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	4/2/2014	NA	DRY	NA	NA	DRY
					11/4/2014	NA	DRY	NA	NA	DRY
MW-2	30	20	30	94.70	4/2/2014	NA	21.12	NA	NA	73.58
					11/4/2014	NA	23.03	NA	NA	71.67
MW-3	29	19	29	94.45	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	4/2/2014	NA	21.31	NA	NA	73.54
					11/11/2014	NA	21.76	NA	NA	73.09
MW-5	26	16	26	95.26	4/2/2014	NA	DRY	NA	NA	DRY
					11/11/2014	NA	DRY	NA	NA	DRY
MW-6	30	20	30	94.96	4/3/2014	NA	22.61	NA	NA	72.35
					11/11/2014	NA	23.98	NA	NA	70.98
MW-7	30	20	30	95.93	4/3/2014	NA	23.02	NA	NA	72.91
					11/11/2014	NA	24.12	NA	NA	71.81
MW-8	28	18.5	28	94.79	4/3/2014	NA	19.95	NA	NA	74.84
					11/11/2014	NA	21.43	NA	NA	73.36
MW-9	30	20	30	92.30	4/2/2014	NA	20.60	NA	NA	71.70
					11/11/2014	NA	21.69	NA	NA	70.61
MW-10	28	18	28	85.98	4/1/2014	NA	17.69	NA	NA	68.29
					11/11/2014	Interface Probe Failure - 1.25-Feet of Product Observed in Bailer				
MW-11	30	Unknown		88.46	4/2/2014	NA	18.61	NA	NA	69.85
					11/11/2014	NA	19.38	NA	NA	69.08
MW-12	24.65	Unknown		72.80	4/2/2014	NA	4.20	NA	NA	68.60
					11/11/2014	NA	4.63	NA	NA	68.17
MW-13	30.1	Unknown		80.44	4/1/2014	NA	11.13	NA	NA	69.31
					11/11/2014	NA	12.15	NA	NA	68.29
MW-15	25	15	25	86.44	4/1/2014	**16.60**	**16.00**	**0.60**	**69.84**	70.88*
					11/11/2014	Interface Probe Failure - 0.25-Feet of Product Observed in Bailer				
MW-16	25	15	25	88.19	4/2/2014	NA	17.54	NA	NA	70.65
					11/12/2014	NA	18.98	NA	NA	69.21
MW-17	22	20	30	92.45	4/2/2014	NA	22.00	NA	NA	70.45
					11/12/2014	NA	23.45	NA	NA	69.00
MW-18	30	20	30	94.81	4/2/2014	NA	23.68	NA	NA	71.13
					11/12/2014	NA	25.08	NA	NA	69.73
MW-19	30	20	30	93.96	4/3/2014	NA	23.33	NA	NA	70.63
					11/13/2014	NA	24.56	NA	NA	69.40
MW-20	25	15	25	94.12	4/3/2014	NA	21.95	NA	NA	72.17
					11/13/2014	NA	23.28	NA	NA	70.84
MW-22	30	20	30	94.25	4/3/2014	NA	21.11	NA	NA	73.14
					11/11/2014	NA	22.68	NA	NA	71.57
MW-23	30	20	30	94.43	4/3/2014	NA	23.65	NA	NA	70.78
					11/13/2014	NA	24.98	NA	NA	69.45
MW-25	25.6	Unknown		93.09	4/1/2014	NA	19.71	NA	NA	73.38
					11/10/2014	NA	21.60	NA	NA	71.49
MW-26	30	Unknown		95.96	4/3/2014	NA	20.01	NA	NA	75.95
					11/11/2014	NA	22.95	NA	NA	73.01
MW-27	30	15	30	91.40	4/1/2014	NA	14.65	NA	NA	76.75
					11/13/2014	NA	18.85	NA	NA	72.55
MW-28	30	15	30	91.46	4/1/2014	NA	15.63	NA	NA	75.83
					11/13/2014	NA	19.75	NA	NA	71.71
MW-29	30	15	30	91.09	4/1/2014	NA	15.51	NA	NA	75.58
					11/13/2014	NA	19.92	NA	NA	71.17
MW-30	30	15	30	92.77	4/1/2014	NA	20.50	NA	NA	72.27
					11/10/2014	NA	22.90	NA	NA	69.87
MW-31	35	20	35	95.20	4/2/2014	NA	24.41	NA	NA	70.79
					11/12/2014	NA	26.36	NA	NA	68.84
MW-32	30	15	30	92.87	4/2/2014	NA	21.28	NA	NA	71.59
					11/12/2014	NA	23.16	NA	NA	69.71
MW-33	35	20	35	93.84	4/1/2014	NA	23.18	NA	NA	70.66
					11/12/2014	NA	24.65	NA	NA	69.19
MW-34	35	20	35	94.77	4/1/2014	NA	24.06	NA	NA	70.71
					11/12/2014	NA	25.49	NA	NA	69.28

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-35	35	20	35	93.71	4/1/2014	NA	21.35	NA	NA	72.36
					11/12/2014	NA	24.66	NA	NA	69.05
MW-36	35	20	35	93.89	4/1/2014	NA	22.84	NA	NA	71.05
					11/12/2014	NA	24.72	NA		69.17
MW-37	35	20	35	93.78	4/1/2014	NA	22.24	NA	NA	71.54
					11/12/2014	NA	24.87	NA	NA	68.91
MW-38	35	20	35	95.53	4/1/2014	NA	24.61	NA	NA	70.92
					11/12/2014	NA	26.17	NA	NA	69.36
MW-39	35	20	35	96.19	4/2/2014	NA	25.59	NA	NA	70.60
					11/12/2014	NA	27.36	NA	NA	68.83
MW-40	35	20	35	95.69	4/2/2014	NA	25.29	NA	NA	70.40
					11/12/2014	NA	27.01	NA	NA	68.68
MW-41	35	20	35	94.85	4/1/2014	NA	24.70	NA	NA	70.15
					11/11/2014	NA	26.99	NA	NA	67.86
MW-42	35	20	35	95.81	4/1/2014	NA	25.35	NA	NA	70.46
					11/12/2014	NA	27.22	NA	NA	68.59
MW-43	40	20	40	95.15	4/2/2014	NA	24.00	NA	NA	71.15
					11/11/2014	NA	25.61	NA	NA	69.54
MW-44	31	16	31	94.57	4/1/2014	NA	24.42	NA	NA	70.15
					11/11/2014	NA	24.23	NA	NA	70.34
MW-45	30	15	30	92.51	4/1/2014	NA	21.22	NA	NA	71.29
					11/11/2014	NA	22.63	NA	NA	69.88
MW-46	35	20	35	94.50	4/1/2014	NA	23.55	NA	NA	70.95
					11/11/2014	NA	24.95	NA	NA	69.55
MW-48	30	15	30	89.95	4/2/2014	NA	19.70	NA	NA	70.25
					11/11/2014	Unable to Access - Locked Gate				
MW-49	30	15	30	88.18	4/2/2014	Unable to Access - Locked Gate				
					11/11/2014					
MW-50	30	15	30	84.09	4/2/2014	Unable to Access - Locked Gate				
					11/11/2014					
MW-51	35	20	35	93.91	4/2/2014	NA	21.23	NA	NA	72.68
					11/11/2014	NA	24.29	NA	NA	69.62
MW-53	20	5	20	79.60	4/3/2014	NA	9.60	NA	NA	70.00
					11/11/2014	NA	11.02	NA	NA	68.58
MW-54	20	5	20	77.58	4/1/2014	NA	11.31	NA	NA	66.27
					11/11/2014	Unable to Locate - Overgrown Field				
MW-55	14	4	14	71.22	4/3/2014	NA	2.51	NA	NA	68.71
					11/11/2014	Unable to Locate - Overgrown Field				
MW-56	20	5	20	76.39	4/3/2014	NA	5.12	NA	NA	71.27
					11/11/2014	Unable to Locate - Overgrown Field				
MW-58	19	4	19	76.37	4/2/2014	Abandoned				
					11/11/2014					
MW-59	17	2	17	68.02	4/2/2014	NA	6.05	NA	NA	61.97
					11/11/2014	NA	6.69	NA	NA	61.33
MW-60	14	4	14	67.94	4/2/2014	Unable to Locate				
					11/11/2014					
MW-62	35	20	35	94.05	4/1/2014	NA	22.32	NA	NA	71.73
					11/12/2014	NA	24.75	NA	NA	69.30
MW-63	35	20	35	94.65	4/2/2014	NA	23.07	NA	NA	71.58
					11/12/2015	Unable to Locate				
MW-65	35	20	35	94.04	4/2/2014	Unable to Locate - Paved over				
					11/11/2014					
MW-67	35	20	35	96.10	4/1/2014	NA	24.44	NA	NA	71.66
					11/12/2014	NA	27.28	NA	NA	68.82
MW-70	35	20	35	95.49	4/2/2014	NA	24.70	NA	NA	70.79
					11/11/2014	NA	26.22	NA	NA	69.27
MW-5AR	28	18	28	94.18	4/1/2014	NA	21.24	NA	NA	72.94
					11/13/2014	NA	22.64	NA	NA	71.54
PW-1R	50	45	50	93.75	4/3/2014	NA	23.11	NA	NA	70.64
					11/13/2014	NA	23.92	NA	NA	69.83
DW-1	70	65	70	94.66	4/2/2014	NA	45.00	NA	NA	49.66
					11/10/2014	NA	45.42	NA	NA	49.24
DW-2	75	70	75	94.02	4/2/2014	NA	44.34	NA	NA	49.68
					11/11/2014	NA	44.88	NA	NA	49.14

