _____ ° (C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.

15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

Client:	[illegible]	Preservatives (see codes):	
Attn:	[illegible]	Bottle Types (see codes):	
Address:	[illegible]		
City:	[illegible]	State: [illegible]	Zip Code: [illegible]
Phone:	[illegible]	Fax:	[illegible]
Email:	[illegible]		
Project ID:	[illegible]		
Sampled By:	[illegible]		

REQUESTED LAB ANALYSIS

Preservation Codes / Bottle Types

*Preservative Codes:
0 = None, 1 = HCL, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4, 9 = cooled to 50°C, 10 = cooled to 5-10°C, 11 = Amm Cl, 12 = Ascorbic Acid / HCL, 13 = EDA

*Matrix Codes:
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section), NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Lab ID:	Sample Name:	Date Collected:	Time Collected:	G=Grab C=Comp	Matrix (see codes)	Program Area (see codes)	Total # Containers									Notes / Comments
	MW 10	[illegible]	[illegible]	G	[illegible]	[illegible]	3	# Containers per Test ID	3							
	MW 9		[illegible]					# Containers per Test ID								
	MW 56		[illegible]					# Containers per Test ID								
	DW 9		[illegible]					# Containers per Test ID								
	MW 79		[illegible]					# Containers per Test ID								
	MW 55		[illegible]					# Containers per Test ID								
	MW 83		[illegible]					# Containers per Test ID								
	MW 11		[illegible]					# Containers per Test ID								
	DW 1		[illegible]					# Containers per Test ID								
	MW 6		[illegible]					# Containers per Test ID								

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:				Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice
Standard	✓	Rush *		SC	X	[illegible]	[illegible]	[illegible]	[illegible]	✓ Y ___ N ___ N/A
*Date Required				NC						___ Y ___ N ___ N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.				Other	(Specify):					___ Y ___ N ___ N/A
										___ Y ___ N ___ N/A

Chain of Custody Page 2 **of** 7

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: _____ °(C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.

15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

Client:	CHAUFORD ENVIRO	Preservatives (see codes):	
Attn:	DAN Fisher	Bottle Types (see codes):	
Address:	1701 Shenandoah Ave		
City:	Roan Ohe	State: VA	Zip Code: 24017
Phone:	540-342-6256	Fax:	540-343-6255
Email:	Dfisher@chauforddenvironmental.com		
Project ID:	Clouds Fetor		
Sampled By:	Billy Ewing		

REQUESTED LAB ANALYSIS: PTEX/NAM/Dr/Ac

Preservation Codes / Bottle Types

*Preservative Codes:
0 = None, 1 = HCL, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4, 9 = cooled to 68°C, 10 = cooled to 610°C, 11 = Amm.Cl, 12 = Ascorbic Acid / HCL, 13 = EDA

*Matrix Codes:
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section) NA = for non regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Lab ID:	Sample Name:	Date Collected:	Time Collected:	Collect Comp	Matrix (see codes)	Preservative (see codes)	Total Containers	REQUESTED LAB ANALYSIS	PTEX/NAM/Dr/Ac							Notes / Comments
	MW22	1-28-18	1005	G	GW	UST	3	# Containers per Test ID	3							
	MW5 AR		1020					# Containers per Test ID								
	DW4		1110					# Containers per Test ID								
	DW3		1150					# Containers per Test ID								
	DW6		1155					# Containers per Test ID								
								# Containers per Test ID								
								# Containers per Test ID								
								# Containers per Test ID								
								# Containers per Test ID								
								# Containers per Test ID								

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:		Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice
Standard	X	SC	X	Billy Ewing	[signature]	1/28/18	1100	X Y ___ N ___ N/A
*Date Required		NC						___ Y ___ N ___ N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.		Other (Specify):						___ Y ___ N ___ N/A
								___ Y ___ N ___ N/A

Chain of Custody Page 7 of 7

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: _____ ° (C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.
15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

Client:	[illegible]	Preservatives (see codes):	
Attn:	[illegible]	Bottle Types (see codes):	
Address:	[illegible]		
City:	[illegible]	State: [illegible]	Zip Code: [illegible]
Phone:	540 343 6756	Fax:	540 343 6759
Email:	[illegible]		
Project ID:	[illegible]		
Sampled By:	[illegible]		

REQUESTED LAB ANALYSIS

Preservation Codes / Bottle Types:

*Preservative Codes:
0 = None, 1 = HCl, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5015 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAc, 8 = H_3PO_4, 9 = cooled to 50°C, 10 = cooled to 510°C, 11 = Amm.Cl, 12 = Ascorbic Acid / HCl, 13 = EDA

*Matrix Codes:
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section), NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewater), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Lab ID	Sample Name	Date Collected	Time Collected	G=Grab C=Comp	Matrix (see codes)	Program Area (see codes)	Total # Containers	REQUESTED LAB ANALYSIS	Notes / Comments
	FB-1	[illegible]	[illegible]	G	GW	[illegible]	3	3	
	FB-2	[illegible]	1200						
	FB-3	[illegible]	500						
	MW 49		1440						
	PW1R		1230						
	MW 19		940						
	MW 11		1420						
	MW 51		1210						
	MW 34		810						
	MW 35		750						

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:				Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice:
Standard	X	Rush*		SC	X	[illegible]	[illegible]	[illegible]	[illegible]	X Y ___ N ___ N/A
*Date Required				NC						___ Y ___ N ___ N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.				Other (Specify):						___ Y ___ N ___ N/A
										___ Y ___ N ___ N/A

Chain of Custody Page 1 of 7

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: _____ °(C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.
15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

Client:	CRAWFORD ENVIRO	Preservatives (see codes):	1
Attn:	DAN Fisher	Bottle Types (see codes):	6
Address:	1701 Shenandoah Ave		
City:	Roanoke	State: VA	Zip Code: 24017
Phone:	540-343-6256	Fax:	540-343-6255
Email:	Dfisher@crawfordenvironmental.com		
Project ID:	Cloud's Exxon		
Sampled By:	Billy E		

REQUESTED LAB ANALYSIS: [illegible]

Preservation Codes / Bottle Types:

*Preservative Codes:
0 = None, 1 = HCl, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 1025 sol w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4, 9 = cooled to 35°C, 10 = cooled to 410°C, 11 = Amm Cl, 12 = Ascorbic Acid / HCl, 13 = EDA

*Matrix Codes:
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section), NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Lab ID	Sample Name	Date Collected	Time Collected	Sample Type	Matrix (see codes)	Program Area (see codes)	Total # Containers	# Containers per Test								Notes / Comments
	DW5	1-24-10	740	G	GW	UST	3	3								
	MW18		830													
	MW23		850													
	DW[illegible]		855													
	MW30		905													
	MW32		915													
	MW29		925													
	MW28		935													
	MW27		945													
	MW25		955													

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:				Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice:
Standard	X	Rush*		SC	X	Billy Ewing	[signature]	1/26/10	1150	X Y N N/A
*Date Required:				NC						Y N N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.				Other (Specify):						Y N N/A
										Y N N/A

Chain of Custody Page 6 of 7

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: _____ ° (C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.
15 Thames Valley Rd
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

Client:

Attn:

Address:

City: State: Zip Code:

Phone: Fax:

Email:

Project ID:

Sampled By:

Preservatives (see codes):

Bottle Types (see codes):

REQUESTED LAB ANALYSIS

Preservation Codes / Bottle Types:

*Preservative Codes:
0 = None, 1 = HCl, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4, 9 = cooled to 6°C, 10 = cooled to 0°C, 11 = Ameri-C®, 12 = Ascorbic Acid / HCl, 13 = EDA

*Matrix Codes:
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section) NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SHW = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Lab ID	Sample Name	Date Collected	Time Collected	G=Grab C=Comp	Matrix (see codes)	Program Area (see codes)	Total # Containers	Notes / Comments

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:				Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice:
Standard		Rush*		SC						Y N N/A
*Date Required				NC						Y N N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.				Other (Specify):						Y N N/A
										Y N N/A

Chain of Custody Page ___ of ___

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: _____ °(C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

Access Lab Report #: _____

Sub Lab (if applicable): _____ / Sub Report #: _____

PO#: _____

ACCESS ANALYTICAL, INC.
15 Thames Valley Rd.
Irmo, SC 29063
Phone: 803-781-4243
Web: www.axs-inc.com

Chain of Custody Record

Client:	[illegible]	Preservatives (see codes):	
Attn:	[illegible]	Bottle Types (see codes):	
Address:	[illegible] AVE		
City:	[illegible]	State: [illegible]	Zip Code: [illegible]
Phone:	[illegible]	Fax:	[illegible]
Email:	[illegible]		
Project ID:	[illegible]		
Sampled By:	[illegible]		

REQUESTED LAB ANALYSIS

Lab ID:	Sample Name:	Date Collected:	Time Collected:	G=Grab C=Comp	Matrix (see codes)	Program Area (see codes)	Total # Containers		Notes / Comments
	MW 63	[illegible]	[illegible]	G	[illegible]	[illegible]	3	# Containers per Test	3
	MW 70		[illegible]					# Containers per Test	
	MW 39		[illegible]					# Containers per Test	
	MW 42		[illegible]					# Containers per Test	
	DW 6		[illegible]					# Containers per Test	
	MW 67		[illegible]					# Containers per Test	
	MW 35		[illegible]					# Containers per Test	
	MW 43		[illegible]					# Containers per Test	
	MW 44		[illegible]					# Containers per Test	
	MW 45		[illegible]					# Containers per Test	

Preservative Codes / Bottle Types:

*Preservative Codes:
0 = None, 1 = HCl, 2 = HNO_3, 3 = H_2SO_4, 4 = NaOH, 5 = $Na_2S_2O_3$, 6 = Method 5035 set w/ $NaHSO_4$ & CH_3OH, 7 = NaOH/ZnOAC, 8 = H_3PO_4, 9 = cooled to 50°C, 10 = cooled to 500°C, 11 = Ammonia, 12 = Ascorbic Acid / HCL, 13 = EDA

*Matrix Codes:
GW = ground water, WW = waste water, DW = drinking water, SW = surface/storm water, S = soil, SL = sludge, A = air, IW = industrial waste, O = other (specify in comments section), NA = for non-regulatory samples

*Program Area Codes:
CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking water), SWA = Solid and Hazardous Wastes (for soils, ground waters and waste samples)

*Container Type: G = Glass, P = Plastic

Auto Sampler Data (composite samples only):

Date/Time On: _____ by whom: _____ Meter Reading Before: _____ Meter Reading After: _____ Difference: _____

Date/Time Off: _____ by whom: _____ X _____ (factor): _____

Turnaround Time Requested:				Project Location:		Relinquished By:	Received By:	Date:	Time (24hr):	Samples Received on Ice:
Standard	X	Rush*		SC	X	[illegible]	[illegible]	[illegible]	[illegible]	Y N N/A
*Date Required				NC						Y N N/A
Rush data emailed/faxed by the end of business day on date required. Standard TAT is 7-10 business days.				Other (Specify):						Y N N/A
										Y N N/A

Chain of Custody Page 1 of ____

Received in lab by: _____

Sample Temp. Upon Receipt in Lab: _____ °(C)

White Copy: Lab original / Canary Copy: File Copy / Pink Copy: Client Copy

NOTE: Relinquishing samples via this Chain of Custody document constitutes client acceptance of Access Analytical terms and conditions.

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Monitoring Well Gauging

Site Information

Date:	Site ID #:	Site Name:
County:	Project Manager:	Field Personnel:

Well Gauging Information

Well ID:	Total Well Depth (ft.)	Screened Interval (ft.)	Depth to Free Product (ft.)	Depth to Ground water (ft.)	Free Product Thickness (ft.)	Confirmed with Bailer?	Photos Taken ?	Well Pad OK?	Bolts in Well Cover?	Water in Well Vault?
DW-6	70	65-70		45.51						
DW-7	55	50-55		DESTROY						
DW-8	55	50-55		LOCKED						
DW-9	65	60-65		23.73						
49	30	15-70		17.83						
39				27.68						

Notes: DUP 3 945

Signature: _____

DHEC

Underground Storage Tank Management Division
Field Data Information Sheet – Monitoring Well Gauging

Site Information

Date:	Site ID #:	Site Name:
County:	Project Manager:	Field Personnel:

Well Gauging Information

Well ID:	Total Well Depth (ft.)	Screened Interval (ft.)	Depth to Free Product (ft.)	Depth to Ground water (ft.)	Free Product Thickness (ft.)	Confirmed with Bailer?	Photos Taken ?	Well Pad OK?	Bolts in Well Cover?	Water in Well Vault?
1				DRY						
2	30	20-30		24.04						
3	29	19-29		23.42						
4	28	18-28		22.19						
5	26	16-26		DRY						
6	30	20-30		24.54						
7	30	20-30		24.58						
8	28	18-28		21.86						
9	30	20-30		22.22						
10	28	18-28		17.28						
11	30	20-30		DESTROY						
12	24.5	14.5 24.5		DESTROY						
13	30	20-30		DESTROY						

Notes: _____

_____

_____

_____ Signature: _____

DHEC

Underground Storage Tank Management Division
Field Data Information Sheet – Monitoring Well Gauging

Site Information		
Date:	Site ID #:	Site Name:
County:	Project Manager:	Field Personnel:

Well Gauging Information

Well ID:	Total Well Depth (ft.)	Screened Interval (ft.)	Depth to Free Product (ft.)	Depth to Ground water (ft.)	Free Product Thickness (ft.)	Confirmed with Bailer?	Photos Taken ?	Well Pad OK?	Bolts in Well Cover?	Water in Well Vault?
15	25	15-25		17.29						
16	25	15-25		19.36						
17	30	20-30		23.87						
18	30	20-30		25.54						
19	30	20-30		25.11						
20	25	15-25		23.83						
22	30	20-30		23.19						
23	30	20-30		25.35						
25	25	15-25		22.06						
26	30	20-30		23.22						
27	30	15-30		19.71						
28	30	15-30		20.30						
29	30	15-30		20.45						

Notes: _____

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_____ Signature: _____

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Monitoring Well Gauging

Site Information

Date:	Site ID #:	Site Name:
County:	Project Manager:	Field Personnel:

Well Gauging Information

Well ID:	Total Well Depth (ft.)	Screened Interval (ft.)	Depth to Free Product (ft.)	Depth to Ground water (ft.)	Free Product Thickness (ft.)	Confirmed with Bailer?	Photos Taken ?	Well Pad OK?	Bolts in Well Cover?	Water in Well Vault?
30	30	15-30		23.22						
31	35	20-35		26.61						
32	30	15-30		23.54						
33	35	20-35		25.02						
34	35	20-35		25.84						
35	35	20-35		24.98						
36	35	20-35		25.02						
37	35	20-35		25.17						
38	35	20-35		26.42						
39	35	20-35		DESTROY						
40	35	20-35		26.88						
41	35	20-35		27.31						
42	35	20-35		27.42						

Notes: _____

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_____ Signature: _____

DHEC

Underground Storage Tank Management Division
Field Data Information Sheet – Monitoring Well Gauging

Site Information

Date:	Site ID #:	Site Name:
County:	Project Manager:	Field Personnel:

Well Gauging Information

Well ID:	Total Well Depth (ft.)	Screened Interval (ft.)	Depth to Free Product (ft.)	Depth to Ground water (ft.)	Free Product Thickness (ft.)	Confirmed with Bailer?	Photos Taken ?	Well Pad OK?	Bolts in Well Cover?	Water in Well Vault?
43	40	20-40		25.84						
44	31	16-31		24.42						
45	30	15-30		22.94						
46	35	20-35		25.26						
48	30	15-30		LOCKED						
50				NO FIND						
51				DESTROY						
53	20	5-20		11.32						
54	1			DESTROY						
55	14	4-14		3.51						
56	20	5-20		8.69						
58				COVERED						
59	17	2-17		6.55						

Notes: _____

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_____ Signature: _____

DHEC

Underground Storage Tank Management Division
Field Data Information Sheet – Monitoring Well Gauging

Site Information

Date:	Site ID #:	Site Name:
County:	Project Manager:	Field Personnel:

Well Gauging Information

Well ID:	Total Well Depth (ft.)	Screened Interval (ft.)	Depth to Free Product (ft.)	Depth to Ground water (ft.)	Free Product Thickness (ft.)	Confirmed with Bailer?	Photos Taken ?	Well Pad OK?	Bolts in Well Cover?	Water in Well Vault?
60	~~28~~ 14	~~20-35~~ 4-14		NO FIND						
62	35	20-35		24.18						
63	35	20-35		25.45						
65				DESTROY						
67	35	20-35		27.44						
70	35	20-35		26.36						
MW-5-AR	28	18-28		23.16						
PW-1-R	50	45-50		24.43						
DW-1	70	65-70		43.95						
DW-2	75	70-75		43.23						
DW-3	52	47-52		25.11						
DW-4	110	105-110		43.33						
DW-5	70	65-70		43.46						

Notes: _____

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_____ Signature: _____

DHEC 0424 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 12/1/18	Site ID #: 02584/0777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiska	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: Dw 4	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 110 to 105		Total Well Depth (TWD) (ft.): 110
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 43.37		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 66.63	1 casing volume (CV = LWC x C) (gals.): 10		3 casing volumes (3 x CV) (gals.): 30

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	10	20	30				
Time (military)	1210	1045	1100	1110				
PH (s.u.)	6.23	5.93	5.57					
Specific Conductivity (uS/cm)	148	145	150					
Water Temperature (°C)	21.53	22.01	21.69					
Turbidity (NTU)	12.6	2.61	4.54					
Dissolved Oxygen (mg/L)	7.90	5.57	5.30					

Sampling Data

Sampled By: Billy E.	Sampling Time: 1110	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 12/V/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiske	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 5A2	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 28 to 18	Total Well Depth (TWD) (ft.): 28
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.16		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 4.84	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1050							
PH (s.u.)	6.59							
Specific Conductivity (µS/cm)	591							
Water Temperature (°C)	22.11							
Turbidity (NTU)	14.9							
Dissolved Oxygen (mg/L)	3.17							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1030	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 20	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 25 to 15	Total Well Depth (TWD) (ft.): 25
Depth to Free Product (DFP) (ft.):		Depth to Groundwater (DGW) (ft.): 23.83	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 1.17		1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	~~1015~~							
PH (s.u.)								
Specific Conductivity (µS/cm)	NOT							
Water Temperature (°C)								
Turbidity (NTU)	Sampled							
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E.	Sampling Time: ~~1015~~	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: Block at 24 HT

Signature: [signature]

DHEC 8423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/22/18	Site ID #: 07584/07771/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name:	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 1	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other_____ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	NOT							
PH (s.u.)	Sample							
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)	Dry							
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E.	Sampling Time: ——	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 5	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 24 to 16		Total Well Depth (TWD) (ft.): 26
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): DRY		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	N							
PH (s.u.)	O							
Specific Conductivity (µS/cm)	T							
Water Temperature (°C)								
Turbidity (NTU)	Sample							
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E.	Sampling Time: ___	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/1/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 12	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	Destroyed							
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E.	Sampling Time: ———	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 13	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	Destroyed							
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E.	Sampling Time: ___	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW48	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other_____ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	Gate							
PH (s.u.)	Locked							
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E.	Sampling Time: ———	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 5D	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other_____ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	Not							
PH (s.u.)	Found							
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E.	Sampling Time: ———	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/1/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 54	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other_____ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	DESTROYED							
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E.	Sampling Time: ———	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy Ealy

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/1/18	Site ID #: 07581/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 58	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	Locked							
PH (s.u.)	NOT							
Specific Conductivity (µS/cm)	Found							
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E.	Sampling Time: _____	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/1/19	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW60	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	NOT							
PH (s.u.)	Found							
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E.	Sampling Time: ___	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/14	Site ID #: 07583/07777/12352	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW65	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	Destroyed							
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy E.	Sampling Time: ———	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/1/18	Site ID #: 07585/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: ~~MW~~ DW7	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	Destroyed							
PH (s.u.)								
Specific Conductivity (µS/cm)	NOT							
Water Temperature (°C)	Sampled							
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Billy F.	Sampling Time: ___	Duplicate: Y or N	If yes, Duplicate Time:

Notes: ___

Signature: Billy F

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: ~~MW~~ DW8	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.):		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	Locked							
PH (s.u.)	gate							
Specific Conductivity (µS/cm)								
Water Temperature (°C)	NOT							
Turbidity (NTU)	Sampled							
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By Billy E.	Sampling Time: ___	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/18	Site ID #: 02584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: ~~Dup~~ DW 3	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 52 to 47		Total Well Depth (TWD) (ft.): 52
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.11		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 26.89	1 casing volume (CV = LWC x C) (gals.): 4.3		3 casing volumes (3 x CV) (gals.): 12.9

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.3	8.6	12.5				
Time (military)	1130	1130	1145	1150				
PH (s.u.)	6.31	6.14	6.13	6.14				
Specific Conductivity (µS/cm)	106	175	177	178				
Water Temperature (°C)	22.01	22.75	22.46	22.87				
Turbidity (NTU)	24.5	24.8	43.0	45.5				
Dissolved Oxygen (mg/L)	2.36	2.60	3.41	3.28				

Sampling Data

Sampled By: Billy E.	Sampling Time: 1150	Duplicate: Y or (N)	If yes, Duplicate Time: 1155

Notes: Dup 6 1155

Signature: Billy Eady

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW2	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.04		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 5.96	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1330							
PH (s.u.)	~~5.99~~ 7.01							
Specific Conductivity (uS/cm)	~~0~~ 2566							
Water Temperature (°C)	~~22.10~~ 24.5							
Turbidity (NTU)	~~0.0~~ 347							
Dissolved Oxygen (mg/L)	~~10.55~~ 2.64							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1330	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/6/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: ~~MW~~ DW1	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 70 to 65	Total Well Depth (TWD) (ft.): 70
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 43.95		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 26.05	1 casing volume (CV = LWC x C) (gals.): 4.1		3 casing volumes (3 x CV) (gals.): 12.3

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.1	8.2	12.3				
Time (military)	13:40	1350	DRY	DRY				
PH (s.u.)	6.45	7.68	↓	↓				
Specific Conductivity (µS/cm)	67	102						
Water Temperature (°C)	22.36	22.11						
Turbidity (NTU)	88.3	<1000						
Dissolved Oxygen (mg/L)	6.36	5.25						

Sampling Data

Sampled By: Billy E.	Sampling Time: 1350	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Busted locking cap

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/8/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: DW2	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 75 to 70	Total Well Depth (TWD) (ft.): 75
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 43.23		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 31.77	1 casing volume (CV = LWC x C) (gals.): 5		3 casing volumes (3 x CV) (gals.): 15

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	5	10	15				
Time (military)	1400	1410	1420	1430				
PH (s.u.)	6.37	6.57	6.59	6.49				
Specific Conductivity (µS/cm)	49	50	62	59				
Water Temperature (°C)	22.54	22.33	22.16	22.02				
Turbidity (NTU)	35.3	479	< 1000	888				
Dissolved Oxygen (mg/L)	5.15	6.59	5.89	5.89				

Sampling Data

Sampled By: Billy E.	Sampling Time: 1430	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Busted locking cap

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/29/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name:	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 3	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 29 to 19	Total Well Depth (TWD) (ft.): 25
Depth to Free Product (DFP) (ft.):		Depth to Groundwater (DGW) (ft.): 23.42	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 5.58		1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1440							
PH (s.u.)	5.57							
Specific Conductivity (µS/cm)	165							
Water Temperature (°C)	24.90							
Turbidity (NTU)	19.5							
Dissolved Oxygen (mg/L)	3.16							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1440	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/7/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 26	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.2		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 6.78	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1450							
PH (s.u.)	5.20							
Specific Conductivity (µS/cm)	102							
Water Temperature (°C)	24.40							
Turbidity (NTU)	14.2							
Dissolved Oxygen (mg/L)	4.63							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1450	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 8	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 18 to 8	Total Well Depth (TWD) (ft.): 18
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 21.86		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 6.14	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1500							
PH (s.u.)	5.10							
Specific Conductivity (µS/cm)	50							
Water Temperature (°C)	24.67							
Turbidity (NTU)	28.6							
Dissolved Oxygen (mg/L)	9.84							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1500	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/17/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 7	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):		Depth to Groundwater (DGW) (ft.): 24.58	Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 5.42		1 casing volume (CV = LWC x C) (gals.):	3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1510							
PH (s.u.)	4.40							
Specific Conductivity (µS/cm)	126							
Water Temperature (°C)	24.58							
Turbidity (NTU)	10.5							
Dissolved Oxygen (mg/L)	5.94							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1510	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/8/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 4	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other ___ Private WSW ___Public WSW	Screened Interval (ft.): 28 to 18		Total Well Depth (TWD) (ft.): 28
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.19		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 5.81	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1520							
PH (s.u.)	4.21							
Specific Conductivity (µS/cm)	147							
Water Temperature (°C)	24.82							
Turbidity (NTU)	499							
Dissolved Oxygen (mg/L)	5.39							

Sampling Data

Sampled By: Billy F.	Sampling Time: 1520	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy F.

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy F
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 16	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 25 to 15	Total Well Depth (TWD) (ft.): 25
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 19.36		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 5.64	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1315							
PH (s.u.)	5.89							
Specific Conductivity (µS/cm)	84							
Water Temperature (°C)	23.13							
Turbidity (NTU)	10.9							
Dissolved Oxygen (mg/L)	2.27							

Sampling Data

Sampled By: Billy F.	Sampling Time: 1315	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy F

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/29/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 17	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.87		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 6.13	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1305							
PH (s.u.)	5.99							
Specific Conductivity (µS/cm)	309							
Water Temperature (°C)	24.11							
Turbidity (NTU)	5.7							
Dissolved Oxygen (mg/L)	2.57							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1305	Duplicate: Y or N	If yes, Duplicate Time:

Notes: No locking cap.

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/22/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 10	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 28 to 18	Total Well Depth (TWD) (ft.): 28
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 17.28		Free Product Thickness (ft.):
Length of water column (LWC = TWD - DGW) (ft.): 10.72	1 casing volume (CV = LWC x C) (gals.): 1.7		3 casing volumes (3 x CV) (gals.): 5.1

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1.7	3.4	5.1				
Time (military)	1220	1230	DRY	DRY				
PH (s.u.)	5.97	6.16	↓	↓				
Specific Conductivity (µS/cm)	383	399						
Water Temperature (°C)	23.61	23.24						
Turbidity (NTU)	184	120						
Dissolved Oxygen (mg/L)	3.82	2.41						

Sampling Data

Sampled By: Billy E.	Sampling Time: 1220	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/29/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 9	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 30 to 20	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.22		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.78	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1255							
PH (s.u.)	6.11							
Specific Conductivity (µS/cm)	308							
Water Temperature (°C)	24.83							
Turbidity (NTU)	14.0							
Dissolved Oxygen (mg/L)	2.47							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1255	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy F
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 56	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other_____ ___Private WSW ___Public WSW	Screened Interval (ft.): 20 to 5		Total Well Depth (TWD) (ft.): 20
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 5.69		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 11.31	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1120							
PH (s.u.)	5.68							
Specific Conductivity (µS/cm)	982							
Water Temperature (°C)	20.11							
Turbidity (NTU)	972							
Dissolved Oxygen (mg/L)	4.73							

Sampling Data

Sampled By: Billy F.	Sampling Time: 1123	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy F

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/27/18	Site ID #: 07584/07777/12352	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: ~~MW~~ DW9	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 65 to 60		Total Well Depth (TWD) (ft.): 65
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.73		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 41.27	1 casing volume (CV = LWC x C) (gals.): 6.6		3 casing volumes (3 x CV) (gals.): 19.8

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	6.6	13.2	19.8				
Time (military)	1010	1040	1050	1100				
PH (s.u.)	5.99	6.13	5.89	5.90				
Specific Conductivity (µS/cm)	104	101	95	87				
Water Temperature (°C)	20.40	20.66	20.62	20.52				
Turbidity (NTU)	30.0	71.6	17.8	8.33				
Dissolved Oxygen (mg/L)	3.17	4.26	4.16	4.01				

Sampling Data

Sampled By: Billy E.	Sampling Time: 1100	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No well cap on well

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/18	Site ID #: 07584/0777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 59	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 17 to 2		Total Well Depth (TWD) (ft.): 17
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 6.55		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.45	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1110							
PH (s.u.)	5.99							
Specific Conductivity (uS/cm)	423							
Water Temperature (°C)	17.80							
Turbidity (NTU)	23.9							
Dissolved Oxygen (mg/L)	2.96							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1110	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/22/18	Site ID #: 07584/07777/12352	Site Name: Cloud's Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 55	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 4 to 14	Total Well Depth (TWD) (ft.): 14
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 3.51		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.49	1 casing volume (CV = LWC x C) (gals.): 1.6		3 casing volumes (3 x CV) (gals.): 4.8

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	1.6	3.2	4.8				
Time (military)	1130	1140	1150	1200				
PH (s.u.)	5.86	5.97	5.94	5.96				
Specific Conductivity (uS/cm)	282	215	216	207				
Water Temperature (°C)	18.57	19.35	20.55	19.93				
Turbidity (NTU)	295	414	586	>1000				
Dissolved Oxygen (mg/L)	2.86	4.03	3.55	3.56				

Sampling Data

Sampled By: Billy E.	Sampling Time: 1200	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/4/18	Site ID #: 07587/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 53	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 5	Total Well Depth (TWD) (ft.): 20
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 11.32		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 8.68	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1210							
PH (s.u.)	4.79							
Specific Conductivity (µS/cm)	97							
Water Temperature (°C)	21.74							
Turbidity (NTU)	125							
Dissolved Oxygen (mg/L)	4.37							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1210	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/09/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 15	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 25 to 15	Total Well Depth (TWD) (ft.): 25
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 17.29		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.71	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1240							
PH (s.u.)	6.24							
Specific Conductivity (µS/cm)	504							
Water Temperature (°C)	23.05							
Turbidity (NTU)	50.4							
Dissolved Oxygen (mg/L)	2.32							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1240	Duplicate: Y or N	If yes, Duplicate Time: 1245

Notes: Busted well casing / No Pad. DWP

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/14/14	Site ID #: 07584/0777/1235	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 6	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.54		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 5.46	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1530							
PH (s.u.)	4.61							
Specific Conductivity (µS/cm)	99							
Water Temperature (°C)	24.98							
Turbidity (NTU)	516							
Dissolved Oxygen (mg/L)	4.26							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1530	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Broken lock cap.

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/23/14	Site ID #: 07584/07777/12352	Site Name: Clouds Eaton	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 33	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 35 to 20	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.02		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.98	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1220	1225						
PH (s.u.)	5.65							
Specific Conductivity (µS/cm)	209							
Water Temperature (°C)	23.72							
Turbidity (NTU)	125							
Dissolved Oxygen (mg/L)	2.57							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1225	Duplicate: (Y) or N	If yes, Duplicate Time:

Notes: Dup 4 1230

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/13/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 46	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 35 to 20		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.26		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.74	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	600							
PH (s.u.)	4.56							
Specific Conductivity (µS/cm)	97							
Water Temperature (°C)	29.27							
Turbidity (NTU)	55.6							
Dissolved Oxygen (mg/L)	7.89							

Sampling Data

Sampled By: Billy E.	Sampling Time: 600	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/23/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskr	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 36	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 35 to 20	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.02		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.98	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1245							
PH (s.u.)	4.83							
Specific Conductivity (µS/cm)	124							
Water Temperature (°C)	23.64							
Turbidity (NTU)	19.2							
Dissolved Oxygen (mg/L)	3.07							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1245	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/30/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW41	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 35 to 20		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 27.31		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.69	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	940							
PH (s.u.)	6.04							
Specific Conductivity (uS/cm)	153							
Water Temperature (°C)	21.51							
Turbidity (NTU)	541							
Dissolved Oxygen (mg/L)	3.00							

Sampling Data

Sampled By: Billy E.	Sampling Time: 940	Duplicate: Y or N	If yes, Duplicate Time:
		Y	945

Notes: DUP 3

Signature: Billy E

DHEC 0423 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/18/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 40	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 35 to 20		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 26.88		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 8.12	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	930							
PH (s.u.)	6.42							
Specific Conductivity (µS/cm)	338							
Water Temperature (°C)	21.57							
Turbidity (NTU)	52.5							
Dissolved Oxygen (mg/L)	2.73							

Sampling Data

Sampled By: Billy E.	Sampling Time: 930	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: H2 By Tractor No gal NO CAP

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/23/18	Site ID #: 07584/02777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 37	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 35 to 20	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.17		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.83	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1200							
PH (s.u.)	4.55							
Specific Conductivity (uS/cm)	112							
Water Temperature (°C)	23.89							
Turbidity (NTU)	259							
Dissolved Oxygen (mg/L)	3.44							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1200	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/13/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW31	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW		Screened Interval (ft.): 35 to 20	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 26.61		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 8.39	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1145							
PH (s.u.)	5.39							
Specific Conductivity (uS/cm)	151							
Water Temperature (°C)	21.34							
Turbidity (NTU)	184							
Dissolved Oxygen (mg/L)	2.63							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1145	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/23/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW62	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 35 to 20	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.18		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.82	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1130							
PH (s.u.)	4.51							
Specific Conductivity (µS/cm)	202							
Water Temperature (°C)	20.94							
Turbidity (NTU)	101							
Dissolved Oxygen (mg/L)	2.99							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1130	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/23/14	Site ID #: 07584/0777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 63	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 35 to 20		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.45		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.55	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1115							
PH (s.u.)	4.28							
Specific Conductivity (µS/cm)	174							
Water Temperature (°C)	12.70							
Turbidity (NTU)	407							
Dissolved Oxygen (mg/L)	3.21							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1115	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/28/18	Site ID #: 02584/07771/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 70	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 35 to 20	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 26.36		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 8.64	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1045							
PH (s.u.)	7.97							
Specific Conductivity (µS/cm)	88							
Water Temperature (°C)	21.67							
Turbidity (NTU)	602							
Dissolved Oxygen (mg/L)	4.25							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1045	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/21/14	Site ID #: 07584/0777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 39	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): to	Total Well Depth (TWD) (ft.):
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 27.68		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.):	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0						
Time (military)		1634						
PH (s.u.)		6.24						
Specific Conductivity (µS/cm)		89						
Water Temperature (°C)		23.07						
Turbidity (NTU)		667						
Dissolved Oxygen (mg/L)		2.73						