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	4/3/2014	NA	24.40	NA	NA	69.35
					11/13/2014	NA	24.42	NA	NA	69.33
DW-4	110	105	110	93.79	4/3/2014	NA	44.60	NA	NA	49.19
					11/13/2014	NA	3.45	NA	NA	90.34
DW-5	70	65	70	93.74	4/1/2014	NA	44.22	NA	NA	49.52
					11/12/2014	NA	44.75	NA	NA	48.99
DW-6	70	65	70	95.90	4/1/2014	NA	45.86	NA	NA	50.04
					11/12/2014	NA	46.64	NA	NA	49.26
DW-7	55	50	55	72.79	4/3/2014	NA	24.00	NA	NA	48.79
					11/11/2014	NA	24.75	NA	NA	48.04
DW-8	55	50	55	68.63	4/2/2014	Abandoned				
					11/11/2014					
DW-9	65	60	65	76.47	4/2/2014	NA	25.00	NA	NA	51.47
					11/11/2014	NA	24.44	NA	NA	52.03

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									
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
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
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	<1000
MW-5	4/2/2014	Dry								
	11/11/2014									
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
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
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
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
MW-10	4/1/2014	1800	5700	350	8500	50	690	5000	500.000	5000
	11/11/2014	1.25-Feet of Free Product								
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
MW-12	4/2/2014	2.9	0.67	1.6	0.91	18	4.7	630	9.300	<100
	11/11/2014	990	19	910	140	21	180	3600	14.000	<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
MW-15	4/1/2014	0.60-Feet of Free Product								
	11/11/2014	0.25-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
MW-17	4/2/2014	280	5100	450	13000	50	850	2200	500.000	5000
	11/12/2014	32	3000	450	8300	<10	690	270	<100	<1000
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
MW-19	4/3/2014	300	1800	490	12000	50	900	610	500.000	5000
	11/13/2014	1400	2800	1600	24000	<50	1400	1300	<50	<5000
MW-20	4/3/2014	1800	11000	460	11000	50	960	3100	65.000	5000
	11/13/2014	1400	12000	500	14000	120	1100	<10000	<1000	<10000
MW-22	4/3/2014	5700	12000	880	23000	50	990	3600	500.000	5000
	11/11/2014	6300	23000	700	21000	<20	1200	9600	<20	<140
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
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
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
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
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
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
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
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
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
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
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
MW-35	4/1/2014	3700	4300	2000	6200	160	550	5600	54.000	5000
	11/12/2014	6000	7200	2800	7400	330	700	4700	76.000	<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-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
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
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
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
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
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
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
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
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
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
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
MW-48	4/2/2014	<1	<1	<1	<1	<1	<5	<100	<10	<100
	11/11/2014	Unable to Access - Locked Gate								
MW-49	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
MW-50	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
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
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
MW-54	4/1/2014	<1	<1	<1	<1	9.6	<5	<100	6.700	<100
	11/11/2014	Unable to Locate								
MW-55	4/3/2014	10	1	3.5	<1	24	3.9	98	6.400	<100
	11/11/2014	Unable to Locate								
MW-56	4/3/2014	<1	<1	<1	<1	<1	<5	50	<10	<100
	11/11/2014	Unable to Locate								
MW-58	4/2/2014	Abandoned								
	11/11/2014									
MW-59	4/2/2014	28	2.8	300	6.4	130	45	2600	42.000	160
	11/11/2014	81	3.6	730	14	91	96	4500	27.000	<100
MW-60	4/2/2014	Unable to Locate								
	11/11/2014									
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
MW-63	4/2/2014	<1	<1	<1	<1	<1	5	120	<10	<100
	11/12/2014	Unable to Locate								
MW-65	4/2/2014	Unable to Locate - Paved over								
	11/11/2014	Unable to Locate - Paved over								
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
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
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
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
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
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
DW-3	4/3/2014	9800	22000	3700	17000	990	780	10000	190.000	<5000
	11/13/2014	2000	20000	2800	10000	23	650	2700	<20	<140

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
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
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
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
DW-8	4/2/2014	Abandoned								
	11/11/2014									
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
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								

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	-1857.14%
	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	140.0	300.0	220.0	1300.0	410.0	160.0	210.0	1.0	6.8	2747.8	
	SSTL	77.0	280.0	56.0	460.0	380.0	54.0	200.0	9.2	140.0	1656.2	
	Subsequent > SSTL	63.0	20.0	164.0	840.0	30.0	106.0	10.0	0.0	0.0	1233.0	
MW-3	Initial	3000.0	7400.0	260.0	4500.0	3300.0	260.0	2000.0	340.0	1300.0	22360.0	-194%
	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	4600.0	11000.0	620.0	8700.0	1300.0	280.0	480.0	310.0	340.0	27630.0	
	SSTL	111.0	7400.0	260.0	4500.0	1976.0	108.0	2000.0	340.0	1300.0	17995.0	
	Subsequent > SSTL	4489.0	3600.0	360.0	4200.0	0.0	172.0	0.0	0.0	0.0	12821.0	
MW-5	Initial	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	Dry
	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	Dry										
	SSTL	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	
	Subsequent > SSTL	Dry										
MW-9	Initial	4100.0	27000.0	2500.0	19000.0	150.0	960.0	1600.0	2000.0	20000.0	77310.0	84%
	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	380.0	11000.0	1900.0	13000.0	5.0	650.0	1100.0	1.0	6.8	28042.8	
	SSTL	35.0	7134.0	2500.0	19000.0	150.0	68.0	809.0	270.0	15628.0	45594.0	
	Subsequent > SSTL	345.0	3866.0	0.0	0.0	0.0	582.0	291.0	0.0	0.0	5084.0	
MW-10	Initial	740.0	7800.0	2500.0	15000.0	2500.0	950.0	50000.0	5000.0	50000.0	134490.0	Free Product
	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											
	SSTL	24.0	7800.0	2500.0	15000.0	294.0	53.0	793.0	707.0	11042.0	38213.0	
	Subsequent > SSTL											
MW-12	Initial	1.7	5.0	11.0	5.0	5.6	4.7	370.0	1.5	19.0	423.5	-546850%
	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	990.0	19.0	910.0	140.0	21.0	180.0	3600.0	14.0	6.8	5880.8	
	SSTL	1.7	5.0	11.0	5.0	5.6	4.7	370.0	1.5	19.0	423.5	
	Subsequent > SSTL	988.3	14.0	899.0	135.0	15.4	175.3	3230.0	12.5	0.0	5469.5	
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	Free Product										
	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	98%
	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	32.0	3000.0	450.0	8300.0	4.2	690.0	270.0	10.0	68.0	12824.2	
	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	624.0	0.0	0.0	0.0	624.0	
MW-18	Initial	1900.0	7200.0	630.0	8300.0	340.0	370.0	4900.0	70.0	5000.0	28710.0	-142%
	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	3100.0	11000.0	560.0	8700.0	510.0	290.0	12000.0	100.0	680.0	36940.0	
	SSTL	40.0	19326.0	3700.0	21680.0	4260.0	348.0	938.0	4989.0	54462.0	109743.0	
	Subsequent > SSTL	3060.0	0.0	0.0	0.0	0.0	0.0	11062.0	0.0	0.0	14122.0	
MW-19	Initial	300.0	1800.0	490.0	12000.0	50.0	900.0	610.0	500.0	5000.0	21650.0	-115%
	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	1400.0	28000.0	1600.0	24000.0	21.0	1400.0	1300.0	50.0	340.0	58111.0	
	SSTL	54.0	11081.0	3700.0	21680.0	16080.0	86.0	1065.0	320.0	26814.0	80880.0	
	Subsequent > SSTL	1346.0	0.0	0.0	0.0	0.0	1314.0	0.0	0.0	0.0	2660.0	
MW-20	Initial	412.0	2930.0	728.0	8820.0	88.7	817.0	2850.0	200.0	2000.0	18845.7	-566%
	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	1400.0	12000.0	500.0	14000.0	120.0	1100.0	950.0	100.0	680.0	30850.0	
	SSTL	83.0	2930.0	728.0	8820.0	88.7	108.0	1403.0	200.0	2000.0	16360.7	
	Subsequent > SSTL	1317.0	9070.0	0.0	5180.0	0.0	992.0	0.0	0.0	0.0	16559.0	
MW-22	Initial	3300.0	17000.0	2900.0	20000.0	1000.0	640.0	6200.0	130.0	20000.0	71170.0	-93%
	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	6300	23000	700	21000	20	1200	9600	20.000	140	61980.0	
	SSTL	90.0	17000.0	2900.0	20000.0	1000.0	112.0	1469.0	130.0	20000.0	62701.0	
	Subsequent > SSTL	6210.0	0.0	0.0	1000.0	0.0	1088.0	8131.0	-110.0	0.0	16319.0	
MW-23	Initial	4200.0	16000.0	880.0	19000.0	120.0	1100.0	5900.0	500.0	5000.0	52700.0	81%
	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	890.0	3600.0	450.0	16000.0	21.0	1200.0	1500.0	50.0	340.0	24051.0	
	SSTL	72.0	14880.0	3700.0	21680.0	33368.0	100.0	1279.0	359.0	38475.0	113913.0	
	Subsequent > SSTL	818.0	0.0	0.0	0.0	0.0	1100.0	221.0	0.0	0.0	2139.0	
MW-25	Initial	5000.0	3000.0	1900.0	23000.0	5000.0	5000.0	100000.0	10000.0	100000.0	252900.0	99%
	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	38.0	140.0	200.0	2600.0	1.9	490.0	2800.0	1.0	6.8	6277.7	
	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	369.0	1188.0	0.0	0.0	1557.0	