Sampling Data

Sampled By: Billy E.	Sampling Time: 1630	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: Found well pad Destroyed By Trucks
NO Locking Cap Well Bowling

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/27/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 42	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 35 to 20		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 27.42		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.58	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	955							
PH (s.u.)	6.04							
Specific Conductivity (µS/cm)	159							
Water Temperature (°C)	22.56							
Turbidity (NTU)	5.1							
Dissolved Oxygen (mg/L)	2.62							

Sampling Data

Sampled By: Billy E.	Sampling Time: 955	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: DAJ Hit destroyed By Tractor

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: ~~MW~~ Dw6	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 70 to 65		Total Well Depth (TWD) (ft.): 70
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 45.51		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 24.49	1 casing volume (CV = LWC x C) (gals.): 3.9		3 casing volumes (3 x CV) (gals.): 11.7

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	3.9	7.8	11.7				
Time (military)	910	920	D	D				
PH (s.u.)	6.83	7.05						
Specific Conductivity (uS/cm)	137	134	R	R				
Water Temperature (°C)	20.93	20.87						
Turbidity (NTU)	62.2	412	Y	Y				
Dissolved Oxygen (mg/L)	4.50	6.04						

Sampling Data

Sampled By: Billy E.	Sampling Time: 910	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/23/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 67	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 35 to 20	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 27.44		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.56	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	900							
PH (s.u.)	4.80							
Specific Conductivity (µS/cm)	125							
Water Temperature (°C)	23.28							
Turbidity (NTU)	205							
Dissolved Oxygen (mg/L)	5.42							

Sampling Data

Sampled By: Billy E.	Sampling Time: 900	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: Hit By Asphalt Remover pad Destroyed Well Broken

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/13/14	Site ID #: 07584/0777/1235	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW38	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 35 to 20		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 26.42		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 8.58	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	840							
PH (s.u.)	4.36							
Specific Conductivity (µS/cm)	46							
Water Temperature (°C)	24.64							
Turbidity (NTU)	5.8							
Dissolved Oxygen (mg/L)	7.82							

Sampling Data

Sampled By: Billy E.	Sampling Time: 840	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/23/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 43	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___Pump
X MW ___IW ___RW ___Other___ ___Private WSW ___Public WSW		Screened Interval (ft.): 20 to 40	Total Well Depth (TWD) (ft.): 40
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25-84		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 14.16	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	820							
PH (s.u.)	4.47							
Specific Conductivity (µS/cm)	108							
Water Temperature (°C)	24.40							
Turbidity (NTU)	10.2							
Dissolved Oxygen (mg/L)	5.60							

Sampling Data

Sampled By: Billy E.	Sampling Time: 830	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/23/14	Site ID #: 07584/0777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 44	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 31 to 16	Total Well Depth (TWD) (ft.): 31
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.42		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 6.58	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	820							
PH (s.u.)	4.24							
Specific Conductivity (µS/cm)	100							
Water Temperature (°C)	24.49							
Turbidity (NTU)	7.5							
Dissolved Oxygen (mg/L)	5.78							

Sampling Data

Sampled By: Billy E.	Sampling Time: 820	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/08/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 4S	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 30 to 15	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.94		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 7.06	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	810							
PH (s.u.)	4.38							
Specific Conductivity (µS/cm)	95							
Water Temperature (°C)	24.32							
Turbidity (NTU)	982							
Dissolved Oxygen (mg/L)	6.62							

Sampling Data

Sampled By: Billy E.	Sampling Time: 810	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/14	Site ID #: 07584/02777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 49	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 30 to 15	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 17.83		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 12.17	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1440							
PH (s.u.)	1.52							
Specific Conductivity (µS/cm)	199							
Water Temperature (°C)	22.47							
Turbidity (NTU)	54.1							
Dissolved Oxygen (mg/L)	6.54							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1440	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E.

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E	
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:		Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: ~~test~~ PW1R	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 50 to 45		Total Well Depth (TWD) (ft.): 50
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.43		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 25.57	1 casing volume (CV = LWC x C) (gals.): 4		3 casing volumes (3 x CV) (gals.): 12

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4	8 PRG	12 PRG				
Time (military)	1210	1220	1230	1240				
PH (s.u.)	5.57	5.67	5.77					
Specific Conductivity (µS/cm)	121	152	154					
Water Temperature (°C)	23.78	24.39	24.70					
Turbidity (NTU)	14.1	334	>1000					
Dissolved Oxygen (mg/L)	3.57	2.58	2.60					

Sampling Data

Sampled By: Billy E.	Sampling Time: 1230	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 12/4/14	Site ID #: 07584/0777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 19	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 30 to 20	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.11		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 4.89	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	840							
PH (s.u.)	5.88							
Specific Conductivity (µS/cm)	374							
Water Temperature (°C)	23.75							
Turbidity (NTU)	87.3							
Dissolved Oxygen (mg/L)	2.68							

Sampling Data

Sampled By: Billy E.	Sampling Time: 840	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 11/1/18	Site ID #: 07584/0777/1235	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 51	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 35	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.82		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.18	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0						
Time (military)	~~DRY~~	1210						
PH (s.u.)		4.89						
Specific Conductivity (µS/cm)		155						
Water Temperature (°C)		22.09						
Turbidity (NTU)		470						
Dissolved Oxygen (mg/L)		4.55						

Sampling Data

Sampled By: Billy E.	Sampling Time: 1410	Duplicate: Y or N	If yes, Duplicate Time:

Notes: IW Locking Cap

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/18	Site ID #: 02584/0777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI d3 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 11	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 20.91		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.09	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	0						
Time (military)		1420						
PH (s.u.)		4.99						
Specific Conductivity (µS/cm)		130						
Water Temperature (°C)		21.17						
Turbidity (NTU)		102						
Dissolved Oxygen (mg/L)		4.61						

Sampling Data

Sampled By: Billy E.	Sampling Time: 1420	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/4/18	Site ID #: 07584/0777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 34	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 35 to 20	Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.84		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.16	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post.	Sampling
Volume Purged (gallons)	0							
Time (military)	810							
PH (s.u.)	5.14							
Specific Conductivity (µS/cm)	140							
Water Temperature (°C)	22.52							
Turbidity (NTU)	44.7							
Dissolved Oxygen (mg/L)	3.49							

Sampling Data

Sampled By: Billy E.	Sampling Time: 810	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 35	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 35 to 20		Total Well Depth (TWD) (ft.): 35
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 24.88		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.12	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	750							
PH (s.u.)	5.36							
Specific Conductivity (µS/cm)	147							
Water Temperature (°C)	22.24							
Turbidity (NTU)	136							
Dissolved Oxygen (mg/L)	2.73							

Sampling Data

Sampled By: Billy E.	Sampling Time: 750	Duplicate: Y or N	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 12/4/18	Site ID #: 07587/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: ~~MW~~ DW5	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ MW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 70 to 65	Total Well Depth (TWD) (ft.): 70
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 43.46		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 26.54	1 casing volume (CV = LWC x C) (gals.): 4.2		3 casing volumes (3 x CV) (gals.): 12.6

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0	4.2	8.4	12.6				
Time (military)	730	740	D	D				
PH (s.u.)	5.49	5.70	D	D				
Specific Conductivity (uS/cm)	127	142	D	D				
Water Temperature (°C)	20.56	20.53	4	4				
Turbidity (NTU)	201	600						
Dissolved Oxygen (mg/L)	3.10	5.13						

Sampling Data

Sampled By: Billy E.	Sampling Time: 740	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/14	Site ID #: 07584/02777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 18	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.54		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 4.46	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	830							
PH (s.u.)	5.70							
Specific Conductivity (µS/cm)	287							
Water Temperature (°C)	13.07							
Turbidity (NTU)	61.5							
Dissolved Oxygen (mg/L)	2.78							

Sampling Data

Sampled By: Billy E.	Sampling Time: 830	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Locking cap

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/21/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 23	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 20 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 25.35		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 4.65	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	850							
PH (s.u.)	5.68							
Specific Conductivity (uS/cm)	220							
Water Temperature (°C)	22.84							
Turbidity (NTU)	27.8							
Dissolved Oxygen (mg/L)	2.60							

Sampling Data

Sampled By: Billy E.	Sampling Time: 858	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: Broken Locking CAP DRS 855

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 12/4/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 30	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ Private WSW ___ Public WSW		Screened Interval (ft.): 10 to 15	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.22		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 6.78	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	905							
PH (s.u.)	5.96							
Specific Conductivity (µS/cm)	212							
Water Temperature (°C)	21.52							
Turbidity (NTU)	115							
Dissolved Oxygen (mg/L)	3.71							

Sampling Data

Sampled By: Billy E.	Sampling Time: 905	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 12/4/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 32	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 30 to 15	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.54		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 6.46	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	915							
PH (s.u.)	5.44							
Specific Conductivity (µS/cm)	187							
Water Temperature (°C)	22.82							
Turbidity (NTU)	81.5							
Dissolved Oxygen (mg/L)	3.00							

Sampling Data

Sampled By: Billy E.	Sampling Time: 915	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 10/4/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW29	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 30 to 15	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 20.45		Free Product Thickness (ft.):
Length of water column (LWC = TWD - DGW) (ft.): 9.55	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	925							
PH (s.u.)	5.39							
Specific Conductivity (uS/cm)	155							
Water Temperature (°C)	20.28							
Turbidity (NTU)	472							
Dissolved Oxygen (mg/L)	3.44							

Sampling Data

Sampled By: Billy E.	Sampling Time: 925	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/18	Site ID #: 07587/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy F
County: Richland	Project Manager: DAN Fiskn	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 28	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 30 to 15	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 20.30		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 9.70	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	935							
PH (s.u.)	4.95							
Specific Conductivity (µSrcm)	128							
Water Temperature (°C)	19.51							
Turbidity (NTU)	67.1							
Dissolved Oxygen (mg/L)	4.60							

Sampling Data

Sampled By: Billy F.	Sampling Time: 935	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy F

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 12/1/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 27	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 30 to 15		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 19.71		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 10.29	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	945							
PH (s.u.)	4.90							
Specific Conductivity (µS/cm)	217							
Water Temperature (°C)	21.52							
Turbidity (NTU)	9.1							
Dissolved Oxygen (mg/L)	4.50							

Sampling Data

Sampled By: Billy E.	Sampling Time: 945	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 12/4/18	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fisher	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 22	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW	Screened Interval (ft.): 30 to 20		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 23.19		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 6.81	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	1005							
PH (s.u.)	5.74							
Specific Conductivity (µS/cm)	182							
Water Temperature (°C)	22.03							
Turbidity (NTU)	18.5							
Dissolved Oxygen (mg/L)	2.86							

Sampling Data

Sampled By: Billy E.	Sampling Time: 1005	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: Billy E

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Sampling

Site Information

Date: 1/24/14	Site ID #: 07584/07777/12352	Site Name: Clouds Exxon	Field Personnel: Billy E
County: Richland	Project Manager: DAN Fiskr	General Weather Conditions:	Ambient Air Temp (°F):

Quality Assurance

Meter Name	Serial #:	Calibration:			
YSI 63 (pH, Specific Conductivity, Temperature)		pH 4.0: Y or N	pH 7.0: Y or N	pH 10.0: Y or N	S.C.: Y or N
YSI 55 (Dissolved Oxygen)		Y or N			
LaMotte (Turbidity)		0.0 NTU: Y or N	1.0 NTU: Y or N	10.0 NTU: Y or N	

Well Information

Well ID: MW 25	Well Diameter (ft.): 2	Conversion Factor (C): 1" well = 0.047, 2" well = 0.16, 4" well = 0.652	Method of Purging/Sample Collection: X Bailer ___ Pump
X MW ___ IW ___ RW ___ Other ___ ___ Private WSW ___ Public WSW		Screened Interval (ft.): 15 to 25	Total Well Depth (TWD) (ft.): 25
Depth to Free Product (DFP) (ft.):	Depth to Groundwater (DGW) (ft.): 22.06		Free Product Thickness (ft.):
Length of water column (LWC = TWD – DGW) (ft.): 2.94	1 casing volume (CV = LWC x C) (gals.):		3 casing volumes (3 x CV) (gals.):

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)	0							
Time (military)	955							
PH (s.u.)	6.00							
Specific Conductivity (uS/cm)	351							
Water Temperature (°C)	20.42							
Turbidity (NTU)	17.4							
Dissolved Oxygen (mg/L)	2.84							

Sampling Data

Sampled By: Billy E.	Sampling Time: 955	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: _____

Appendix C

Disposal Manifest

CRAWFORD
ENVIRONMENTAL
SERVICES

February 14, 2018

South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201

Re: Purge Water Report- Development & Groundwater Sampling
Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352

Dear Project Manager;

The letter presents the certification that Crawford Environmental Services (CES) treated purge waters referenced below with a granular activated carbon unit prior to discharge. This was completed in accordance with the conditions laid out in the "Proposed Conditions for use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater" produced by the SCDHEC Bureau of Water.

A total of 109-gallons was treated on January 22, 23, and 24, 2018 for the above referenced facility.

A record of treatment is available upon request. If you have any questions or comments please feel free to contact us at 540-798-5068.

Sincerely,

Daniel Fisher
Operations Manager
Crawford Environmental Services

Appendix D

QAPP Addendum Contractor Checklist

UST Programmatic QAPP Contractor Checklist				
Item #:	Item	Yes	No	N/A
1	Is Facility Name, Permit #, and address provided?	Yes		
2	Is UST Owner/Operator name, address, provided?			n/a
3	Is name, address, & phone number of current property owner provided?	Yes		
4	Is the SCDHEC Certified UST Site Rehabilitation Contractor's name, address, phone number, and certification number provided?	Yes		
5	Is the name, address ,telephone number, and certification number of the well driller that installed the boring/monitoring wells provided?			n/a
6	Is the name, address, telephone number, and certification number of the certified laboratories performing analytical analyses provided	Yes		
7	Has the facility history be summarized?			n/a
8	Has the regional geology and hydrogeology been summarized?			n/a
9	Are the receptor survey results provided as required?			n/a
10	Has the current use of the site and adjacent land been described?	Yes		
11	Has the site specific geology been described?			n/a
12	Has the primary soil type been described?			n/a
13	Have the field screening results been described?			n/a
14	Has a description of the soil sample collection and preservation been detailed?			n/a
15	Has the field screening methodology been detailed?			n/a
16	Has the monitoring well installation and development dates been provided?			n/a
17	Has the method of well development been detailed? (Table 2)			n/a
18	Has the justification been provided for the locations of the monitoring wells?			n/a
19	Have the monitoring wells been labeled in accordance with the UST QAPP guidelines?	Yes		
20	Has the groundwater sampling methodology been detailed?	Yes		
21	Have the groundwater sampling dates and groundwater measurements been provided?	Yes		
22	Has the purging methodology been detailed?	Yes		
23	Has the volume of water purged from each well been provided along with the measurements to verify purging is complete?	Yes		
24	If free-product is present, has the thickness been provided?			n/a
25	Does the report include a brief discussion of the assessment done and the results?			n/a

UST Programmatic QAPP Contractor Checklist				
26	Does the report include a brief discussion of the aquifer evaluation and the results?	Yes		
27	Does the report include a brief discussion of the fate & transport models used?			n/a
28	Are the site-conceptual tables included (Tier 1 risk evaluation)			n/a
29	Have the exposure pathways been analyzed (Tier 2 risk evauluation)			n/a
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 risk evaluation)	Yes		
31	Have recommendations for further action been provided and explained?			n/a
32	Has the soil analytical data for the site been provided in tabular format? (Table 5)			n/a
33	Has the potentiometric data for the site been provided in tabular format?	Yes		
34	Has the current and historical laboratory data been provided in tabular format	Yes		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			n/a
36	Have the Site conceptual model tables been included (Tier 1 risk evaluation)			n/a
37	Has the topographic map been provided with all the required elements?	Yes		
38	Has the site base map been provided with all the required elements?	Yes		
39	Have the CoC maps been provided?	Yes		
40	Have the potentiometric maps been provided?	Yes		
41	Have the geologic cross-sections been provided			n/a
42	Have maps showing the predicted migration of the CoCs through time been provided?			n/a
43	Has the site survey been provided and include all necessary elements? (Appendix A)			n/a
44	Have the sampling logs, chain of custody forms and analytical data package been included with all elements? (Appendix B)	Yes		
45	Is the laboratory performing the analyses properly certified? (Appendix B)	Yes		
46	Has the tax map been included with all necessary elements? (Appendix C)			n/a
47	Have the soil/boring field screening logs been provided? (Appendix D)			n/a
48	Have the well completion logs been provided? (Appendix E)			n/a
49	Have the aquifer evaluation forms,data, graphs, equations,etc. been provided? (Appendix F)			n/a
50	Have the disposal manifests been provided? (Appendix G)	Yes		
51	Has a copy of the local zoning regulations been provided? (Appendix H)			n/a

UST Programmatic QAPP Contractor Checklist				
52	Has all fate and transport modeling been provided? (Appendix I)			n/a
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			n/a
54	Has a copy of this form been attached to the final report and are explainations for any missing or incomplete data been provided?	Yes		
Comments:				

dhec
Healthy People. Healthy Communities.

OCT 9 2 2018

UST DOCKETING

CERTIFIED MAIL
9214 8969 0099 9790 1412 9293 13

MR CHARLES F CRAWFORD III
CRAWFORD ENVIRONMENTAL SERVICES
1701 SHENANDOAH AVENUE NW
ROANOKE VA 24017-5550

Re: Notice of Failure to Perform #1 Complaint
Invitation for Bid IFB-5400007095-1/30/2014-EMW;
Purchase Order #4600322226
UST Permit #07584 265 tech
College Corner, 2367 Taylor Street, Columbia, SC
Release #1 reported January 30, 1991
Release #2 reported April 17, 1998
UST Permit #07777 199 tech
Clouds Chevron, 1600 Two Notch Road, Columbia, SC
Release reported December 31, 1991
UST Permit #12352 134 tech
Clouds Chevron, 1600 Two Notch Road, Columbia, SC
Release reported December 30, 1991
CASE report review sent April 6, 2018
Richland County

Dear Mr. Crawford:

In accordance with bid specification item III.3.4.A.4, the Underground Storage Tank (UST) Management Division is providing you with notification of your failure to perform, as you have failed to meet contract specification item III.3.5.B.8 that requires reports to be submitted on a semi-annual basis. The UST Division sent you the attached CASE report review letter which notified you that the next Corrective Action System Evaluation (CASE) report was to be submitted by **June 15, 2018** in accordance with the semi-annual CASE reporting schedule. To date, the Division has not received the required report nor has any notification been provided to the Division that problems existed in meeting the due date.

In accordance with bid specification item III.3.4.A.4, the UST Division requests that you be available for a meeting on October 15, 2018 at 2:00 PM to discuss a remedy for this deficiency, or that you submit the CASE report **within 15 days from the date of this letter**. Additionally, future CASE report due dates should not be affected. CASE reports are due on June 15 and December 15 of each year.

On all correspondence regarding this site, please reference UST Permit numbers #07584, #07777 and #12352. If you have questions concerning this correspondence, feel free to contact me by phone at (803) 898-2622, or by email at mooresct@dhec.sc.gov.

Sincerely,

Carolyn T Moores

Carolyn Moores, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

Enc: CASE Report Review

Cc: Matt Winslow, Bureau of Business Management
Technical File
Contractor Certification File

dhec
Healthy People. Healthy Communities.

MR CHARLES F CRAWFORD III
CRAWFORD ENVIRONMENTAL SERVICES
15 CHURCH AVENUE SW
ROANOKE VA 24011

APR 0 6 2018

UST 264 Tech DOCKETING

Re: **Corrective Action System Evaluation (CASE) Report Review**
UST Permit# 07584, College Corner, 2367 Taylor St., Columbia, SC
Release #1 reported January 30, 1991; CA# 47811
Release #2 reported April 17, 1998; CA# 47812
UST Permit # 07777, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 31, 1991; CA# 47813
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 30, 1991; CA# 47814
Contract #IFB-5400007095-1/30/2014-EMW; PO# 4600322226
CASE report received February 28, 2018
Richland County

Dear Mr. Crawford:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the CASE report documenting the corrective action activities and the January 2018 groundwater sampling event. The CASE report has documented 36.15% Chemical of Concern (CoC) reduction.

The semi-annual CASE 8 report is due on or before **June 15, 2018.**

On all correspondence regarding this site, please reference UST Permit #07584, #07777, & #12352. If you have any questions regarding this correspondence, please contact me by telephone at (803) 898-0634, by fax at (803) 898-0673, or by e-mail at kuhnkm@dhec.sc.gov.

Sincerely,

Kimberly M. Kuhn, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

cc: Sylvan Food Systems, Inc., 1245 Boston Ave, West Columbia, SC 29170
Gilbert Walker, Public Housing Authority, Gonzales Gardens, P.O. Box 4307, Columbia, SC 29240
1500 Millwood Ave, LLC, 1330 Devonshire Drive, Columbia, SC 29204
John M. Suddeth, 1410 N Millwood Ave, Columbia, SC 29204
Fung Lau, 2300 Taylor St, Suite D, Columbia, SC 29204
Technical File

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NOV 06 2018

UST DOCKETING

CERTIFIED MAIL
9214 8969 0099 9790 1413 2488 02

MR CHARLES CRAWFORD
CRAWFORD ENVIRONMENTAL SERVICES INC
1701 SHENANDOAH AVENUE NORTH WEST
ROANOKE VA 24017-5550

Re: Resolution of Notice of Failure to Perform #1
IFB-5400007095-1/30/2014-EMW;
Purchase Order #4600322226
UST Permit #07584 - 2400T
College Corner, 2367 Taylor Street, Columbia, SC
Release #1 reported January 30, 1991
Release #2 reported April 17, 1998
UST Permit #07777 - 200T
Clouds Chevron, 1600 Two Notch Road, Columbia, SC
Release reported December 31, 1991
UST Permit #12352 - 1350T
Clouds Chevron, 1600 Two Notch Road, Columbia, SC
Release reported December 30, 1991
Richland County

Dear Mr. Crawford:

Thank you for taking the time October 15, 2018 to meet and discuss the Notice of Failure to Perform issued October 2, 2018 by the Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control. This meeting was conducted in accordance with Contractual Requirement III.3.4.A.4 of corrective action contract IFB-5400007622-4/17/14-EMW.

As discussed, UST Management is requesting your next CASE report due on or before November 30, 2018. Going forward please adhere to the due dates listed below.

UST Permit #	Site Name	CASE Report Due Dates
07584, 07777, 12352	College Corner, Clouds Chevron	May 30 and November 30 each year

UST Permit #	Site Name	QAPP Addendum for Corrective Action
07584, 07777, 12352	College Corner, Clouds Chevron	1st Quarter each year

UST Permit #	Site Name	CAP Addendum
07584, 07777, 12352	College Corner, Clouds Chevron	December 31, 2018

Per the schedule of deliverables in section 3.2 of your contract, please notify the project manager at least 2 weeks prior to a sampling event. Additionally, an update of the QAPP Contractor Addendum for Corrective Action is due the first quarter of each year until completion of corrective action. The Division is also requesting a Corrective Action Plan (CAP) Addendum with an updated time table for site closure before the end of the year.

If there are any problems meeting these deadlines, please notify DHEC in advance. On all correspondence regarding this site, please reference UST Permit number #07584, #07777, and #12352. If you have questions concerning this correspondence, feel free to contact me by phone at (803) 898-2622, or by email at mooresct@dhec.sc.gov.

Sincerely,

Carolyn T Moores

Carolyn Moores, Hydrogeologist
Corrective Action & Quality Assurance
Underground Storage Tank Management Division
Bureau of Land and Waste Management

CC: Matt Winslow, Bureau of Business Management (w/enc.)
Technical File (w/enc.)
Contractor Certification File UCC-0388

07777

dhec
Healthy People. Healthy Communities.

NOV 28 2018

UST 2017 DOCKETING

RUBY G FIELDING
ALLEN UNIVERSITY
1530 HARDEN ST
COLUMBIA SC 29204

Re: **Site History Summary**
College Corner, 2367 Taylor Street, Columbia, SC
UST Permit #07584& #18389
Cloud's Chevron, 1600 Two Notch Road, Columbia, SC
UST Permit #07777 & 12352
Releases reported January 30, 1991, April 17, 1998, and April 14, 1999 for UST Permit #07584
Release reported December 31, 1991 for UST Permit #07777
Release reported December 30, 1991 for UST Permit #12352
Request for Site History Summary received November 27, 2018
Richland County

Dear Mrs. Fielding:

In response to a request submitted by ARM Environmental Services on your behalf for information about environmental conditions and liability associated with the referenced facility and adjacent property, the following is provided.

In reference to UST Permit #07584:

According to our records,three USTs were registered with DHEC. The USTs were registered by ACME Petroleum & Fuel Company. One tank was removed from the ground in June 1998 and two were removed from the ground in March 1999.

Our records indicate that ACME Petroleum & Fuel Company, the tank owner at the time of the January 1991 and April 1998 releases,complied with the regulatory requirements and performed the initial response actions outlined in R.61-92, UST Control Regulations, Section 280.61. Additionally, they arecurrently conducting active remedial actions to reduce the concentrations of petroleum chemicals in the subsurface to acceptable levels. The next semi-annual progress report is due by November 30, 2018.

The release reported on April 14, 1999 received a no further action determination on May 5, 1999. Pacemaker Leasing Corporation, Inc. is listed as the tank owner at the time of the release. No additional actions are required.

In reference to UST Permit #18389:

According to our records,fourUSTs were registered with DHEC. USTs 1 & 2 were registered by Fast

Point Food Stores Inc. and were removed from the ground in September 2003. USTs 3 & 4 are registered by HM&D LLC and are still in operation. There are no reported releases associated with the UST Permit.

In reference to UST Permit#07777:

According to our records,fourUSTs were registered with DHEC. The USTs were registered by Wallace Scott. The tanks were removed from the ground in May 1992.

Our records indicate that Mr. Scott, the tank owner at the time of the reported release,complied with the regulatory requirements and performed the initial response actions outlined in R.61-92, UST Control Regulations, Section 280.61. Additionally, they are currently conducting active remedial actions to reduce the concentrations of petroleum chemicals in the subsurface to acceptable levels. The next semi-annual progress report is due by November 30, 2018.

In reference to UST Permit #12352:

According to our records,four USTs were registered with DHEC. The USTs were registered by Jack & Alexander Lee. Two tanks were removed from the ground in October 1993 and the other two tanks were removed from the ground in November 2006.

Our records indicate that Jack & Alexander Lee, the tank owners at the time of the reported release,complied with the regulatory requirements and performed the initial response actions outlined in R.61-92, UST Control Regulations, Section 280.61. Additionally, they are currently conducting active remedial actions to reduce the concentrations of petroleum chemicals in the subsurface to acceptable levels. The next semi-annual progress report is due by November 30, 2018.

The releases of petroleum products from the facilities referenced aboveare qualified to receive funding under the conditions of the State Underground Petroleum Environmental Response Bank (SUPERB) Act. This means that reasonable costs can be paid by the SUPERB Account for site rehabilitation actions associated with the release.The tank owner at the time of the release (as indicated above), under state and federal law, retains responsibility for any additional actions and associated costs for therelease.

As part of the assessment investigation of the release of petroleum products from the facilities referenced above,monitoring wells MW-16, MW-17, MW-48, MW-49, & MW-50 were installed the adjacent property. The wells were installed as monitoring wells and are not a source of drinking water. Groundwater samples were collected from the monitoring wells in January 2018 and analyzed for dissolved petroleum constituents such Benzene, Toluene, Ethylbenzene, Xylene, Naphthalene, EDB, lead, 1,2 DCA, Oxygenates, Ethanol, and MtBE (a historically used gasoline additive which is no longer available in South Carolina). The laboratory data for the above mentioned wellsis enclosed. A site map with the monitoring well locations is also enclosed for your information.

According to the above referenced analytical data, petroleum chemical concentrations that exceed the Risk Based Screening Levels (RBSLs) were detected in monitoring well MW-17. The wells are installedas monitoring wells and are not a source of drinking water.

If you purchase the property which contains the above referenced monitoring wells, you should understand that the UST owner/operators and/or DHEC will require access to your property during reasonable hours to perform necessary rehabilitation activities. You will be contacted by letter before work is initiated. Rehabilitation activities remain the responsibility of the Owner/Operator (O/O) at the time of the release, as tank owner and operator under SC law. Your acquisition of the adjacent property will not make you a responsible party for the pre-existing petroleum release so long as: (1) you do not have any familial, financial, or related interest with, or are an affiliate of, the O/O at the time of the above referenced release AND (2) you allow for reasonable access by the UST O/O or DHEC to perform site rehabilitation activities. Additionally, this letter does not address any other pre-existing condition on the adjacent property. You should conduct you own due diligence to determine if there are any other conditions of concern.

DHEC is not aware of any laws or regulations that prohibit the use or development of adjacent properties and properties where a petroleum release has occurred. However, DHEC advises against installing a water supply well for drinking, cooking, or bathing purposes until rehabilitation activities are is completed. If you should choose to install a water supply well for these purposes at this time, it is at your discretion. As stated above, corrective action measures will be implemented to rehabilitate affected ground water to acceptable levels.

If you have any questions, please contact Carolyn Moores at (803) 898-2622. She can also be reached by email at mooresct@dhec.sc.gov or by fax at (803) 898-0673.

Sincerely,

Debra L. Thoma

Debra L. Thoma, Manager
Corrective Action & Quality Assurance Section
UST Management Division
Bureau of Land and Waste Management

enc: Table of Analytical data
Site Map

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. 7.0547

Groundwater Laboratory Analytical Result Summary

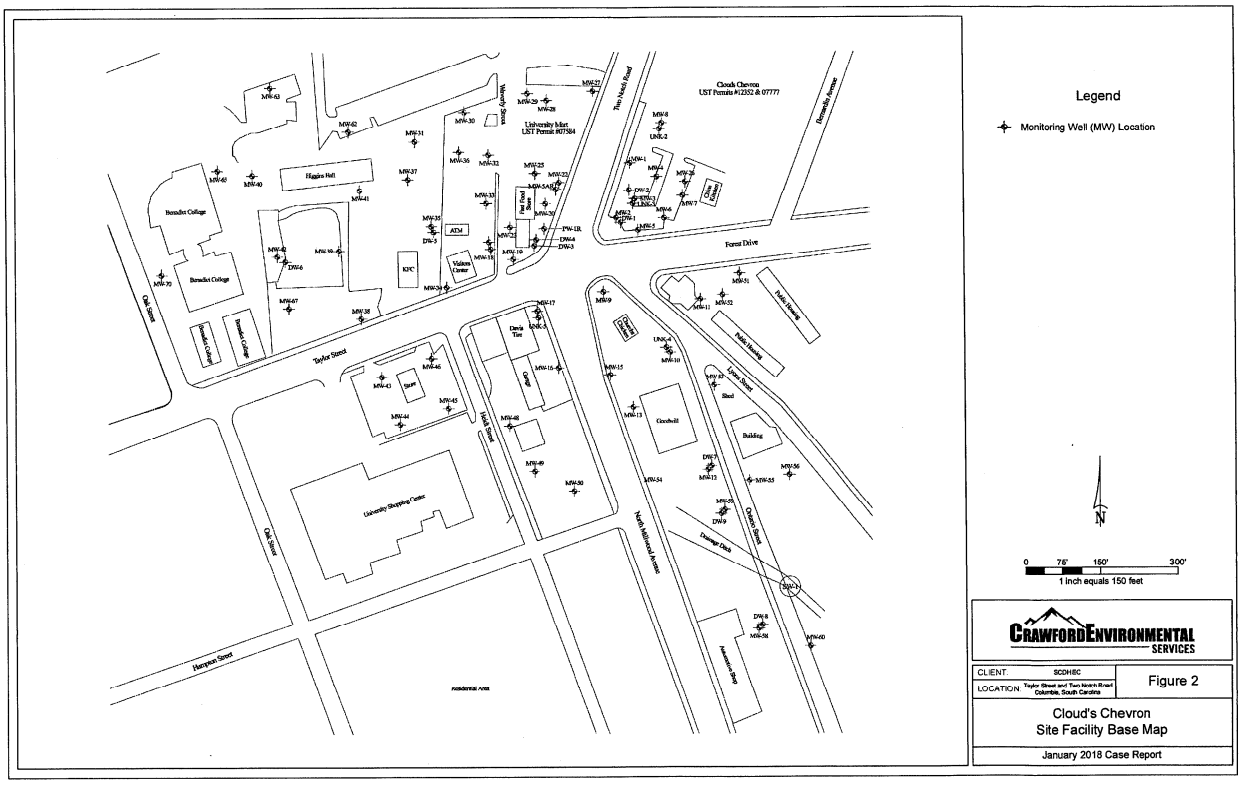
Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-9	4/2/2014	830	7500	1700	14000	50	590	1700	5000	5000
	11/11/2014	380	11000	1900	13000	5	650	1100	<10	<100
	5/28/2015	250	5700	1200	8200	<50	480	<5000	<500	<5000
	11/4/2015	520	6200	1100	8600	<50	470	3000	<500	<5000
	5/18/2016	78	1900	1000	4300	<1	440	200	<10	<100
	10/21/2016	60	1500	730	3600	<1	210	550	<10	<100
	6/28/2017	Unable to Locate								
	1/22/2018	150	5400	1700	13000	<50	680	<5000	<500	<5000
MW-10	4/1/2014	1800	5700	350	8500	50	690	5000	500	5000
	11/11/2014	1.25-Feet of Free Product								
	5/28/2015	66	76	67	980	<1	370	<100	<10	<100
	11/4/2015	10	18	4.6	120	<1	46	<100	<10	<100
	5/18/2016	88	11	22	97	<1	170	<100	<10	<100
	10/21/2016	27	7.1	11	93	<1	47	<100	<10	<100
	6/28/2017	27	3.3	17	59	<1	120	<100	<10	<100
	1/22/2018	40	15	94	590	<1	120	42 J	<10	<100
MW-11	4/2/2014	2.3	4.1	11	4.1	<1	4.4	120	<10	<100
	11/11/2014	0.53	<1	<1	<1	<1	<5	80	<10	58
	5/29/2015	0.51	<1	<1	3.8	<1	6.6	50	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-12	4/2/2014	2.9	0.67	1.6	0.91	18	4.7	830	9	<100
	11/11/2014	990	19	910	140	21	180	3800	14	<100
	5/28/2015	53	2.7	430	14	22	44	2300	<10	<100
	11/4/2015	110	2	53	25	<1	10	1800	8	<100
	5/18/2016	260	83	710	330	17	190	1300	<10	<100
	10/20/2016	180	18	420	300	13	110	4000	<10	<100
	6/28/2017	Destroyed - Paved Over								
	1/23/2018	Destroyed - Paved Over								
MW-13	4/1/2014	0.62	8.8	4.5	86	<1	31	10	<10	<100
	11/11/2014	<1	<1	<	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<1	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/28/2017	Destroyed - Paved Over								
	1/23/2018	Destroyed - Paved Over								
MW-15	4/1/2014	0.60-Feet of Free Product								
	11/11/2014	0.25-Feet of Free Product								
	5/29/2015	0.16-Feet of Free Product								
	11/3/2015	0.14-Feet of Free Product								
	5/15/2016	0.44-Feet of Free Product								
	10/19/2016	0.60-Feet of Free Product								
	6/28/2017	<1	300	320	7,500	<1	880	<100	<10	<100
	1/22/2018	0.74 J	490	250	6500	<1	<100	<100	<10	<100
MW-16	4/2/2014	<1	<1	<1	<1	<1	3.4	<100	<10	<100
	11/12/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	Unable to Locate								
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-17	4/2/2014	280	5100	450	13000	50	850	2200	500	5000
	11/12/2014	32	3000	450	8300	<10	690	270	<100	<1000
	5/28/2015	210	7500	480	12000	<50	830	2200	<500	<5000
	11/4/2015	280	10000	660	13000	<100	720	<10000	<1000	<10000
	5/15/2016	Not Sampled due to Obstruction								
	10/20/2016	<100	5500	510	11000	<100	580	<10000	<1000	<10000
	6/27/2017	10	5.8	190	28	<1	190	<100	<10	<100
	1/22/2018	35	13	430	150	<1	440	70 J	<10	<100