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-31	Initial	57.0	90.0	520.0	250.0	12.0	210.0	510.0	50.0	500.0	2199.0	100%
	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	30.0	9.8	310.0	9.3	4.1	160.0	460.0	1.0	6.8	991.0	
	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	97%
	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	130.0	410.0	210.0	550.0	1.2	71.0	1000.0	1.0	6.8	2380.0	
	SSTL	53.0	7200.0	1500.0	7200.0	500.0	410.0	1136.0	1000.0	10000.0	28999.0	
	Subsequent > SSTL	77.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	77.0	
MW-35	Initial	4400.0	2000.0	1700.0	3500.0	300.0	580.0	5300.0	51.0	5000.0	22831.0	-133%
	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	6000.0	7200.0	2800.0	7400.0	330.0	700.0	4700.0	76.0	340.0	29546.0	
	SSTL	56.0	2000.0	1700.0	3500.0	300.0	542.0	1181.0	51.0	5000.0	14330.0	
	Subsequent > SSTL	5944.0	5200.0	1100.0	3900.0	0.0	158.0	3519.0	25.0	0.0	19846.0	
MW-37	Initial	240.0	34.0	270.0	240.0	11.0	220.0	850.0	50.0	44.0	1959.0	100%
	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	0.4	0.4	0.4	0.8	0.4	0.2	9.5	1.0	6.8	19.9	
	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	100%
	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	11.0	1500.0	1000.0	3700.0	0.4	340.0	220.0	1.0	6.8	6779.2	
	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	100%
	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	140.0	970.0	300.0	2900.0	12.0	150.0	600.0	1.0	6.8	5079.8	
	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	100%
	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	0.4	0.4	0.4	0.4	0.4	0.2	9.5	1.0	6.8	19.5	
	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	Unable to Locate
	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											
	SSTL	5.0	5.0	5.0	5.0	5.0	5.0	110.0	2.0	14.0	156.0	
	Subsequent > SSTL											
MW-58	Initial	4.8	25.0	20.0	25.0	93.0	11.0	1800.0	15.0	100.0	2093.8	Abandoned
	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	Abandoned										
	SSTL	4.8	25.0	20.0	25.0	51.0	11.0	279.0	15.0	100.0	530.8	
	Subsequent > SSTL	Abandoned										
MW-65	Initial	420.0	398.0	234.0	262.0	16.4	168.0	648.0	50.0	500.0	2696.4	Unable to Locate
	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	93%
	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	830.0	180.0	98.0	670.0	13.0	130.0	9.5	13.0	6.8	1950.3	
	SSTL	83.0	1000.0	1400.0	4400.0	160.0	108.0	1300.0	381.0	10000.0	18832.0	
	Subsequent > SSTL	747.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	769.0	
PW-1R	Initial	460.0	3400.0	320.0	9200.0	50.0	250.0	710.0	500.0	5000.0	19890.0	-38%
	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	850.0	6900.0	580.0	18000.0	21.0	1300.0	480.0	50.0	340.0	28521.0	
	SSTL	58.0	11928.0	3700.0	21680.0	290.0	19298.0	1114.0	330.0	29344.0	87742.0	
	Subsequent > SSTL	792.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	792.0	
DW-3	Initial	2600.0	19000.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	61020.0	-1%
	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	2000	20000	2800	10000	23	650	2700	20.000	140	38333.0	
	SSTL	45.0	8470.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	47935.0	
	Subsequent > SSTL	1955.0	11530.0	600.0	0.0	0.0	30.0	-900.0	0.0	0.0	13215.0	
SW-1	Initial	130.0	2.8	23.0	36.0	17.0	6.5	340.0	2.6	23.0	580.9	Unable to Access
	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	
	Subsequent											
	SSTL	5.0	2.8	23.0	36.0	17.0	6.5	240.0	2.6	23.0	355.9	
	Subsequent > SSTL											