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-44	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-45	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-46	4/1/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/23/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-48	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	Unable to Access - Locked Gate								
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/3/2015	Unable to Access - Locked Gate								
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/25/2016	Unable to Access - Locked Gate								
	6/26/2017	Unable to Access - Locked Gate								
	1/22/2018	Unable to Access - Locked Gate								
MW-49	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
	6/26/2017									
	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-50	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/19/2016									
	6/26/2017									
	1/24/2018									
MW-51	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/20/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/24/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-53	4/3/2014	<1	<1	<1	<1	<1	4.1	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	4.1	<100	<10	<100
	5/28/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/22/2018	<1	<1	0.36 J	<1	<1	<5	<100	<10	<100


Legend
Monitoring Well (MW) Location
0 75' 150' 300'
1 inch equals 150 feet
N
Cloud's Chevron
UST Permits #12352 & 07777
University Mart
UST Permit #07584
Two Notch Road
Bernadin Avenue
Forest Drive
Taylor Street
Oak Street
Hampton Street
North Millwood Avenue
Ontario Street
Hatch Street
Wheeler Street
Higgins Hall
Benedict College
Visitors Center
ATM
KFC
Davis Tire
Gangs
Goodwill
Building
Shed
Public Housing
Drainage Ditch
Antiquarian Shop
Residential Area
CRAWFORD ENVIRONMENTAL SERVICES
CLIENT: SCDHEC
LOCATION: Taylor Street and Two Notch Road Columbia, South Carolina
Figure 2
Cloud's Chevron
Site Facility Base Map
January 2018 Case Report

Crawford Environmental Services, Inc.
1701 Shenandoah Avenue, NW
Roanoke, Virginia 24017
540.343.6256 [office]
540.343.6259 [facsimile]
www.crawfordenvironmental.com



December 28, 2018

Ms. Debra Thoma
South Carolina Department of Health and Environmental Control
UST Management Division
2600 Bull Street
Columbia, South Carolina 29201

RE: PAY FOR PERFORMANCE CORRECTIVE ACTION SITES
Lancaster Maintenance Facility – UST Permit #15006
Lloyds Rollins Service Station – UST Permit #15930
Columbia Maintenance Facility – UST Permit #07359
Hillcrest Grocery – UST Permit #09383
Passmore Grocery & Grill – UST Permit #09423
Neely's Country Corner – UST Permit #14541
Newberry County Law Enforcement Center – UST Permit #15591
Clouds Chevron – UST Permit #07584 / 07777 / 12352
USA Petroleum – UST Permit #07907

Dear Ms. Thoma:

Crawford Environmental Services (CES) recently received correspondence from SCDHEC Case Managers associated with the sites listed above. Please be advised that CES remains committed to the execution of these contracts to progress the sites toward closure. Termination of the contracts would result in extended cleanup timeframes to establish new contracts and for new contractor to become familiar with the sites to initiate corrective action.

During the second half of 2018, significant scheduling delays were encountered due to inclement weather and overgrown / abandoned site conditions. CES requests that the sampling schedules be modified in FY2019 and CAP Addendums outlining the modified remedial approach be prepared for each location. The following modifications are proposed:

Site Name	Next Sampling Event	Reported By	CAPA / Revised Cleanup Schedule	Long Term Schedule (CASE Due Dates)
Lancaster Maintenance Facility	02/19	04/01/19	03/10/19	May 15 / November 15
Lloyd Rollins Service Station	12/18 (Complete)	01/30/19	01/30/19	May 15 / November 15
Columbia Maintenance Facility**	03/19	04/30/19	04/30/19	April 30 / October 30
Hillcrest Grocery	12/18 – WSW (Complete)	01/30/19	02/20/19	December 15 / June 15 (Comprehensive) & September 15 / March 15 (WSW Only)

Pay for Performance Corrective Action Sites
UST Permit #s 15006 / 15930 / 07359 / 09383 / 09423 /14541 / 15591 / 07584 / 07777 / 12352 / 07907

Site Name	Next Sampling Event	Reported By	CAPA / Revised Cleanup Schedule	Long Term Schedule (CASE Due Dates)
Passmore Grocery and Grill	12/18 – WSW (Complete)	01/30/19	02/10/19	September 15 / March 15 (Comprehensive) December 15 / June 15 (WSW Only)
Neely's Country Store	12/18 – WSW (Complete)	01/30/19	02/20/19	December 15 / June 15 (Comprehensive) & September 15 / March 15 (WSW Only)
Newberry County Law Enforcement	02/19	03/20/19	02/20/19	June 29 / December 29
Clouds Chevron	02/19	03/25/19	03/10/19	June 15 / December 15
USA Petroleum	02/19	04/10/19	03/20/19	April 10 / October 10

***Dates and proposed site activities are contingent upon the property owner relocating equipment and materials from the monitoring well network. Infrastructure (piping, injections wells, etc.) may have been compromised by the property owner and will need to be further evaluated prior to continued corrective action.*

To further expedite site clean-up, CES respectively requests that the sampling events be limited to monitoring wells with established Site Specific Target Levels (SSTLs). This is a critical component to progress the sites toward closure. The sites have extensive monitoring well networks with many redundant well locations. Sampling of all monitoring wells results in extended events which reduce the resources and time available to dedicate to active remediation.

To accomplish these activities, CES is assigning a new Project Manager to drive the referenced sites toward closure. We are committed to implementing new remedial strategies and achieving cleanup endpoints.

We appreciate this opportunity to continue work at these sites and respectively request approval of the proposed schedule and site work presented above. Please do not hesitate to contact us at 540.343.6256 should you have any questions or if additional information is required.

Thank you,

Charles F. Crawford
President / CEO

Daniel Fisher, PMP
Operations Manager

dhec
Healthy People

JAN 10 2019

CHARLES CRAWFORD
CRAWFORD ENVIRONMENTAL SERVICES INC
1701 SHENANDOAH AVE NW
ROANOKE VA 24017

Re: Pay for Performance Corrective Action Sites Response
Lancaster Maintenance Facility – UST Permit #15006 – IFB-35858-4/30/09-EMW
Lloyds Rollins Service Station – UST Permit #15930 – IFB-38217-4/29/10-EMW
Columbia Maintenance Facility – UST Permit #07359 – IFB-11/5/09-EMW
Hillcrest Grocery – UST Permit #09383 – IFB-5400005730-4/9/13-EMW
Passmore Grocery & Grill – UST Permit #09423 – IFB-5400002569-2/17/11-EMW
Neely's Country Corner – UST Permit #14541 – IFB-5400005001-11/8/12-EMW
Newberry County Law Enforcement Center – UST Permit #15591 – IFB-5400007622-4/17/14-EMW
Clouds Chevron – UST Permit #07584/07777/12352 – IFB-5400007095-1/30/14-EMW
USA Petroleum – UST Permit #07907 – IFB-5400005388-2/14/13-EMW

Dear Mr. Crawford:

The Underground Storage Tank (UST) Management Division is in receipt of your letter dated December 28, 2018 regarding the above cited Pay-for-Performance (PFP) Corrective Action Sites. The UST Management Division has concerns about the cleanup progress at several of the sites and the time elapsed to date. The table below illustrates the award date, percent reduction completed to date, and the Corrective Action Completion Times (CACTs) originally proposed.

Site Name	Permit #	Award Date	Proposed CACT	Percent Reduction
Lancaster Maintenance Facility	15006	05/14/2009	36 Months – 12/17/12	54.00%
Lloyds Rollins Service Station	15930	05/05/2010	36 Months – 11/4/13	-23.00%
Columbia Maintenance Facility	07359	06/04/2010	36 Months – 11/22/13	83.95% (?)
Hillcrest Grocery	09383	04/09/2013	36 Months – 7/25/16	54.04%
Passmore Grocery & Grill	09423	03/07/2011	36 Months – 5/7/14	95.99%
Neely's Country Corner	14541	11/28/2012	48 Months – 2/26/17	75.62%
Newberry County Law Enforcement Center	15591	04/25/2014	48 Months – 10/6/18	46.07%
Clouds Chevron	07584/07777/ 12352	01/07/2014	60 Months – 5/16/19	36.15%
USA Petroleum	07907	02/21/2013	36 Months – 6/24/16	-32.70%

As illustrated in the table, the oldest remediation contract going on nearly 10 years with the newest at nearly 5 years. The intent of these PFP contracts is to have remediation to site-specific target levels (SSTLs) within a 5 year timeframe or within the contractor's proposed CACT, whichever comes first. Based on the percent reduction achieved to date, Crawford Environmental is only above a 75% reduction on three of the nine sites. Additionally, the proposed CACTs have been exceeded on all except one site.

The UST Management Division commends Crawford Environmental Services' commitment to these remediation sites. The timetable proposed by Crawford for Corrective Action System Evaluation (CASE) report submittal is acceptable. However, there is concern the proposed due dates for some of the CASE reports as it appears Crawford will not be conducting any sampling activities at these sites until the latter part of February. It is requested that sampling events be conducted as soon as possible and the CASE reports be submitted prior to the dates proposed. The dates for future CASE reports will not be modified or altered in any way based upon the schedule proposed by Crawford Environmental.

The UST Management Division will approve the sampling of only the SSTL wells at the sites until such time that all monitoring wells will require sampling (i.e. verification sampling, payment milestones, etc.) or as deemed necessary by the UST Management Division (e.g. site conditions warrant - #07359, possible plume migration, reevaluate site conditions, etc.). This approval is contingent upon the gauging of the wells being conducted during routine sampling events to ensure the wells are continually located and accessible for the duration of the remediation. Gauging of the wells will also provide a more comprehensive potentiometric map to be constructed for submission with the CASE reports. In addition, Crawford Environmental Services must sample the SSTL wells for all constituents as required for the site's PFP contract.

The Corrective Action Plan Addendums and Revised Corrective Action Timetables including an updated CACT should be submitted as proposed. The revised Corrective Action Timetables should include demobilization and site restoration in accordance with the Solicitation Section "Specifications for Corrective Action, Performance Specifications, Corrective Action Plan". Please ensure that the cleanup schedules propose an aggressive schedule to expedite closure of these sites. In addition, the corrective action plan addendums should be aggressive and detailed with locations and quantities of materials and should include an Underground Injection Control Permit application or addendum, as applicable. A public notice period may be required if the technology has not been proposed previously.

Please note, the all requested CASE reports, CAP addendums, and Revised Corrective Action Timetables **must** be submitted by the due dates; all SSTL wells, WSWs wells, and surface water locations must be sampled for all the required constituents; and reasonable progress towards the cleanup goals must be achieved or subsequent action may be taken by the UST Management Division to enforce the terms and conditions of the contracts. Several of the sites have already received two failure to perform notifications. Issuance of a third on a particular contract may result in cancellation of that contract and further action against Crawford Environmental Services in accordance with the contract's terms and conditions.

The UST Management Division encourages the Crawford project manager to keep the UST Project Managers informed of changing site conditions that could potentially impact the success of the remediation. Please ensure that the UST Project Manager receives the required site notification in

regards to anticipated field work activity as required by the contracts. The UST Management Division will work with Crawford Environmental to overcome obstacles that are encountered, but must do so within the terms and conditions of the contracts. The UST Management Division is amenable to working collaboratively with Crawford Environmental to achieve the required remediation and closure at these sites in a reasonable manner. Periodic telephone conferences may be conducted to ensure that work is progressing and issues are being resolved effectively.

If you wish to discuss this in further detail, please contact me at (803) 898-0643. I can also be reached by email at thomadl@dhec.sc.gov or by fax at 803-898-0673.

Sincerely,

Debra L Thoma

Debra Thoma, Manager
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

Enc: Schedule of Deliverables

Cc: Technical Files (w/ enc)

Schedule of Deliverables

Site Name	Proposed Reported By	CAPA/Revised Cleanup Schedule	Report Due	Report Due	Report Due	Report Due
Lancaster Maintenance	**04/01/2019**	03/10/2019	05/15/2019	11/15/2019	05/15/2020	11/15/2020
Lloyd Rollins Service Station	01/30/2019	01/30/2019	05/15/2019	11/15/2019	05/15/2020	11/15/2020
Columbia Maintenance	04/30/2019	04/30/2019	10/30/2019	04/30/2020	10/30/2020	04/30/2021
Hillcrest Grocery	01/30/2019 (WSW)	02/20/2019	03/15/2019 (WSW)	06/15/2019 (Comp)	09/15/2019 (WSW)	12/15/2019 (Comp)
Passmore Grocery	01/30/2019 (WSW)	02/10/2019	03/15/2019 (Comp)	06/15/2019 (WSW)	09/15/2019 (Comp)	12/15/2019 (WSW)
Neely's Store	01/30/2019 (WSW)	02/20/2019	03/15/2019 (WSW)	06/15/2019 (Comp)	09/15/2019 (WSW)	12/15/2019 (Comp)
Newberry Law	**03/20/2019**	02/20/2019	06/29/2019	12/29/2019	06/29/2020	12/29/2020
Clouds Chevron	**03/25/2019**	03/10/2019	06/15/2019	12/15/2019	06/15/2020	12/15/2020
USA Petroleum	04/10/2019	03/20/2019	04/10/2019	10/10/2019	04/10/2020	10/10/2020

March 8, 2019



Ms. Carolyn Moores
State of South Carolina
Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

RE: Corrective Action Plan Addendum
Handy Pantry #65 / University Mart / Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352
2707 2047 1397

Dear Ms. Moores:

Crawford Environmental Services, Inc. (CES) has prepared the following Corrective Action Plan Addendum (CAPA) for the Handy Pantry #65, University Mart and Cloud's Chevron facilities in Columbia, South Carolina. CES has reviewed the original Corrective Action Plan (CAP) and the remedial progress to date. Based on this review, CES has concluded that the original strategy will be an effective method to address the adsorbed- and dissolved-phase contamination. However, it has been determined that the three air sparge systems will no longer be effective. As presented in the original CAP, the existing subsurface infrastructure and injection locations will be used for chemical and biological injections. An updated corrective action timetable has been prepared and is presented below.

Description	Start Date	End Date
Injection Event Planning	04/01/19	05/01/19
Chemical and Biological Injection Event #1	05/15/19	05/25/19
Chemical and Biological Injection Event #2	08/15/19	08/25/19
Semi-Annual Confirmatory Sampling Event 1	06/01/19	06/10/19
Semi-Annual Confirmatory Sampling Event 2	11/01/19	11/10/19
Estimated completion of corrective action activities	01/01/21	

This CAPA was prepared in accordance with DHEC correspondence and is being delivered to Ms. Carolyn Moores. Should you have any questions regarding the modifications presented herein, or if additional information is required, please feel free to contact me at (540) 343-6256.

Prepare By:

James Coleman
Project Manager

Reviewed By:

Daniel Fisher
Operations Manager

Attachments

cc:



dhec
Healthy People. Healthy Communities.

MAR 2 5 2019

UST DOCKETING

MR CHARLES F CRAWFORD III
CRAWFORD ENVIRONMENTAL SERVICES
15 CHURCH AVENUE SW
ROANOKE VA 24011

Re: **Corrective Action Plan Addendum (CAPA) Review**
UST Permit# 07584, University Mart, 2367 Taylor St., Columbia, SC
Release #1 reported January 30, 1991; CA# 47811
Release #2 reported April 17, 1998; CA# 47812
UST Permit # 07777, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 31, 1991; CA# 47813
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 30, 1991; CA# 47814
Contract #IFB-5400007095-1/30/2014-EMW; PO# 4600322226
CAP Addendum received March 14, 2019
Richland County

Dear Mr. Crawford:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the referenced documents. A renewal of the UIC permit prior to the April 11, 2019 expiration date of the current permit #SCHE03020184M will be needed before CAP implementation can proceed as scheduled, since chemical and biological injections are scheduled 5/15/19 and 8/15/19.