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

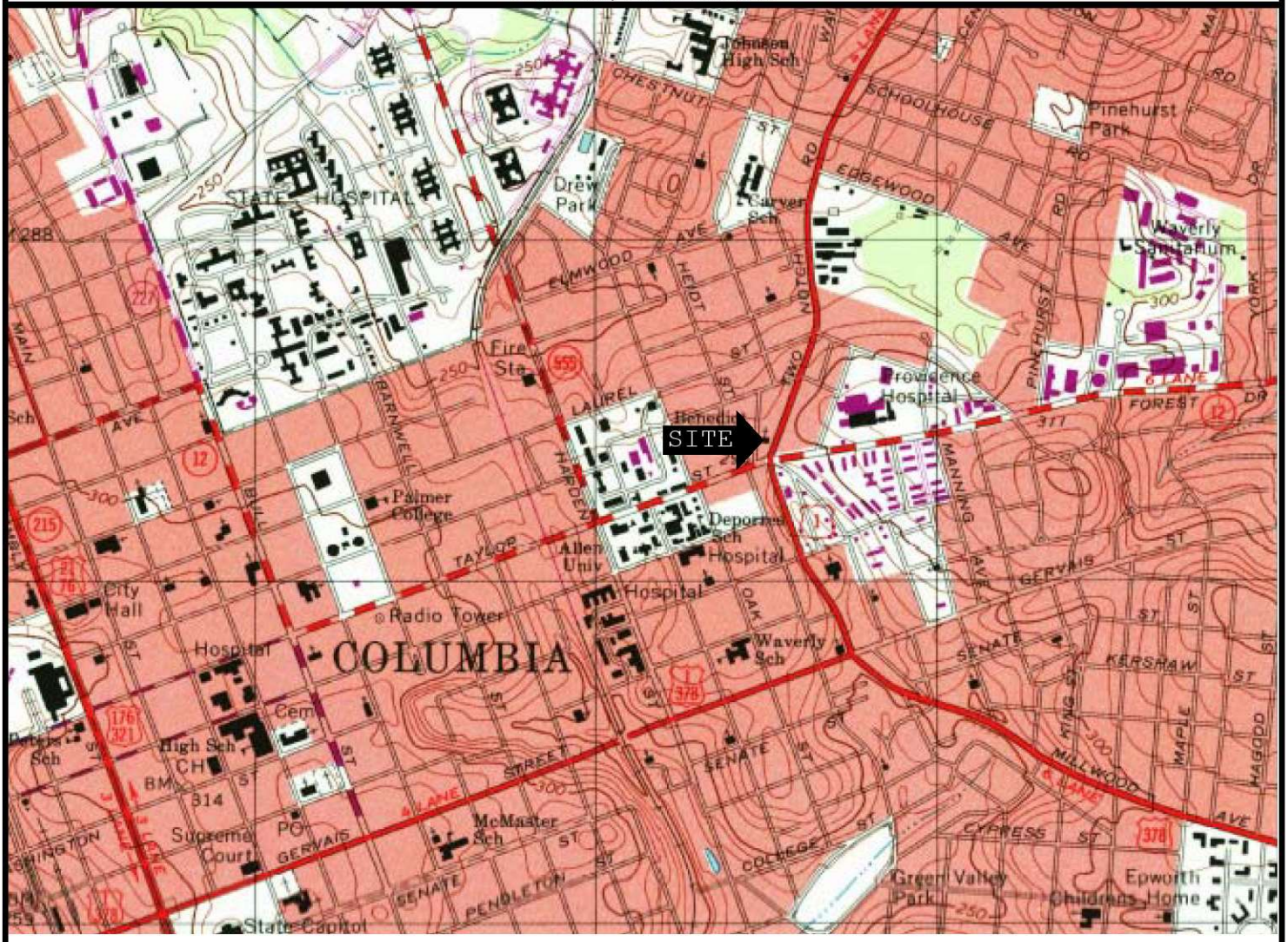
Initial>SSTL	325262.00
Subsequent>SSTL	113286.50
COC Reduction	65.17%

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

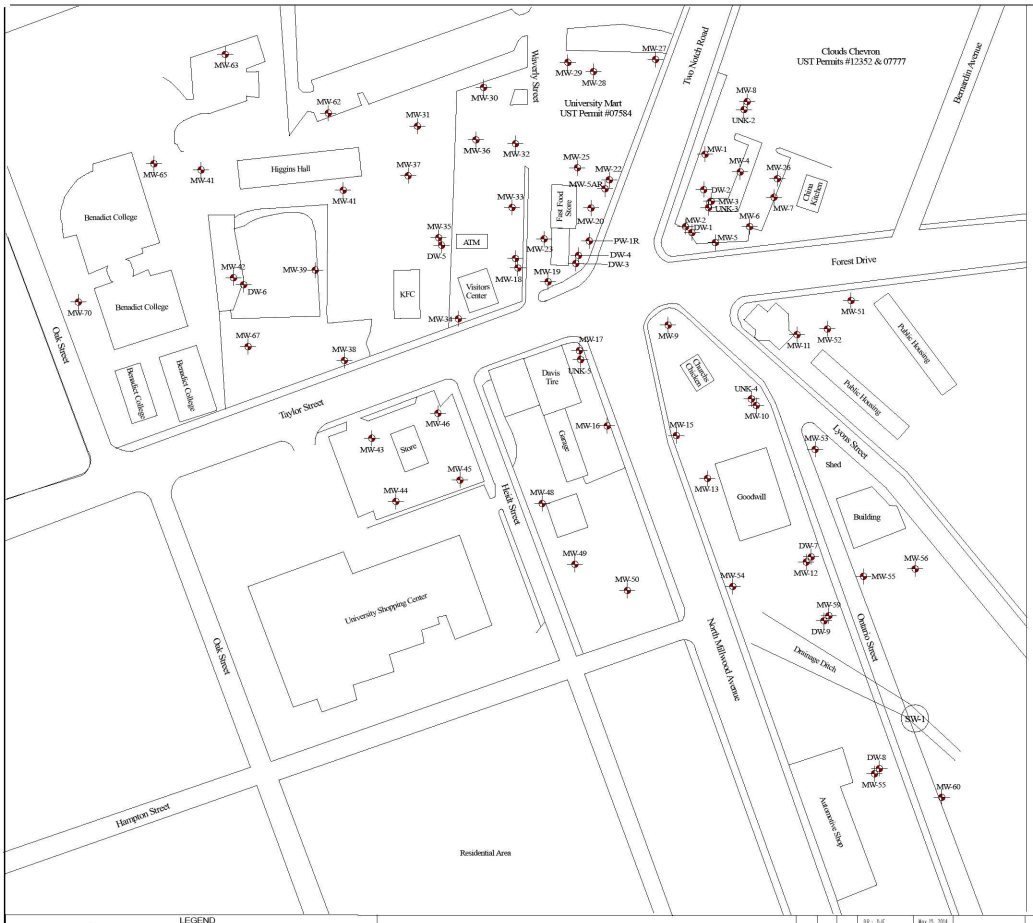
Source: U.S.G.S. Topographic Map of the Columbia North Quadrangle, Virginia, 7.5 Minute Series (1977, revised 1988)
Scale: 1:24,000 Contour Interval: 20 Feet
Vertical Datum: National Geodetic Vertical Datum 1929
Horizontal Datum: North American Datum1927

Project: CASE Report

Client: SCDHEC

CES Job #: 7.0547

Latitude:
034”00’42.72”N
Longitude:
081”01’00.13”W



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.: DJF — May 15, 2014
			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



Well ID:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-1	Dry								
MW-2	140	300	220	1300	410	160	210	<10	<100
MW-3	4600	11000	620	8700	1300	280	<5000	310.000	<5000
MW-4	<1	<1	<1	<1	1.6	<5	<100	<10	<1000
MW-5	Dry								
MW-6	<1	<1	<1	<1	0.8	<5	<100	<10	<100
MW-7	0.71	<1	<1	<1	<1	<5	<100	<10	<100
MW-8	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-9	380	11000	1900	13000	5	650	1100	<10	<100
MW-10	1.25-Feet of Free Product								
MW-11	0.53	<1	<1	<1	<1	<5	80	<10	58
MW-12	990	19	910	140	21	180	3600	14.000	<100
MW-13	<1	<1	<	<1	<1	<5	<100	<10	<100
MW-15	0.25-Feet of Free Product								
MW-16	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-17	32	3000	450	8300	<10	690	270	<100	<1000
MW-18	3100	11000	560	8700	510	290	12000	<1000	<10000
MW-19	1400	2800	1600	24000	<50	1400	1300	<50	<5000
MW-20	1400	12000	500	14000	120	1100	<10000	<1000	<10000
MW-22	6300	23000	700	21000	<20	1200	9600	<20	<140
MW-23	890	3600	450	16000	<50	1200	1500	<50	<340
MW-25	38	140	200	2600	1.9	490	2800	<10	<100
MW-26	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-27	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-28	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-29	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-30	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-31	30	9.8	310	9.3	4.1	160	460	<10	<100
MW-32	4	13	72	10	<1	45	<100	<10	<100
MW-33	130	410	210	550	1.2	71	1000	<10	<100
MW-34	<1	<1	<1	<1	<1	<5	39	<10	<100
MW-35	6000	7200	2800	7400	330	700	4700	76.000	<100
MW-36	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-37	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-38	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-39	11	1500	1000	3700	<1	340	220	<10	<100
MW-40	140	970	300	2900	12	150	600	<10	<100
MW-41	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-42	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-43	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-44	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-45	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-46	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-48	Unable to Access - Locked Gate								
MW-49	Unable to Access - Locked Gate								
MW-50	Unable to Access - Locked Gate								
MW-51	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-53	<1	<1	<1	<1	<1	4.1	<100	<10	<100
MW-54	Unable to Locate								
MW-55	Unable to Locate								
MW-56	Unable to Locate								
MW-58	Abandoned								
MW-59	81	3.6	730	14	91	96	4500	27.000	<100
MW-60	Unable to Locate								
MW-62	51	<1	<1	0.93	2.6	65	730	<10	<100
MW-63	Unable to Locate								
MW-65	Unable to Locate - Paved over								
MW-67	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-70	<1	<1	<1	<1	<1	1.5	<100	<10	<100
MW-5AR	830	180	98	670	13	130	<100	13.000	<100
PW-1R	850	6900	580	18000	<50	1300	<5000	<500	<5000
DW-1	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-2	<1	<1	<1	<1	10	<5	<100	<10	<100
DW-3	2000	20000	2800	10000	23	650	2700	<20	<140
DW-4	<1	1	<1	<1	<1	<5	<100	<10	<100
DW-5	6700	380	240	3100	1400	190	5300	110.000	<100
DW-6	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-7	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-8	Abandoned								
DW-9	<1	2.8	<1	<1	<1	<5	<100	<10	<100
SW-1	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 Feb 12 2015
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
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	11/4/2014	NA	DRY	NA	NA	DRY
MW-2	94.70	11/4/2014	NA	23.03	NA	NA	71.67
MW-3	94.45	11/12/2014	NA	23.16	NA	NA	71.29
MW-4	94.85	11/11/2014	NA	21.76	NA	NA	73.09
MW-5	95.26	11/11/2014	NA	DRY	NA	NA	DRY
MW-6	94.96	11/11/2014	NA	23.98	NA	NA	70.98
MW-7	95.93	11/11/2014	NA	24.12	NA	NA	71.81
MW-8	94.79	11/11/2014	NA	21.43	NA	NA	73.36
MW-9	92.30	11/11/2014	NA	21.69	NA	NA	70.61
MW-10	85.98	11/11/2014	Interface Probe Failure - 1.25-Feet of Product				
MW-11	88.46	11/11/2014	NA	19.38	NA	NA	69.08
MW-12	72.80	11/11/2014	NA	4.63	NA	NA	68.17
MW-13	80.44	11/11/2014	NA	12.15	NA	NA	68.29
MW-15	86.44	11/11/2014	Interface Probe Failure - 0.25-Feet of Product				
MW-16	88.19	11/12/2014	NA	18.98	NA	NA	69.21
MW-17	92.45	11/12/2014	NA	23.45	NA	NA	69.00
MW-18	94.81	11/12/2014	NA	25.08	NA	NA	69.73
MW-19	93.96	11/13/2014	NA	24.56	NA	NA	69.40
MW-20	94.12	11/13/2014	NA	23.28	NA	NA	70.84
MW-22	94.25	11/11/2014	NA	22.68	NA	NA	71.57
MW-23	94.43	11/13/2014	NA	24.98	NA	NA	69.45
MW-25	93.09	11/10/2014	NA	21.60	NA	NA	71.49
MW-26	95.96	11/11/2014	NA	22.95	NA	NA	73.01
MW-27	91.40	11/13/2014	NA	18.85	NA	NA	72.55
MW-28	91.46	11/13/2014	NA	19.75	NA	NA	71.71
MW-29	91.09	11/13/2014	NA	19.92	NA	NA	71.17
MW-30	92.77	11/10/2014	NA	22.90	NA	NA	69.87
MW-31	95.20	11/12/2014	NA	26.36	NA	NA	68.84
MW-32	92.87	11/12/2014	NA	23.16	NA	NA	69.71
MW-33	93.84	11/12/2014	NA	24.65	NA	NA	69.19
MW-34	94.77	11/12/2014	NA	25.49	NA	NA	69.28
MW-35	93.71	11/12/2014	NA	24.66	NA	NA	69.05
MW-36	93.89	11/12/2014	NA	24.72	NA	NA	69.17
MW-37	93.78	11/12/2014	NA	24.87	NA	NA	68.91
MW-38	95.53	11/12/2014	NA	26.17	NA	NA	69.36
MW-39	96.19	11/12/2014	NA	27.36	NA	NA	68.83
MW-40	95.69	11/12/2014	NA	27.01	NA	NA	68.68
MW-41	94.85	11/11/2014	NA	26.99	NA	NA	67.86
MW-42	96.81	11/11/2014	NA	27.22	NA	NA	68.59
MW-43	95.15	11/11/2014	NA	25.61	NA	NA	69.54
MW-44	94.57	11/11/2014	NA	24.23	NA	NA	70.34
MW-45	92.51	11/11/2014	NA	22.63	NA	NA	69.88
MW-46	94.50	11/11/2014	NA	24.95	NA	NA	69.55
MW-48	89.95	11/11/2014	Unable to Access - Locked Gate				
MW-49	88.18	11/11/2014	Unable to Access - Locked Gate				
MW-50	84.09	11/11/2014	Unable to Access - Locked Gate				
MW-51	93.91	11/11/2014	NA	24.29	NA	NA	69.62
MW-53	79.60	11/11/2014	NA	11.02	NA	NA	68.58
MW-54	77.58	11/11/2014	Unable to Locate - Overgrown Field				
MW-55	71.22	11/11/2014	Unable to Locate - Overgrown Field				
MW-56	76.39	11/11/2014	Unable to Locate - Overgrown Field				
MW-58	76.37	11/11/2014	Unable to Locate				
MW-59	68.02	11/11/2014	NA	6.69	NA	NA	61.33
MW-60	67.94	11/11/2014					
MW-62	94.05	11/12/2014	NA	24.75	NA	NA	69.30
MW-63	94.65	11/12/2015	Unable to Locate				
MW-65	94.04	11/11/2014	Unable to Locate				
MW-67	96.10	11/12/2014	NA	27.28	NA	NA	68.82
MW-70	95.49	11/11/2014	NA	26.22	NA	NA	69.27
MW-5AR	94.18	11/13/2014	NA	22.64	NA	NA	71.54
PW-1R	93.75	11/13/2014	NA	23.92	NA	NA	69.83
DW-1	94.66	11/10/2014	NA	45.42	NA	NA	49.24
DW-2	94.02	11/11/2014	NA	44.88	NA	NA	49.14
DW-3	93.75	11/13/2014	NA	24.42	NA	NA	69.33
DW-4	93.79	11/13/2014	NA	3.45	NA	NA	90.34
DW-5	93.74	11/12/2014	NA	44.75	NA	NA	48.99
DW-6	95.90	11/12/2014	NA	46.64	NA	NA	49.26
DW-7	72.79	11/11/2014	NA	24.75	NA	NA	48.04
DW-8	68.63	11/11/2014	Abandoned				
DW-9	76.47	11/11/2014	NA	24.44	NA	NA	52.03

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 May 15, 2014
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

February 13, 2015

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 105 gallons were treated on November 11/12/13, 2014 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
Project Manager
Crawford Environmental Services

APPENDIX B

Groundwater Sampling Data Sheets

GROUNDWATER SAMPLING LOG

SITE NAME: Clouds	SITE LOCATION: Taylor & Two North
WELL NO: mw1	SAMPLE ID:
	DATE: 10-10-14

PURGING DATA

DRY

WELL DIAMETER (inches): 2	Total Well Depth (feet): 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 = (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

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 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			

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		SITE LOCATION: Taylor & Two Notch	
WELL NO: mw-2	SAMPLE ID:		DATE: 11-16-14

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): 23.03	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
1530			25.14		4.55		~~[illegible]~~ 126		4.90		8.57		Clear	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

Took Dup-1

SAMPLED BY (PRINT): William Ewing	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 11-11-13	SAMPLING TIME: 1530
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW 3	SAMPLE ID:	DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 29	WELL SCREEN INTERVAL DEPTH: 19 feet to 29 feet	STATIC DEPTH TO WATER (feet): 23.16	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 = galions

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
1400			25.65		5.61		182		2.79		1.67		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1400
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	40mL	HCL	NA	NA	826013	13	

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	SITE LOCATION: Taylor & Tuba North	
WELL NO: mw 4	SAMPLE ID:	DATE: 11-10-14

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) 21.76	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
1350			25.48		4.52		151		4.45		302		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1350
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	40mL	HCL	NA	NA	8260 B	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** = 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	SITE LOCATION: Taylor & Two Notch
WELL NO: MW 5AR	SAMPLE ID:
	DATE: 11-10-14

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): 22.64	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
915			23.45		6.09		186		.91		2.97		clear	ST