The semi annual sampling dates have been noted as occurring in the first half of June and November of 2019.

Since this CAP Addendum covers a one year period, a second CAP addendum will be required on or before **December 31, 2019** to cover work plans through 2020.

The semi-annual CASE 8 report is due on or before **May 30, 2019.**

The semi-annual CASE 9 report is due on or before **November 30, 2019.**

On all correspondence regarding this site, please reference UST Permit #07584, #07777, & #12352. If you have any questions regarding this correspondence, please contact me by telephone at (803) 898-0634, by fax at (803) 898-0673, or by e-mail at mooresct@dhec.sc.gov.

Sincerely,

Carolyn T Moores

Carolyn Moores, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

Document Receipt Information

☐ Hard Copy ☒ CD ☐ Email

Date Received 3-28-2019

Permit Number 07584, 07777, 12352

Project Manager Carolyn Moores

Name of Contractor Crawford Env Services

UST Certification Number CASE - Feb 2019

Docket Number _____

Scanned _____

17 07584 - 272 Tech
07777 - 206 Tech
12352 - 141 Tech

CRAWFORD ENVIRONMENTAL SERVICES

March 25, 2019

Ms. Carolyn Moores
Corrective Action Section
UST Management Division
Bureau of Land and Waste Management
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

RE: Corrective Action System Evaluation – February 2019 (Sampling Date)
Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352

Dear Ms. Moores:

Enclosed please find one copy of the February 2019 Corrective Action System Evaluation (CASE) report prepared by Crawford Environmental Services, Inc. (CES) for the referenced site. In addition, CES has included an updated copy of the Corrective Action Plan Addendum / Cleanup Schedule as **Appendix E**. Should you have any questions regarding the enclosed material, or if additional information is required, please feel free to contact Charlie Crawford or myself at 540.343.6256.

Best Regards,

Daniel Fisher
Operations Manager

cc:

CRAWFORD ENVIRONMENTAL SERVICES

Corrective Action System Evaluation Report
February 2019
Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
UST Permit # 07584 / 07777 / 12352
March 25, 2019
Revision 0

CORRECTIVE ACTION SYSTEM EVALUATION REPORT

Handy Pantry #65/University Mart & Cloud's Chevron
Intersection of Taylor Street and Two Notch Road
Columbia, South Carolina
York County
UST Permit #: 07584/07777/12352
CES Job #: 7.0547

PREPARED BY:
Crawford Environmental Services, Inc.
1701 Shenandoah Avenue, NW
Roanoke, Virginia 24017
Phone: 540-343-6256; Fax: 540-343-6259
dfisher@crawfordenvironmental.com

PREPARED FOR:
South Carolina Department of Health & Environmental Control
Ms. Carolyn Moores
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

SUBMITTED TO:
South Carolina Department of Health & Environmental Control
Ms. Carolyn Moores
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

CRAWFORD ENVIRONMENTAL SERVICES

Title: *Corrective Action System Evaluation Report, Handy Pantry/University Mart and Cloud's Chevron, Site (Site No. 07584/07777/12352), Columbia, South Carolina, February 2019.*

Written By:

Daniel J. Fisher
Senior Project Manager/Technical Reviewer

22 March 2019
Date Reviewed

Reviewed By:

B. Thomas Houghton, P.G.
Senior Project Geologist/Technical Reviewer
Registered South Carolina P.G. No. 2343

23 March 2019
Date Reviewed

Approved By:

Charles F. Crawford
President/Chief Executive Officer, Technical Reviewer

25 March 2019
Date Reviewed

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Appendix A: Groundwater Laboratory Analytical Report & Chain-of-Custody Documentation
Appendix B: Groundwater Sampling Data Sheets
Appendix C: Purge Water Disposal Manifest
Appendix D: QAPP Addendum Contractor Checklist
Appendix E: Revised CAPA and Cleanup Schedule

1.0 Project Information

1.1 Introduction

Crawford Environmental Services Inc., (CES) has completed a Corrective Action System Evaluation (CASE) report for the Handy Pantry #65/University Mart and former Cloud's Chevron site. The report describes assessment activities conducted at the site in general accordance with the scope of work as defined in the QAPP Addendum Approval, dated March 20, 2014. The subject property is in a primarily commercial area of Columbia, South Carolina (*Figure 1*). The subject sites, operating as Handy Pantry #65/University Mart and former Cloud's Chevron, is bordered by light commercial properties in all directions. A site plan depicting pertinent features of the subject property is provided as *Figure 2*.

1.2 Facility Information

1.2.1 Site Address

Handy Pantry #65 / University Mart / Clouds Chevron
2367 Taylor Street
Columbia, South Carolina

1.2.2 Property Owner Information

Mr. Mahesh Patel
2367 Taylor Street
Columbia, South Carolina

Mr. Andrew Diggins
1600 Block Two Notch Road
Columbia, South Carolina

1.2.3 Contractor Information

Crawford Environmental Services
1701 Shenandoah Avenue, NW
Roanoke, Virginia 24017
1 (540) 343-6256
Contractor Number: UCC-0388

1.2.4 Laboratory Information

Access Analytical, Inc. (AA)
7478 Carlisle Street
Irmo, SC 29063
1 (803) 781-4243
SC Certification: 32575001

Analytical Environmental Services Inc. (AES)
3785 Presidential Pkwy.
Atlanta, GA 30340
1 (770) 457-8177
SC Certification: 98016003

2.0 Corrective Action Activities

Corrective Action activities at the facility for this phase of work included the following:

-Semi-Annual Sampling Event

2.1 Groundwater Sampling Event

A comprehensive groundwater sampling event, including; recording equilibrated static water levels, product thicknesses, and the collection of chemical samples was completed by CES personnel between February 20 - 21, 2019. CES personnel utilized an electronic water level indicator for water level measurements and an oil/water interface probe for free phase product measurements. Samples for the shallow wells were collected utilizing disposable polyethylene bailers. Shallow wells that exhibited groundwater above the screened bracket were purged of at least three well volumes or purged till dry before sample collection. Deep and intermediate wells exhibiting groundwater above the screened bracket were purged utilizing submersible pumps with dedicated tubing. For sample collection, disposable polyethylene bailers were lowered slowly to the top of the water column (after purging in some cases) allowed to fill one volume, then removed. Disposal records for the 30-gallons of purge water generated are included as Appendix A. Groundwater was then transferred to the appropriate sampling containers and was then placed in coolers, maintaining 4˚C, and delivered to an independent laboratory. Groundwater chemical samples were submitted to Access Analytical, Inc., {SC Certification: 32575001} for analysis.

2.1.1 Groundwater Sampling

Equilibrated static water levels and free-product thicknesses were recorded for monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-15, MW-18, MW-19, MW-20, MW-22, MW-23, MW-26, MW-27, MW-28, MW-29, MW-30, MW-31, MW-32, MW-33, MW-34, MW-35, MW-36, MW-37, MW-38, MW-40, MW-41, MW-43, MW-44, MW-45, MW-46, MW-49, MW-50, MW-53, MW-55, MW-56, MW-62, MW-63, MW-67, MW-70, MW-5AR, PW-1R, DW-1, DW-2, DW-3, DW-4, and DW-9. Groundwater sampling data sheets are included as Appendix B.

During the referenced sampling event, CES was unable to access monitoring well MW-48 due to a locked gate and monitoring wells MW-60, MW-65, DW-7 were unable to be located. CES also utilized a metal detector to locate the wells, however, the overgrown site conditions did not permit the location of the aforementioned monitoring wells. Due to obstructions (vehicle) covering the wells, monitoring wells MW-58 and DW-8 were not able to be sampled. Monitoring wells MW-12, MW-13, MW-54, MW-65 and DW-7 have been paved over following recent construction and presumed destroyed.

CES sampled the monitoring wells, as part of the February 2019 sampling event, for the following chemical analyses:
Benzene/Toluene/Ethylbenzene/Xylenes (BTEX), naphthalene, Methyl Tert-Butyl Ether (MTBE), Tert-Amyl Methyl Ether (TAME), Tert-Butyl Alcohol (TBA), and Tert-Amyl Alcohol (TAA).

During the sampling event CES collected duplicate samples of monitoring wells MW-15 and MW-31. Review of the duplicate samples collected from aforementioned monitoring well samples did not yield significant data gaps.

In addition to duplicate samples, CES also collected daily field blank samples at the conclusion of the sample events. The samples were collected at the conclusion of the day to be representative of all samples that were collected during that day. Sealed trip blank samples were also stored with samples during each day of the sampling event.

Table 2 presents the laboratory data for the submitted groundwater samples collected as part of this assessment. The groundwater concentration maps are included as *Figure 3.* The groundwater elevation map is included as *Figure 4*.

3.0 Summary

During the corrective action activities performed at the subject property, CES conducted a comprehensive groundwater monitoring event, to determine the effectiveness of the current corrective action plan. The qualitative and quantitative data collected from recent assessment activities indicates the following regarding current site conditions;

1. During this sampling event, groundwater from monitoring wells MW-2, MW-3, MW-9, MW-10, MW-18, MW-19, MW-20, MW-22, MW-23, MW-33, MW-35, MW-37, MW-40, MW-41, MW-5AR, PW-1R, DW-3, and SW-1 exhibited hydrocarbon constituent concentrations above the SSTLs for the chemicals of concern.

2. CES calculated a COC reduction of 35.98 percent during this phase of work.

3. Free-phase petroleum was not observed during the February 2019 sampling event.

4.0 Conclusion

Based on the results of the comprehensive sampling event, CES estimates that the historical remedial injects have been successful in targeting source area and contaminants. CES estimates that decreases in the COC reduction percentage observed during this period are based upon a significant number of wells being unable to be sampled and the reduction of free-phase petroleum during sampling event. A Revised CAPA and schedule for cleanup is included as **Appendix E**.

5.0 Limitations

This report is based upon a specific scope of work requested by SCDHEC. This report is intended only for the use of CES's client and anyone else specifically listed on this report. Some data contained within this report was previously collected by other consultants and is assumed to be correct. CES will not and cannot be liable for the unauthorized release by any third party. Other than as contained in this paragraph, CES makes no expressed or implied warranty as to the contents of this report.

Tables

Table 1: Well Construction and Historical Groundwater Elevation Summary
Table 2: Groundwater Laboratory Analytical Result Summary
Table 3: Site Specific Target Levels

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-1	27	17	27	93.89	2/20/2019	NA	DRY	NA	NA	DRY
					1/24/2018	NA	DRY	NA	NA	DRY
					6/26/2017	NA	DRY	NA	NA	DRY
					10/19/2016	NA	DRY	NA	NA	DRY
					5/15/2016	NA	DRY	NA	NA	DRY
					11/3/2015	NA	DRY	NA	NA	DRY
					5/29/2015	NA	DRY	NA	NA	DRY
					11/11/2014	NA	DRY	NA	NA	DRY
					4/2/2014	NA	DRY	NA	NA	DRY
MW-2	30	20	30	94.70	2/20/2019	NA	22.24	NA	NA	72.46
					1/22/2018	NA	24.04	NA	NA	70.66
					6/27/2017	NA	21.51	NA	NA	73.19
					10/19/2016	NA	21.17	NA	NA	73.53
					5/16/2016	NA	20.08	NA	NA	74.62
					11/3/2015	NA	20.32	NA	NA	74.38
					5/29/2015	22.56	22.57	0.01	72.14	72.13
					11/4/2014	NA	23.03	NA	NA	71.67
					4/2/2014	NA	21.12	NA	NA	73.58
MW-3	29	19	29	94.45	2/20/2019	NA	21.43	NA	NA	73.02
					1/22/2018	NA	23.42	NA	NA	71.03
					6/27/2017	NA	20.98	NA	NA	73.47
					10/19/2016	NA	20.18	NA	NA	74.27
					5/16/2016	NA	19.84	NA	NA	74.61
					11/3/2015	NA	23.29	NA	NA	71.16
					5/29/2015	23.2	23.29	0.09	71.25	71.16
					4/2/2014	NA	21.40	NA	NA	73.05
					11/12/2014	NA	23.16	NA	NA	71.29
MW-4	28	18	28	94.85	2/20/2019	NA	21.11	NA	NA	73.74
					1/22/2018	NA	22.19	NA	NA	72.66
					6/27/2017	NA	20.55	NA	NA	74.30
					10/19/2016	NA	20.42	NA	NA	74.43
					5/16/2016	NA	19.20	NA	NA	75.65
					11/3/2015	NA	20.35	NA	NA	74.50
					5/29/2015	NA	21.52	NA	NA	73.33
					11/11/2014	NA	21.76	NA	NA	73.09
					4/2/2014	NA	21.31	NA	NA	73.54
MW-5	26	16	26	95.26	2/20/2019	NA	DRY	NA	NA	DRY
					1/22/2018	NA	DRY	NA	NA	DRY
					6/26/2017	NA	DRY	NA	NA	DRY
					10/19/2016	NA	DRY	NA	NA	DRY
					5/16/2016	NA	19.75	NA	NA	75.51
					11/3/2015	NA	DRY	NA	NA	DRY
					5/29/2015	NA	DRY	NA	NA	DRY
					11/11/2014	NA	DRY	NA	NA	DRY
					4/2/2014	NA	DRY	NA	NA	DRY
MW-6	30	20	30	94.96	2/20/2019	NA	22.25	NA	NA	72.71
					1/22/2018	NA	24.54	NA	NA	70.42
					6/27/2017	NA	22.91	NA	NA	72.05
					10/19/2016	NA	22.04	NA	NA	72.92
					5/17/2016	NA	20.59	NA	NA	74.37
					11/3/2015	NA	21.21	NA	NA	73.75
					5/29/2015	NA	22.38	NA	NA	72.58
					11/11/2014	NA	23.98	NA	NA	70.98
					4/3/2014	NA	22.61	NA	NA	72.35
MW-7	30	20	30	95.93	2/20/2019	NA	22.65	NA	NA	73.28
					1/22/2018	NA	24.58	NA	NA	71.35
					6/27/2017	NA	22.32	NA	NA	73.61
					10/19/2016	NA	22.20	NA	NA	73.73
					5/16/2016	NA	20.98	NA	NA	74.95
					11/3/2015	NA	21.79	NA	NA	74.14
					5/29/2015	NA	23.48	NA	NA	72.45
					11/11/2014	NA	24.12	NA	NA	71.81
					4/3/2014	NA	23.02	NA	NA	72.91
MW-8	28	18.5	28	94.79	2/20/2019	NA	20.08	NA	NA	74.71
					1/22/2018	NA	21.86	NA	NA	72.93
					6/27/2017	NA	19.65	NA	NA	75.14
					10/19/2016	NA	19.70	NA	NA	75.09
					5/17/2016	NA	18.75	NA	NA	76.04
					11/3/2015	NA	19.19	NA	NA	75.60
					5/29/2015	NA	20.08	NA	NA	74.71
					11/11/2014	NA	21.43	NA	NA	73.36
					4/3/2014	NA	19.95	NA	NA	74.84