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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-13-14	SAMPLING TIME: 915
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	N/A	N/A	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** = 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	SITE LOCATION: Taylor & Two Notch
WELL NO: mw-5	SAMPLE ID:
	DATE: 10-11-12

PURGING DATA

Blocked At 20 Ft

WELL DIAMETER (inches): 2	Total Well Depth (feet): 26	WELL SCREEN INTERVAL DEPTH: 16 feet to 26 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	TURB IDITY (NTU)	Δ	COLOR	ODOR
[illegible]														

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

Dry

SAMPLED BY (PRINT)	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: [illegible]	SAMPLING TIME: [illegible]
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			

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:	Cloud 5	SITE LOCATION:	TAYLOR & Two Notch
WELL NO:	mw 6	SAMPLE ID:	DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches):	Total Well Depth (feet):	WELL SCREEN INTERVAL	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	30	DEPTH: 20 feet to 30 feet	23.98	

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
1430			25.03		4.96		108		3.22		7.46		CL	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)	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE:	SAMPLING TIME:
William Ewing		11-11-14	1430
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	40mL	HCL	NA	NA	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** = 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		SITE LOCATION: Taylor & Two North	
WELL NO: MW 7	SAMPLE ID:		DATE: 11-10-14

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): 24.12	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
1420			24.95		3.93		139		5.95		1.50		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1420
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Tonopah	
WELL NO: MW 8	SAMPLE ID:	DATE: 11-10-14

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): 21.43	PURGE PUMP TYPE OR BAILER: (B)

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
1300			25.21		4.68		47		4.48		1.14		CL	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): William Emery	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1300
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	GG	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor: Two Notch	
WELL NO: MW-9	SAMPLE ID:	DATE: 11-11-14

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): 21.69	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
9:40	0	.16	24.67		6.02		314		4.85		21.91		Cl	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 9:40
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Twelfth
WELL NO: mw-10	SAMPLE ID:
	DATE: 11-11-14

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): 18.14	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

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

Feet of Product

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 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			

REMARKS:
well Beside it Has aBout 0 1/4 Inch

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	SITE LOCATION: Tahoe & Two Notch	
WELL NO: MW-11	SAMPLE ID:	DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 30	WELL SCREEN INTERVAL DEPTH: NA feet to NA feet	STATIC DEPTH TO WATER (feet): 19.38	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
1230			22.98		5.37		160		1.27		3.98		CL	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): William Ervig	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-15	SAMPLING TIME: 12:30
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor ... Two Nat	
WELL NO: mw-12	SAMPLE ID:	DATE: 11-11-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 24.65	WELL SCREEN INTERVAL DEPTH: NA feet to NA feet	STATIC DEPTH TO WATER (feet): 4.63	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
= (24.65 feet – 4.63 feet) X .16 gallons/foot = 3 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
1110	0		24.51		6.03		288		1.16		88.4		Clear	None
1115	3		25.56		6.17		433		2.31		292		↓	↓
1120	6		25.67		6.16		444		3.76		119		↓	↓
1125	9		25.68		6.17		446		3.75		182		↓	↓

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): William Ewing	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1125
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	LG	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Two Notch
WELL NO: MW 13	SAMPLE ID:
	DATE: 11-11-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 30	WELL SCREEN INTERVAL DEPTH: NA feet to NA feet	STATIC DEPTH TO WATER (feet): 12.15	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
1010	0	.16	25.08		7.19		83		7.93		1.81		CL	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): William Emmy	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1010
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW-15	SAMPLE ID:	DATE: 11-11-14

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):	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
1025														

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: 11-11-14	SAMPLING TIME: 1025
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			

REMARKS:
No Reading Product 1/4 Inch No Cap Broken well

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	SITE LOCATION: Taylor & Two Notch
WELL NO: mw-16	SAMPLE ID:
	DATE: 11-12-14

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): 18.98	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
9:25	0	.16	25.87		6.33		293		1.06		.30		Clear	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): William Emery	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 925
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	NA	NA	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: mw-17	SAMPLE ID:	DATE: 11-11-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 30	WELL SCREEN INTERVAL DEPTH: 22 feet to 30 feet	STATIC DEPTH TO WATER (feet): 23.45	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
9:10	0	.37	25.17		5.40		118		3.09		.89		clear	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): Gwilliam Emily	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 910
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	40mL	HCL	NA	NA	8260B	B	

REMARKS: NO CAP

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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW-18	SAMPLE ID:	DATE: 11-10-14

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): 25.09	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
1530			24.73		5.79		349		1.72		218		CAN	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)	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE:	SAMPLING TIME:
William Emily		11-12-14	1530
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	40ml	HCL	NA	NA	8260B	B	

REMARKS: NO CAP on well

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
WELL NO: mw-19	SAMPLE ID:
	DATE: 11-10-14

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): 24.56	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
1220			23.19		5.77		176		1.28		24.6		clear	SF

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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-13-14	SAMPLING TIME: 1230
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Two North	
WELL NO: mw-20	SAMPLE ID:	DATE: 11-10-14

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): 23.28	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
930			22.41		5.94		316		2.79		40		CL	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-13-14	SAMPLING TIME: 930
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	N/A	N/A	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** = 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	SITE LOCATION: Taylor & Two Notch
WELL NO: MW - [redacted] 22	SAMPLE ID:
	DATE: 11-10-14

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): 22.68	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
900			23.54		5.65		217		1.15		10.3		clear	Mild

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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-10-14	SAMPLING TIME: 900
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	N/A	N/A	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** = 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
WELL NO: mw-23	SAMPLE ID:
	DATE: 11-10-14

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): 24.98	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
1215			21.82		5.67		203		1.03		108		CL	ST

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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-13-14	SAMPLING TIME: 1215
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	N/A	N/A	8260 B	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW 25	SAMPLE ID:	DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 25.6	WELL SCREEN INTERVAL DEPTH: NA feet to NA feet	STATIC DEPTH TO WATER (feet): 21.60	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
845			20.03		6.29		915		.90		2.74		Clear	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

Dup-3

SAMPLING DATA

SAMPLED BY (PRINT): William Emery	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-13-14	SAMPLING TIME: 845
PUMP OR TUBING DEPTH IN WELL (feet): 8	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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Two North
WELL NO: mw 06	SAMPLE ID:
	DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 30	WELL SCREEN INTERVAL DEPTH: NA feet to NA feet	STATIC DEPTH TO WATER (feet): 22.95	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
1410			25.03		4.61		95		3.68		12.7		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	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			
	3	CG	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor : Two Notch
WELL NO: MW - 27	SAMPLE ID:
	DATE: 11-10-14

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): 18.85	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
830			23.14		4.77		200		1.57		6.74		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-13-14	SAMPLING TIME: 830
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	40ML	HCL	N/A	N/A	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** = 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	SITE LOCATION: Taylor & Two North
WELL NO: mw 28	SAMPLE ID:
	DATE: 11-10-14

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) 19.75	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
815			20.44		4.74		199		1.44		339		clear	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-13-14	SAMPLING TIME: 815
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	40ML	HCL	N/A	N/A	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: mw-29	SAMPLE ID:	DATE: 11-10-14

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): 14.52	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
800			20.17		5.86		172		1.46		186		Clear	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:	SAMPLING TIME:
William Ewing		11-13-14	800
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW 30	SAMPLE ID:	DATE: 11-10-14

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): 22.90	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
1600			22.92		5.51		152		1.83		6.07		clear	ST

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

Dup. 2

SAMPLED BY (PRINT): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 1600
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	40mL	HCL	None	<2	8260	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** = 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	SITE LOCATION: Taylor & Two Notch
WELL NO: MW 31	SAMPLE ID:
	DATE: 11-10-14

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) 26.36	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
1300	0		22.02		5.61		181		1.11		2.91		clear	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)	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE:	SAMPLING TIME:
William Ewing		11-12-14	1300
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	40mL	HCL	NA	NA	8260B	B	

REMARKS:
No well seal on well

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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW-32	SAMPLE ID:	DATE: 11-10-14

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): 23.16	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
1515			24.78		5.55		229		1.23		2.11		Clear	ST

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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 1515
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Tuolumne
WELL NO: MW 33	SAMPLE ID:
	DATE: 11-10-14

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): 24.65	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
1545			24.59		5.43		111		1.26		363		cloudy	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 1545
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW 34	SAMPLE ID:	DATE: 11-10-14

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): 25.49	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
1425	0	[illegible]	24.67		4.88		156		1.57		10.1		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 1425
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor and Two Notch
WELL NO: MW-35	SAMPLE ID:
	DATE: 11-10-14

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): 24.66	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
1330			24.68		5.29		164		.90		867		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 1330
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor and Two Notch
WELL NO: 36	SAMPLE ID:
	DATE: 11-10-14

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): 24.72	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
1500			24.14		4.81		134		1.44		17.1		clear	ST

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:
William Ewing		11-12-14	1500
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Tus North	
WELL NO: mw 37	SAMPLE ID:	DATE: 11-10-14

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): 24.87	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
1315			24.66		4.58		146		2.66		.76		Clear	Musty

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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 1315
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	40mL	HCl	NA	NA	826013	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** = 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	SITE LOCATION: Taylor & Tuthill
WELL NO: mw 38	SAMPLE ID:
DATE: 11-10-14	

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): 26.17	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
1240			24.53		4.81		72		6.47		3.14		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 1248
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	GG	40mL	HCL	NA	NA	826013	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: mw-39	SAMPLE ID:	DATE: 11-10-14

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): 27.36	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
1130			23.07		5.84		117		1.43		.74		clear	mod

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:
William Emily		11-12-14	1130
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	40mL	HCL	NA	NA	826013	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW-4D	SAMPLE ID:	DATE: 11-10-14

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): 27.01	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
1645			21.63		5.84		171		1.58		4.44		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1645
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	NA	NA	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW-41	SAMPLE ID:	DATE: 11-10-14

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): 26.99	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
1630			22.63		5.43		160		1.85		10		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1630
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	40mL	HCL	NA	NA	8260B	B	

REMARKS:
No well Seal

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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW 42	SAMPLE ID:	DATE: 11-10-14

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): 27.22	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
1150			22.45		4.58		75		5.90		40.9		Clear	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): William Emily	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 1150
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	NA	NA	8260 B	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: mw-43	SAMPLE ID:	DATE: 11-11-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 40	WELL SCREEN INTERVAL DEPTH: 20 feet to 40 feet	STATIC DEPTH TO WATER (feet): 25.61	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
8:00	0		23.83		4.72		165		5.71		2.17		Clear	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): Billy Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 8:00
PUMP OR TUBING DEPTH IN WELL (feet): NA	TUBING MATERIAL CODE: NA	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	NA	NA	8260B	B	

REMARKS: Broken well seal

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	SITE LOCATION: Taylor & Two Notch	
WELL NO: mw44	SAMPLE ID:	DATE: 11-11-14

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) 24.27	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
8:15			23.90		4.18		126.8		6.47		.83		clear	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) William Emry	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 8:15
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	40mL	HCL	NA	NA	8260D	D	

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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW-45	SAMPLE ID:	DATE: 11-11-14

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): 22.63	PURGE PUMP TYPE OR BAILER: (B)

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
8:30	0		24.37		4.19		162		5.26		0.48		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 8:30
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	40mL	HCL	1mL	NM	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** = 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	SITE LOCATION: Taylor : Two Notch	
WELL NO: mw 46	SAMPLE ID:	DATE: 11-11-14

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): 24.95	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
8:45	0		24.75		3.86		[illegible]		6.62		.74		Clear	none
							[illegible]							
							141							

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) William Ensley	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 845
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor ; Two Notch
WELL NO: mw-48	SAMPLE ID: DATE: 11-11-14

PURGING DATA

Locked Fence

WELL DIAMETER (inches): 2	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
= (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

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 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			

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	SITE LOCATION:	
WELL NO: MW-49	SAMPLE ID:	DATE:

PURGING DATA

Locked Fence

WELL DIAMETER (inches): 2	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	TURB IDITY (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	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			

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:	SITE LOCATION:	
WELL NO: MW-50	SAMPLE ID:	DATE:

PURGING DATA

Locked Fence

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	TURB IDITY (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 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			

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	SITE LOCATION: Taylor & Two North
WELL NO: MW-S1	SAMPLE ID:
	DATE: 11-10-14

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) 24.29	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
12:40			22.66		4.13		109		2.58		2.42		CL	N

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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1240
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: TAYlor & Two Notch Rd
WELL NO: MW-52	SAMPLE ID: DATE: 11-10-14

PURGING DATA

DRY

WELL DIAMETER (inches): 2	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	TURB IDITY (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 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			

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	SITE LOCATION: Taylor & Two Notch	
WELL NO: mw-S3	SAMPLE ID:	DATE: 11-10-14

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): 11.02	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
12:15			25.22		4.52		98		2.72		5.46		CL	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)	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE:	SAMPLING TIME:
William Ewing		11-11-14	12:15
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: TAYlor & TwoNotch	
WELL NO: MW 59	SAMPLE ID:	DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 17	WELL SCREEN INTERVAL DEPTH: 2 feet to 17 feet	STATIC DEPTH TO WATER (feet): 6.69	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
1135	0		22.46		6.21		417		4.24		11.4		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1135
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	40mL	HCL	NA	NA	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 = 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	SITE LOCATION: Taylor and Tamarack
WELL NO: mw 62	SAMPLE ID:
	DATE: 11-10-14

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): 24.75	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
1600		~~24.01~~	21.01		4.61		183		1.97		2.46		clear	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-14-14	SAMPLING TIME: 1600
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	NA	NA	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** = 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	SITE LOCATION: Taylor & Thornton	
WELL NO: MW-65	SAMPLE ID:	DATE: 11-10-14

PURGING DATA

Not Found

WELL DIAMETER (inches): 2	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
= (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

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 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			

REMARKS:
Construction Rubble on top of FT

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	SITE LOCATION: Taylor & Tuolumne
WELL NO: mw-67	SAMPLE ID:
	DATE: 11-12-14

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) 27.28	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
1140			22.23		5.15		103		5.90		1.61		Clear	mod

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:
William Ewing		11-12-14	1140
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: MW-70	SAMPLE ID:	DATE: 11-10-14

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): 26.22 (26.22)	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
1620			22.00		4.96		119		1.35		18.7		Clear	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): William Ewing	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1620
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Two Notch
WELL NO: ~~PW~~ PW R-1	SAMPLE ID:
	DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches): 4	Total Well Depth (feet): 50	WELL SCREEN INTERVAL DEPTH: 45 feet to 50 feet	STATIC DEPTH TO WATER (feet): 23.92	PURGE PUMP TYPE OR BAILER: B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
= (50 feet − 23.92 feet) X .66 gallons/foot = 17 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
945	0		21.00		5.88		250		.87		78.1		cl	Stale
1000	4	Dry	At	4	Gal									
1015	8													
1030	12													

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

Dry at 6 Gal

SAMPLED BY (PRINT): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 1030
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	N/A	N/A	8260B	B	

REMARKS:
PW 1 R is a 4" well That is 30 Ft Deep

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		SITE LOCATION: Taylor & Two Notch	
WELL NO: DW-1	SAMPLE ID:		DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 70	WELL SCREEN INTERVAL DEPTH: 65 feet to 70 feet	STATIC DEPTH TO WATER (feet): 45.42	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
= (70 feet – 45.42 feet) X .16 gallons/foot = 4 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
1450	0		23.65		6.23		94		1.18		7.46		Clear	No
1500	4		22.58		9.43		113		2.91		—		Cloudy	No
1510	8	DRY												
1520	12													

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

DRY at 6 Gal

SAMPLED BY (PRINT)	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1520
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE:
DUPLICATE COLLECTED: 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	NA	NA	8260B	B	

REMARKS: DRY at 6 Gal

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%

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GROUNDWATER SAMPLING LOG

SITE NAME: Clouds		SITE LOCATION: Taylor & Two Notch	
WELL NO: Dw-2	SAMPLE ID:		DATE: 11-10-14

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): 44.88	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
= (75 feet – 44.88 feet) X .16 gallons/foot = 5 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
1310	0		23.51		6.78		35		6.43		1.08		CL	No
1320	5		23.24		7.11		63		5.85		359		CLoud	No
1330	10		23.39		6.52		71		4.84		970		CLoudy	no
1340	15		23.43		6.63		74		4.90		—		CLow	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): William Ewing	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1340
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Two North	
WELL NO: DW-3	SAMPLE ID:	DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 52	WELL SCREEN INTERVAL DEPTH: 47 feet to 52 feet	STATIC DEPTH TO WATER (feet): 24.42	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
= (52 feet − 24.42 feet) X .16 gallons/foot = 4.5 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
1135	0		19.97		5.89		209		1.78		139		Clear	ST
1145	4.5		19.77		5.97		173		1.31		104		Clear	
1155	9		21.65		6.01		170		1.74		59.6		Clear	ST
1200	13.5		20.99		6.03		175		1.98		178		clear	ST