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-9	30	20	30	92.30	2/20/2019	NA	22.54	NA	NA	69.76
					1/22/2018	NA	22.22	NA	NA	70.08
					6/26/2017	Unable to Locate				
					10/19/2016	NA	20.30	NA	NA	72.00
					5/16/2016	NA	18.78	NA	NA	73.52
					11/3/2015	NA	20.04	NA	NA	72.26
					5/28/2015	NA	21.19	NA	NA	71.11
					11/11/2014	NA	21.69	NA	NA	70.61
					4/2/2014	NA	20.60	NA	NA	71.70
MW-10	28	18	28	85.98	2/20/2019	NA	15.01	NA	NA	70.97
					1/22/2018	NA	17.28	NA	NA	68.70
					6/28/2017	NA	15.33	NA	NA	70.65
					10/19/2016	NA	15.75	NA	NA	70.23
					5/18/2016	NA	14.52	NA	NA	71.46
					11/3/2015	NA	14.58	NA	NA	71.40
					5/28/2015	NA	16.64	NA	NA	69.34
					11/11/2014	Interface Probe Failure - 1.25-Feet of Product Observed in Bailer				
					4/1/2014	NA	17.69	NA	NA	68.29
MW-11	30	Unknown		88.46	2/20/2019	NA	17.83	NA	NA	70.63
					1/24/2018	NA	20.91	NA	NA	67.55
					6/27/2017	NA	17.75	NA	NA	70.71
					10/19/2016	NA	18.19	NA	NA	70.27
					5/18/2016	NA	16.66	NA	NA	71.80
					11/3/2015	NA	17.16	NA	NA	71.30
					5/29/2015	NA	18.93	NA	NA	69.53
					11/11/2014	NA	19.38	NA	NA	69.08
					4/2/2014	NA	18.61	NA	NA	69.85
MW-12	24.65	Unknown		72.80	2/20/2019	Destroyed - Paved Over				
					1/23/2018					
					6/26/2017					
					10/19/2016	NA	3.32	NA	NA	69.48
					5/18/2016	NA	2.73	NA	NA	70.07
					11/3/2015	NA	3.15	NA	NA	69.65
					5/28/2015	NA	4.38	NA	NA	68.42
					11/11/2014	NA	4.63	NA	NA	68.17
					4/2/2014	NA	4.20	NA	NA	68.60
MW-13	30.1	Unknown		80.44	2/20/2019	Destroyed - Paved Over				
					1/23/2018					
					6/26/2017					
					10/19/2016	NA	10.83	NA	NA	69.61
					5/16/2016	NA	9.71	NA	NA	70.73
					11/3/2015	NA	9.82	NA	NA	70.62
					5/28/2015	NA	11.71	NA	NA	68.73
					11/11/2014	NA	12.15	NA	NA	68.29
					4/1/2014	NA	11.13	NA	NA	69.31
MW-15	25	15	25	86.44	2/20/2019	NA	15.67	NA	NA	70.77
					1/22/2018	NA	17.29	NA	NA	69.15
					6/28/2017	NA	15.36	NA	NA	71.08
					10/19/2016	15.70	15.82	0.12	70.74	70.62
					5/18/2016	14.58	15.02	0.13	71.86	71.42
					11/3/2015	14.51	14.64	0.13	71.93	71.80
					5/29/2015	16.45	16.61	0.16	69.99	69.83
					11/11/2014	Interface Probe Failure - 0.25-Feet of Product Observed in Bailer				
					4/1/2014	16.60	16.00	0.60	69.84	70.88*
MW-16	25	15	25	88.19	1/22/2018	NA	19.36	NA	NA	68.83
					6/27/2017	NA	17.21	NA	NA	70.98
					10/19/2016	NA	17.55	NA	NA	68.89
					5/18/2016	NA	16.29	NA	NA	71.90
					11/3/2015	NA	16.29	NA	NA	70.15
					5/29/2015	Unable to Locate				
					11/12/2014	NA	18.98	NA	NA	69.21
					4/2/2014	NA	17.54	NA	NA	70.65
MW-17	22	20	30	92.45	1/22/2018	NA	23.87	NA	NA	68.58
					6/27/2017	NA	21.62	NA	NA	70.83
					10/19/2016	NA	21.58	NA	NA	70.87
					5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	NA	20.47	NA	NA	71.98
					5/28/2015	NA	22.70	NA	NA	69.75
					11/12/2014	NA	23.45	NA	NA	69.00
					4/2/2014	NA	22.00	NA	NA	70.45

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-18	30	20	30	94.81	2/20/2019	NA	23.58	NA	NA	71.23
					1/24/2018	NA	25.54	NA	NA	69.27
					6/26/2017	NA	23.16	NA	NA	71.35
					10/19/2016	NA	23.46	NA	NA	71.35
					5/15/2016	NA	22.04	NA	NA	72.77
					11/3/2015	NA	22.28	NA	NA	72.53
					5/28/2015	NA	24.41	NA	NA	70.40
					11/12/2014	NA	25.08	NA	NA	69.73
					4/2/2014	NA	23.68	NA	NA	71.13
MW-19	30	20	30	93.96	2/20/2019	NA	23.31	NA	NA	70.65
					1/24/2018	NA	25.11	NA	NA	68.85
					6/27/2017	NA	22.80	NA	NA	71.16
					10/19/2016	NA	23.70	NA	NA	70.26
					5/18/2016	NA	21.76	NA	NA	72.20
					11/3/2015	NA	21.81	NA	NA	72.15
					5/28/2015	NA	24.00	NA	NA	69.96
					11/13/2014	NA	24.56	NA	NA	69.40
					4/3/2014	NA	23.33	NA	NA	70.63
MW-20	25	15	25	94.12	2/20/2019	NA	21.98	NA	NA	72.14
					1/24/2018	NA	23.83	NA	NA	70.29
					6/27/2017	NA	21.50	NA	NA	72.62
					10/19/2016	NA	21.89	NA	NA	72.23
					5/15/2016	NA	20.41	NA	NA	73.71
					11/3/2015	NA	20.18	NA	NA	73.94
					5/28/2015	22.67	22.61	0.06	71.45	71.51
					11/13/2014	NA	23.28	NA	NA	70.84
					4/3/2014	NA	21.95	NA	NA	72.17
MW-22	30	20	30	94.25	2/20/2019	NA	21.10	NA	NA	73.15
					1/24/2018	NA	23.19	NA	NA	71.06
					6/27/2017	NA	20.77	NA	NA	73.48
					10/19/2016	NA	21.16	NA	NA	73.09
					5/15/2016	NA	19.61	NA	NA	74.64
					11/3/2015	NA	19.01	NA	NA	75.24
					5/28/2015	NA	21.85	NA	NA	72.40
					11/11/2014	NA	22.68	NA	NA	71.57
					4/3/2014	NA	21.11	NA	NA	73.14
MW-23	30	20	30	94.43	2/20/2019	NA	23.55	NA	NA	70.88
					1/24/2018	NA	25.35	NA	NA	69.08
					6/27/2017	NA	23.60	NA	NA	70.83
					10/19/2016	NA	23.06	NA	NA	71.37
					5/18/2016	NA	21.95	NA	NA	72.48
					11/3/2015	NA	21.95	NA	NA	72.48
					5/28/2015	NA	24.25	NA	NA	70.18
					11/13/2014	NA	24.98	NA	NA	69.45
					4/3/2014	NA	23.65	NA	NA	70.78
MW-25	25.6	Unknown		93.09	1/24/2018	NA	22.06	NA	NA	71.03
					6/26/2017	Unable to Locate				
					10/19/2016	NA	19.96	NA	NA	73.13
					5/15/2016	Unable to Locate				
					11/3/2015	NA	17.73	NA	NA	75.36
					5/28/2015	NA	20.65	NA	NA	72.44
					11/10/2014	NA	21.60	NA	NA	71.49
					4/1/2014	NA	19.71	NA	NA	73.38
MW-26	30	Unknown		95.96	2/20/2019	NA	22.70	NA	NA	73.26
					1/22/2018	NA	23.22	NA	NA	72.74
					6/28/2017	NA	21.44	NA	NA	74.52
					10/19/2016	Not Sampled due to Obstruction				
					5/17/2016	NA	20.24	NA	NA	75.72
					11/3/2015	NA	21.06	NA	NA	74.90
					6/5/2015	NA	22.49	NA	NA	73.47
					11/11/2014	NA	22.95	NA	NA	73.01
					4/3/2014	NA	20.01	NA	NA	75.95
MW-27	30	15	30	91.40	2/20/2019	NA	17.06	NA	NA	74.34
					1/24/2018	NA	19.71	NA	NA	71.69
					6/27/2017	NA	17.31	NA	NA	74.09
					10/19/2016	NA	17.46	NA	NA	73.94
					5/17/2016	NA	15.62	NA	NA	75.78
					11/3/2015	NA	11.21	NA	NA	80.19
					5/28/2015	NA	17.75	NA	NA	73.65
					11/13/2014	NA	18.85	NA	NA	72.55
					4/1/2014	NA	14.65	NA	NA	76.75

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-28	30	15	30	91.46	2/20/2019	NA	16.57	NA	NA	74.89
					1/24/2018	NA	20.30	NA	NA	71.16
					6/27/2017	NA	16.97	NA	NA	74.49
					10/19/2016	NA	17.53	NA	NA	73.93
					5/17/2016	NA	15.90	NA	NA	75.56
					11/3/2015	NA	13.08	NA	NA	78.38
					5/28/2015	NA	17.97	NA	NA	73.49
					11/13/2014	NA	19.75	NA	NA	71.71
					4/1/2014	NA	15.63	NA	NA	75.83
MW-29	30	15	30	91.09	2/20/2019	NA	16.45	NA	NA	74.64
					1/24/2018	NA	20.45	NA	NA	70.64
					6/27/2017	NA	16.95	NA	NA	74.14
					10/19/2016	NA	17.76	NA	NA	73.33
					5/17/2016	NA	15.88	NA	NA	75.21
					11/3/2015	NA	13.19	NA	NA	77.90
					5/28/2015	17.91	17.92	0.01	73.18	73.17
					11/13/2014	NA	19.92	NA	NA	71.17
					4/1/2014	NA	15.51	NA	NA	75.58
MW-30	30	15	30	92.77	2/20/2019	NA	20.49	NA	NA	72.28
					1/24/2018	NA	23.22	NA	NA	69.55
					6/27/2017	NA	20.46	NA	NA	72.31
					10/19/2016	NA	29.20	NA	NA	63.57
					5/15/2016	NA	19.27	NA	NA	73.50
					11/3/2015	NA	17.43	NA	NA	75.34
					5/28/2015	NA	26.70	NA	NA	66.07
					11/10/2014	NA	22.90	NA	NA	69.87
					4/1/2014	NA	20.50	NA	NA	72.27
MW-31	35	20	35	95.20	2/20/2019	NA	24.40	NA	NA	70.80
					1/23/2018	NA	26.61	NA	NA	68.59
					6/27/2017	NA	24.12	NA	NA	71.08
					10/19/2016	NA	24.41	NA	NA	70.79
					5/17/2016	NA	22.98	NA	NA	72.22
					11/3/2015	NA	22.53	NA	NA	72.67
					5/28/2015	25.61	25.62	0.01	69.59	69.58
					11/12/2014	NA	26.36	NA	NA	68.84
					4/2/2014	NA	24.41	NA	NA	70.79
MW-32	30	15	30	92.87	2/20/2019	NA	21.15	NA	NA	71.72
					1/24/2018	NA	23.54	NA	NA	69.33
					6/27/2017	NA	20.01	NA	NA	72.86
					10/19/2016	Not Sampled due to Obstruction				
					5/17/2016	NA	19.75	NA	NA	73.12
					11/3/2015	NA	19.12	NA	NA	73.75
					5/28/2015	NA	22.00	NA	NA	70.87
					11/12/2014	NA	23.16	NA	NA	69.71
					4/2/2014	NA	21.28	NA	NA	71.59
MW-33	35	20	35	93.84	2/20/2019	NA	23.05	NA	NA	70.79
					1/23/2018	NA	25.02	NA	NA	68.82
					6/27/2017	NA	22.70	NA	NA	71.14
					10/19/2016	NA	23.00	NA	NA	70.84
					5/15/2016	NA	21.57	NA	NA	72.27
					11/3/2015	NA	21.48	NA	NA	72.36
					5/28/2015	NA	23.83	NA	NA	70.01
					11/12/2014	NA	24.65	NA	NA	69.19
					4/1/2014	NA	23.18	NA	NA	70.66
MW-34	35	20	35	94.77	2/20/2019	NA	23.92	NA	NA	70.85
					1/24/2018	NA	25.84	NA	NA	68.93
					6/27/2017	NA	25.52	NA	NA	69.25
					10/19/2016	NA	23.81	NA	NA	70.96
					5/15/2016	NA	22.38	NA	NA	72.39
					11/3/2015	NA	21.52	NA	NA	73.25
					5/28/2015	NA	24.72	NA	NA	70.05
					11/12/2014	NA	25.49	NA	NA	69.28
					4/1/2014	NA	24.06	NA	NA	70.71
MW-35	35	20	35	93.71	2/20/2019	NA	23.01	NA	NA	70.70
					1/24/2018	NA	24.88	NA	NA	68.83
					6/27/2017	NA	22.65	NA	NA	71.06
					10/19/2016	NA	22.89	NA	NA	70.82
					5/16/2016	NA	21.48	NA	NA	72.23
					11/3/2015	NA	21.37	NA	NA	72.34
					5/28/2015	NA	23.80	NA	NA	69.91
					11/12/2014	NA	24.66	NA	NA	69.05
					4/1/2014	NA	21.35	NA	NA	72.36

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-36	35	20	35	93.89	2/20/2019	NA	22.81	NA	NA	71.08
					1/23/2018	NA	25.02	NA	NA	68.87
					6/27/2017	NA	22.52	NA	NA	71.37
					10/19/2016	NA	22.91	NA	NA	70.98
					5/15/2016	NA	21.36	NA	NA	72.53
					11/3/2015	NA	21.36	NA	NA	72.53
					5/28/2015	NA	23.63	NA	NA	70.26
					11/12/2014	NA	24.72	NA	NA	69.17
					4/1/2014	NA	22.84	NA	NA	71.05
MW-37	35	20	35	93.78	2/20/2019	NA	23.13	NA	NA	70.65
					1/23/2018	NA	25.17	NA	NA	68.61
					6/27/2017	NA	22.76	NA	NA	71.02
					10/19/2016	NA	23.04	NA	NA	70.74
					5/16/2016	NA	21.61	NA	NA	72.17
					11/3/2015	NA	21.36	NA	NA	72.42
					5/28/2015	NA	23.98	NA	NA	69.80
					11/12/2014	NA	24.87	NA	NA	68.91
					4/1/2014	NA	22.24	NA	NA	71.54
MW-38	35	20	35	95.53	2/20/2019	NA	24.45	NA	NA	71.08
					1/23/2018	NA	26.42	NA	NA	69.11
					6/27/2017	NA	24.06	NA	NA	71.47
					10/19/2016	NA	24.32	NA	NA	71.21
					5/18/2016	NA	24.83	NA	NA	70.70
					11/3/2015	NA	22.89	NA	NA	72.64
					6/2/2015	NA	25.26	NA	NA	70.27
					11/12/2014	NA	26.17	NA	NA	69.36
					4/1/2014	NA	24.61	NA	NA	70.92
MW-39	35	20	35	96.19	1/23/2018	NA	27.68	NA	NA	68.51
					6/27/2017	NA	25.15	NA	NA	71.04
					10/19/2016	NA	25.37	NA	NA	70.82
					5/18/2016	NA	24.02	NA	NA	72.17
					11/3/2015	NA	23.79	NA	NA	72.40
					6/2/2015	NA	26.45	NA	NA	69.74
					11/12/2014	NA	27.36	NA	NA	68.83
					4/2/2014	NA	25.59	NA	NA	70.60
MW-40	35	20	35	95.69	2/20/2019	NA	24.80	NA	NA	70.89
					1/23/2018	NA	26.88	NA	NA	68.81
					6/27/2017	NA	24.47	NA	NA	71.22
					10/19/2016	NA	25.04	NA	NA	70.65
					5/18/2016	NA	25.25	NA	NA	70.44
					11/3/2015	NA	23.43	NA	NA	72.26
					6/2/2015	NA	26.12	NA	NA	69.57
					11/12/2014	NA	27.01	NA	NA	68.68
					4/2/2014	NA	25.29	NA	NA	70.40
MW-41	35	20	35	94.85	2/20/2019	NA	25.24	NA	NA	69.61
					1/23/2018	NA	27.31	NA	NA	67.54
					6/27/2017	NA	24.91	NA	NA	69.94
					10/19/2016	NA	24.45	NA	NA	70.40
					5/18/2016	NA	23.71	NA	NA	71.14
					11/3/2015	NA	22.77	NA	NA	72.08
					6/2/2015	NA	25.69	NA	NA	69.16
					11/11/2014	NA	26.99	NA	NA	67.86
					4/1/2014	NA	24.70	NA	NA	70.15
MW-42	35	20	35	95.81	1/23/2018	NA	27.42	NA	NA	68.39
					6/27/2017	NA	25.00	NA	NA	70.81
					10/19/2016	NA	25.08	NA	NA	70.73
					5/18/2016	NA	23.73	NA	NA	72.08
					11/3/2015	NA	23.46	NA	NA	72.35
					6/2/2015	NA	26.25	NA	NA	69.56
					11/12/2014	NA	27.22	NA	NA	68.59
					4/1/2014	NA	25.35	NA	NA	70.46
MW-43	40	20	40	95.15	2/20/2019	NA	23.75	NA	NA	71.40
					1/23/2018	NA	25.84	NA	NA	69.31
					6/27/2017	NA	23.32	NA	NA	71.83
					10/19/2016	NA	23.70	NA	NA	71.45
					5/18/2016	NA	22.04	NA	NA	73.11
					11/3/2015	NA	22.21	NA	NA	72.94
					5/28/2015	NA	24.66	NA	NA	70.49
					11/11/2014	NA	25.61	NA	NA	69.54
					4/2/2014	NA	24.00	NA	NA	71.15

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-44	31	16	31	94.57	2/20/2019	NA	22.02	NA	NA	72.55
					1/23/2018	NA	24.42	NA	NA	70.15
					6/27/2017	NA	21.57	NA	NA	73.00
					10/19/2016	NA	22.16	NA	NA	72.41
					5/18/2016	NA	20.11	NA	NA	74.46
					11/3/2015	NA	20.33	NA	NA	74.24
					5/28/2015	NA	22.70	NA	NA	71.87
					11/11/2014	NA	24.23	NA	NA	70.34
					4/1/2014	NA	24.42	NA	NA	70.15
MW-45	30	15	30	92.51	2/20/2019	NA	21.03	NA	NA	71.48
					1/23/2018	NA	22.94	NA	NA	69.57
					6/27/2017	NA	20.56	NA	NA	71.95
					10/19/2016	NA	20.99	NA	NA	71.52
					5/18/2016	NA	19.43	NA	NA	73.08
					11/3/2015	NA	19.45	NA	NA	73.06
					5/28/2015	NA	21.75	NA	NA	70.76
					11/11/2014	NA	22.63	NA	NA	69.88
					4/1/2014	NA	21.22	NA	NA	71.29
MW-46	35	20	35	94.50	2/20/2019	NA	23.38	NA	NA	71.12
					1/23/2018	NA	25.26	NA	NA	69.24
					6/27/2017	NA	22.82	NA	NA	71.68
					10/19/2016	NA	23.25	NA	NA	71.25
					5/16/2016	NA	21.70	NA	NA	72.80
					11/3/2015	NA	21.84	NA	NA	72.66
					5/28/2015	NA	24.19	NA	NA	70.31
					11/11/2014	NA	24.95	NA	NA	69.55
					4/1/2014	NA	23.55	NA	NA	70.95
MW-48	30	15	30	89.95	2/20/2019	Unable to Access - Locked Gate				
					1/22/2018					
					6/26/2017					
					10/19/2016					
					5/18/2016	NA	18.21	NA	NA	71.74
					11/3/2015	Unable to Access - Locked Gate				
					5/29/2015	NA	19.63	NA	NA	70.32
					11/11/2014	Unable to Access - Locked Gate				
					4/2/2014	NA	19.70	NA	NA	70.25
MW-49	30	15	30	88.18	2/20/2019	NA	15.93	NA	NA	72.25
					1/24/2018	NA	17.83	NA	NA	70.35
					6/26/2017	Unable to Access - Locked Gate				
					10/19/2016					
					5/15/2016					
					11/3/2015					
					5/29/2015					
					11/11/2014					
					4/2/2014					
MW-50	30	15	30	84.09	2/20/2019	NA	13.72	NA	NA	70.37
					1/24/2018	Unable to Access - Locked Gate				
					6/26/2017					
					10/19/2016					
					5/15/2016					
					11/3/2015					
					5/29/2015					
					11/11/2014					
					4/2/2014					
MW-51	35	20	35	93.91	1/22/2018	NA	24.82	NA	NA	69.09
					6/27/2017	NA	22.51	NA	NA	71.40
					10/19/2016	NA	22.78	NA	NA	71.13
					5/18/2016	NA	20.76	NA	NA	73.15
					11/3/2015	NA	21.87	NA	NA	72.04
					5/29/2015	NA	23.72	NA	NA	70.19
					11/11/2014	NA	24.29	NA	NA	69.62
					4/2/2014	NA	21.23	NA	NA	72.68
MW-53	20	5	20	79.60	2/20/2019	NA	9.67	NA	NA	69.93
					1/22/2018	NA	11.32	NA	NA	68.28
					6/27/2017	NA	9.49	NA	NA	70.11
					10/19/2016	Unable to Locate- Overgrown Field				
					5/15/2016	Unable to Locate- Overgrown Field				
					11/3/2015	NA	8.49	NA	NA	71.11
					5/28/2015	NA	10.50	NA	NA	69.10
					11/11/2014	NA	11.02	NA	NA	68.58
					4/3/2014	NA	9.60	NA	NA	70.00

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352
Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-54	20	5	20	77.58	2/20/2019	Destroyed - Paved Over				
					1/23/2018					
					6/26/2017					
					10/19/2016	NA	10.66	NA	NA	66.92
					5/18/2016	NA	10.15	NA	NA	67.43
					11/3/2015	NA	9.83	NA	NA	67.75
					5/28/2015	NA	11.27	NA	NA	66.31
					11/11/2014	Unable to Locate - Overgrown Field				
					4/1/2014	NA	11.31	NA	NA	66.27
MW-55	14	4	14	71.22	2/20/2019	NA	2.18	NA	NA	69.04
					1/22/2018	NA	3.51	NA	NA	67.71
					6/27/2017	NA	2.10	NA	NA	69.12
					10/19/2016	NA	4.26	NA	NA	66.96
					5/18/2016	NA	1.55	NA	NA	69.67
					11/3/2015	NA	1.19	NA	NA	70.03
					5/28/2015	NA	3.83	NA	NA	67.39
					11/11/2014	Unable to Locate - Overgrown Field				
					4/3/2014	NA	2.51	NA	NA	68.71
MW-56	20	5	20	76.39	2/20/2019	NA	7.35	NA	NA	69.04
					1/22/2018	NA	8.69	NA	NA	67.70
					6/27/2017	NA	7.20	NA	NA	69.19
					10/19/2016	NA	7.45	NA	NA	68.94
					5/18/2016	NA	6.76	NA	NA	69.63
					11/3/2015	NA	6.40	NA	NA	69.99
					5/28/2015	NA	8.22	NA	NA	68.17
					11/11/2014	Unable to Locate - Overgrown Field				
					4/3/2014	NA	5.12	NA	NA	71.27
MW-58	19	4	19	76.37	2/20/2019	Not Sampled due to Obstruction				
					1/24/2018					
					6/26/2017					
					10/19/2016					
					5/18/2016					
					11/3/2015	NA	4.52	NA	NA	71.85
					5/29/2015	NA	6.85	NA	NA	69.52
					11/11/2014	Abandoned				
					4/2/2014					
MW-59	17	2	17	68.02	1/22/2018	NA	6.55	NA	NA	61.47
					6/28/2017	NA	5.65	NA	NA	62.37
					10/19/2016	NA	5.84	NA	NA	62.18
					5/18/2016	NA	5.46	NA	NA	62.56
					11/3/2015	NA	5.04	NA	NA	62.98
					5/28/2015	NA	6.46	NA	NA	61.56
					11/11/2014	NA	6.69	NA	NA	61.33
					4/2/2014	NA	6.05	NA	NA	61.97
MW-60	14	4	14	67.94	2/20/2019	Unable to Locate				
					1/22/2018					
					6/26/2017					
					10/19/2016					
					5/18/2016					
					11/3/2015					
					5/28/2015					
					11/11/2014					
					4/2/2014					
MW-62	35	20	35	94.05	2/20/2019	NA	22.73	NA	NA	71.32
					1/23/2018	NA	24.18	NA	NA	69.87
					6/27/2017	NA	22.44	NA	NA	71.61
					10/19/2016	NA	22.64	NA	NA	71.41
					5/18/2016	Not Sampled due to Obstruction				
					11/3/2015	22.15	22.67	0.52	71.90	71.38
					5/28/2015	22.21	23.71	1.5	71.84	70.34
					11/12/2014	NA	24.75	NA	NA	69.30
					4/1/2014	NA	22.32	NA	NA	71.73
MW-63	35	20	35	94.65	2/20/2019	NA	23.05	NA	NA	71.60
					1/23/2018	NA	25.45	NA	NA	69.20
					6/27/2017	NA	22.81	NA	NA	71.84
					10/19/2016	NA	22.84	NA	NA	71.81
					5/18/2016	NA	21.66	NA	NA	72.99
					11/3/2015	NA	24.05	NA	NA	70.60
					5/28/2015	24.04	24.05	0.01	70.61	70.60
					11/12/2015	Unable to Locate				
					4/2/2014	NA	23.07	NA	NA	71.58

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
MW-65	35	20	35	94.04	2/20/2019	Unable to Locate - Paved over				
					1/22/2018					
					6/26/2017					
					10/19/2016					
					5/15/2016					
					11/3/2015					
					5/28/2015					
					11/11/2014					
					4/2/2014					
MW-67	35	20	35	96.10	2/20/2019	NA	25.35	NA	NA	70.75
					1/23/2018	NA	27.44	NA	NA	68.66
					6/27/2017	NA	25.42	NA	NA	70.68
					10/19/2016	NA	25.18	NA	NA	70.92
					5/18/2016	NA	23.73	NA	NA	72.37
					11/3/2015	NA	23.52	NA	NA	72.58
					6/2/2015	NA	26.29	NA	NA	69.81
					11/12/2014	NA	27.28	NA	NA	68.82
					4/1/2014	NA	24.44	NA	NA	71.66
MW-70	35	20	35	95.49	2/20/2019	NA	24.68	NA	NA	70.81
					1/23/2018	NA	26.36	NA	NA	69.13
					6/27/2017	NA	24.51	NA	NA	70.98
					10/19/2016	NA	24.43	NA	NA	71.06
					5/18/2016	NA	23.11	NA	NA	72.38
					11/3/2015	NA	22.89	NA	NA	72.60
					5/28/2015	NA	25.60	NA	NA	69.89
					11/11/2014	NA	26.22	NA	NA	69.27
					4/2/2014	NA	24.70	NA	NA	70.79
MW-5AR	28	18	28	94.18	2/20/2019	NA	21.04	NA	NA	73.14
					1/24/2018	NA	23.16	NA	NA	71.02
					6/27/2017	NA	21.61	NA	NA	72.57
					10/19/2016	NA	21.04	NA	NA	73.14
					5/15/2016	NA	19.59	NA	NA	74.59
					11/3/2015	NA	16.39	NA	NA	77.79
					5/28/2015	NA	20.91	NA	NA	73.27
					11/13/2014	NA	22.64	NA	NA	71.54
					4/1/2014	NA	21.24	NA	NA	72.94
PW-1R	50	45	50	93.75	2/20/2019	NA	22.72	NA	NA	71.03
					1/24/2018	NA	24.43	NA	NA	69.32
					6/28/2017	NA	22.16	NA	NA	71.59
					10/19/2016	NA	22.36	NA	NA	71.39
					5/18/2016	NA	21.03	NA	NA	72.72
					11/3/2015	NA	21.43	NA	NA	72.32
					5/29/2015	23.19	23.20	0.01	70.56	70.55
					11/13/2014	NA	23.92	NA	NA	69.83
					4/3/2014	NA	23.11	NA	NA	70.64
DW-1	70	65	70	94.66	2/20/2019	NA	44.02	NA	NA	50.64
					1/22/2018	NA	43.95	NA	NA	50.71
					6/28/2017	NA	42.91	NA	NA	51.75
					10/19/2016	NA	42.32	NA	NA	52.34
					5/16/2016	NA	42.71	NA	NA	51.95
					11/3/2015	NA	46.28	NA	NA	48.38
					5/29/2015	NA	46.28	NA	NA	48.38
					11/10/2014	NA	45.42	NA	NA	49.24
					4/2/2014	NA	45.00	NA	NA	49.66
DW-2	75	70	75	94.02	2/20/2019	NA	43.30	NA	NA	50.72
					1/22/2018	NA	43.23	NA	NA	50.79
					6/28/2017	NA	42.21	NA	NA	51.81
					10/19/2016	NA	43.05	NA	NA	50.97
					5/16/2016	NA	41.99	NA	NA	52.03
					11/3/2015	NA	43.07	NA	NA	50.95
					11/11/2014	NA	44.88	NA	NA	49.14
					4/2/2014	NA	44.34	NA	NA	49.68
DW-3	52	47	52	93.75	2/20/2019	NA	23.32	NA	NA	70.43
					1/24/2018	NA	25.11	NA	NA	68.64
					6/28/2017	NA	22.85	NA	NA	70.90
					10/19/2016	NA	23.07	NA	NA	70.68
					5/18/2016	NA	21.70	NA	NA	72.05
					11/3/2015	NA	21.29	NA	NA	72.46
					5/28/2015	NA	23.93	NA	NA	69.82
					11/13/2014	NA	24.42	NA	NA	69.33
					4/3/2014	NA	24.40	NA	NA	69.35

Table 1

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST Permit ID: 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — CES Project Number: 7.0547

Well Construction and Historical Groundwater Elevation Summary

Monitor Well	Well Depth (ft)	Screened Interval		Top of Casing (ft)	Date Measured	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Product Elevation (ft)	Groundwater Elevation (ft)
DW-4	110	105	110	93.79	2/20/2019	NA	43.26	NA	NA	50.53
					1/24/2018	NA	43.33	NA	NA	50.46
					6/28/2017	NA	38.96	NA	NA	54.83
					10/19/2016	NA	42.79	NA	NA	51.00
					5/18/2016	NA	42.31	NA	NA	51.48
					11/3/2015	NA	43.34	NA	NA	50.45
					5/28/2015	NA	44.51	NA	NA	49.28
					11/13/2014	NA	3.45	NA	NA	90.34
					4/3/2014	NA	44.60	NA	NA	49.19
DW-5	70	65	70	93.74	2/20/2019	NA	43.26	NA	NA	50.48
					1/24/2018	NA	43.46	NA	NA	50.28
					6/28/2017	NA	42.34	NA	NA	51.40
					10/19/2016	NA	42.51	NA	NA	51.23
					5/16/2016	NA	42.12	NA	NA	51.62
					11/3/2015	NA	42.89	NA	NA	50.85
					5/28/2015	NA	44.45	NA	NA	49.29
					11/12/2014	NA	44.75	NA	NA	48.99
					4/1/2014	NA	44.22	NA	NA	49.52
DW-6	70	65	70	95.90	1/23/2018	NA	45.51	NA	NA	50.39
					6/28/2017	NA	44.31	NA	NA	51.59
					10/19/2016	NA	44.54	NA	NA	51.36
					5/18/2016	NA	44.10	NA	NA	51.80
					11/3/2015	NA	44.59	NA	NA	51.31
					6/2/2015	NA	46.16	NA	NA	49.74
					11/12/2014	NA	46.64	NA	NA	49.26
					4/1/2014	NA	45.86	NA	NA	50.04
DW-7	55	50	55	72.79	2/20/2019	Destroyed - Paved Over				
					1/24/2018					
					6/26/2017					
					10/19/2016	NA	22.24	NA	NA	50.55
					5/18/2016	NA	21.82	NA	NA	50.97
					11/3/2015	NA	22.97	NA	NA	49.82
					5/28/2015	NA	24.32	NA	NA	48.47
					11/11/2014	NA	24.75	NA	NA	48.04
					4/3/2014	NA	24.00	NA	NA	48.79
DW-8	55	50	55	68.63	2/20/2019	Not Sampled due to Obstruction				
					1/24/2018					
					6/26/2017					
					10/19/2016					
					5/18/2016					
					11/3/2015	NA	19.43	NA	NA	49.20
					5/29/2015	NA	5.37	NA	NA	63.26
					11/11/2014	Abandoned				
					4/2/2014					
DW-9	65	60	65	76.47	2/20/2019	NA	23.87	NA	NA	52.60
					1/22/2018	NA	23.73	NA	NA	52.74
					6/28/2017	NA	22.73	NA	NA	53.74
					10/19/2016	NA	22.87	NA	NA	53.60
					5/18/2016	NA	22.42	NA	NA	54.05
					11/3/2015	NA	23.62	NA	NA	52.85
					5/28/2015	NA	24.90	NA	NA	51.57
					11/11/2014	NA	24.44	NA	NA	52.03
					4/2/2014	NA	25.00	NA	NA	51.47

INA = Information not available

* = GW Elevation Corrected for The Presence of Free Product

n/a = not applicable

CRAWFORD ENVIRONMENTAL SERVICES

Table 2

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron — UST — 07584 / 07777 / 12352

Address: 2367 Taylor Street Columbia, South Carolina — Crawford Project No. — 7.0547

Groundwater Laboratory Analytical Result Summary

Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-1	4/2/2014	Dry								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/15/2016									
	10/16/2016									
	6/26/2017									
	1/22/2018									
	2/20/2019									
MW-2	4/2/2014	170	41	200	960	320	150	230	1	6.8
	11/4/2014	140	300	220	1300	410	160	210	<10	<100
	5/29/2015	0.01-Feet of Free Product								
	11/4/2015	0.61	0.48	1.4	5.5	<1	2.6	<100	<10	<100
	5/16/2016	11	0.83 J	0.98 J	49	18	12	<100	<10	<100
	10/21/2016	34	4.9	23	60	56	18	68 J	<10	47 J
	6/27/2017	190	5.6	140	640	370	140	190	14	<100
	1/22/2018	450	10	270	960	520	190	430	23	<100
	2/20/2019	120	4.6	180	290	110	120	73 J	<10	<100
MW-3	4/2/2014	6900	18000	1200	16000	1800	600	980	560.000	340
	11/12/2014	4600	11000	620	8700	1300	280	<5000	310.000	<5000
	5/29/2015	0.09-Feet of Free Product								
	11/4/2015	3000	8700	600	7200	720	360	<2000	140	<2000
	5/16/2016	7800	22000	1800	21000	2500	870	<5000	410 J	<5000
	10/21/2016	480	1000	76	2100	67	61	210	29	330
	6/27/2017	3900	13000	1100	10000	370	560	<1000	210	<1000
	1/22/2018	8400	29000	2400	29000	1500	740	<1000	370 J	<10000
	2/20/2019	5300	21000	1500	17000	520	1600 J	<50000	<5000	<50000
MW-4	4/2/2014	<1	<1	<1	<1	3.5	<5	<100	10.000	<100
	11/11/2014	<1	<1	<1	<1	1.6	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	0.87 J	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	0.73 J	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	2.2	<5	<100	<10	<100
MW-5	4/2/2014	Dry								
	11/11/2014									
	5/29/2015									
	11/3/2015									
	5/16/2016	0.29 J	<1	<1	<1	<1	<5	<100	<10	<100
	10/19/2016	Dry								
	6/26/2017	Dry								
	1/22/2018	Dry								
	2/20/2019	Dry								
MW-6	4/3/2014	2.6	<1	2.4	10	2.5	4.2	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	0.8	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	1.7	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	1.9 J	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	1.9	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	13	<5	<100	<10	<100
MW-7	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	0.71	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	1.3 J	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-8	4/3/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/29/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	10/21/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
	6/27/2017	<1	<1	<1	<1	<1	<5	<100	<10	<100
	1/22/2018	<1	<1	<1	<1	<1	<5	<100	<10	<100