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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-13-14	SAMPLING TIME: 1200
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	N/A	N/A	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: Dw-4	SAMPLE ID:	DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 110	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 3.45	PURGE PUMP TYPE OR BAILER: (B)

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
= (110 feet − 3.45 feet) X .16 gallons/foot = 17 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
1045	0	0	18.64		6.58		97		1.15		2.99		clear	NO
1105	17		19.29		6.63		146		2.86		5.35		clear	NO
1140	34													

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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-13-14	SAMPLING TIME: 1125
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	N/A	N/A	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** = 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	SITE LOCATION: Taylor + Two Notch	
WELL NO: Dw-5	SAMPLE ID:	DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 70	WELL SCREEN INTERVAL DEPTH: 65 feet to 70 feet	STATIC DEPTH TO WATER (feet): 44.75	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
= (70 feet – 44.75 feet) X .16 gallons/foot = 4 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
1340	0		24.99		6.52		123		2.63		11.1		clear	Slight
1350	4		22.66		6.17		158		2.87		—		Tan	Slight
1400	8		DRY											
1410	12													

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): William Ewing	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 11-12-14	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			
	3	CG	40mL	HCL	NA	NA	8260B	B	

REMARKS: DRY well went Dry

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 7	SITE LOCATION: Taylor & Two Notch	
WELL NO: Dw-6	SAMPLE ID:	DATE: 11-10-14

PURGING DATA

WELL DIAMETER (inches): 2	Total Well Depth (feet): 70	WELL SCREEN INTERVAL DEPTH: 65 feet to 70 feet	STATIC DEPTH TO WATER (feet): 46.64	PURGE PUMP TYPE OR (BAILER)

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
= (70 feet − 46.64 feet) X .16 gallons/foot = 4 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
1200	0		22.21		6.86		89		4.04		40.9		CC	None
1210	4		DRY											
1220	8													
1230	12													

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:
William Ewing		11-12-14	1200
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	40mL	HCL	NA	NA	8260B	B	

REMARKS: HAD TO WAIT 20 min TO GET ENOUGH TO 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	SITE LOCATION: Taylor and Two Notes	
WELL NO: DW-7	SAMPLE ID:	DATE: 11-11-14

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): 24.79	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
= (55 feet – 24.79 feet) X 0.16 gallons/foot = 5 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
1035	0		23.16		11.69		857		3.84		1.81		ch	None
1040	5		23.33		11.03		600		5.60		—		Cloudy	↓
1050	10		23.06		10.42		185		8.08		—		cloudy	↓
11:00	15		22.91		10.37		184		7.99		—		Cloud	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): William Ewing	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING DATE: 11-11-14	SAMPLING TIME: 11:00
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	40mL	HCL	NA	NA	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** = 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	SITE LOCATION: Taylor & Two Notch	
WELL NO: DW-5	SAMPLE ID:	DATE: 11-10-14

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): 24.44	PURGE PUMP TYPE OR (BAILER)

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH − STATIC DEPTH TO WATER) X WELL CAPACITY
= (65 feet − 24.44 feet) X .16 gallons/foot = 6.5 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
11:45	0	~~22.10~~	22.10		6.03		58		1.48		8.64		CL	NO
11:50	6.5		21.37		6.01		44		1.18		12.69		CL	NO
11:55	13		21.83		6.08		49		2.98		53.9		CL	NO
12:00	19.5		21.80		6.05		47		2.96		60.7		CL	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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-11-14	SAMPLING TIME: 1200
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	40mL	HCL	NA	NA	8260B	B	

REMARKS:
NO CAP

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	SITE LOCATION: Taylor & Two Notch	
WELL NO:	SAMPLE ID: FB1	DATE: 11-11-14

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	TURB IDITY (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:
William Ewing		11-11-14	1645
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	40mL	HCL	NA	NA	8260B	D	

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	SITE LOCATION: Taylor & Two North	
WELL NO:	SAMPLE ID: FB-2	DATE: 11-12-14

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	TURB IDITY (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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-12-14	SAMPLING TIME: 1645
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	40mL	HCl	NA	NA	8260B	D	

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	SITE LOCATION: Taylor & Twin North	
WELL NO:	SAMPLE ID: FB-3	DATE: 11-13-14

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

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): William Ewing	SAMPLER(S) SIGNATURE(S):	SAMPLING DATE: 11-13-14	SAMPLING TIME: 1645
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	40mL	HCL	NA	NA	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** = 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%

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
Dan Fisher

PROJECT ID
Clouds Chevron

LABORATORY REPORT NUMBER
1411D32

DATE
November 25, 2014

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

Sales Order #_____ PO #_____ Access Quote #_____

Project Work Order # 1411032

Laboratory ID: _____

Company Name: Crawford Enviornmental

Report To: Dan Fisher

Address: 15 Church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 5403436256 Fax: 5403436259

Email: DFisher@Crawfordenviornmental.com

Project ID: Clouds Chevron

Sampled By: Billy Ewing

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	Preservative: (*see codes)	Container Type: (*see codes)	↓ REQUESTED LAB ANALYSIS: ↓ 8260B BTEX + MTBE + TMB + TAME + TBA									
								1	G										
DW 6	11/12/14	1200	G	GW		3	3												
MW 18	11/12/14	1530																	
MW 45	11/11/14	830																	
MW 44	11/11/14	815																	
MW 16	11/12/14	925																	
MW 17	11/12/14	910																	
MW 46	11/12/14	845																	
FB 1	11/11/14	1645																	
FB 2	11/12/14	1645																	
FB 3	11/13/14	1645	↓	↓		↓	↓												

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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):	
Mary Davis	[illegible]	11-14-14	0940	___Y ___N	_____(°C)	_____(N/A)
[illegible]	Fedex	11-14-14	1705	___Y ___N	_____(°C)	_____(N/A)
	Joana Pacurar	11/15/14	9:30	___Y ___N	1.9 (°C)	_____(N/A)
				___Y ___N	_____(°C)	_____(N/A)

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

Project Work Order #: 1411D32

Laboratory ID: _____

Company Name: Crawford Enviornmental

Report To: Dan Fisher

Address: 15 Church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 540 343 6256 Fax: 540 343 6259

Email: Dfisher@crawfordenviornmental.com

Project ID: Clouds Chevron

Sampled By: Billy Ewing

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	8260 BTEX+MTBE TAA+TAME+TBA								
MW 62	11/11/14	1600	G	GW		3	3									
MW 70	11/11/14	1620														
MW 40	11/11/14	1645														
MW 39	11/12/14	1130														
MW 67	11/12/14	1140														
MW 42	11/12/14	1150														
MW 38	11/12/14	1240														
MW 31	11/12/14	1300														
MW 37	11/12/14	1315														
MW 36	11/12/14	1500														

Preservative: (*see codes) 1

Container Type: (*see codes) G

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*Program Area Codes: CWA = Clean Water Act (for wastewaters), SDWA = Safe Drinking Water Act (for drinking waters), SHW = Solid and Hazardous Wastes (for solls, 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):	
Mary Davis	Amart	11-14-14	0940	___Y ___N	___(°C)	___(N/A)
Amart	Fedex	11-14-14	1700	___Y ___N	___(°C)	___(N/A)
	Joana Pacurar	11/15/14	9:30	___Y ___N	1.9 (°C)	___(N/A)
				___Y ___N	___(°C)	___(N/A)

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Project Work Order # 1411032

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

Company Name: Crawford Enviornmental
Report To: Dan Fisher
Address: 15 Church Ave SW
City: Roanoke State: VA Zip: 24011
Phone: 5403436256 Fax: 5403436259
Email: Dfisher@crawfordenviornmental.com
Project ID: Clouds Chevron
Sampled By: Billy Ewing

Preservative: (*see codes) 1
Container Type: (*see codes) G

↓ REQUESTED LAB ANALYSIS: ↓ 826013 BTEX+MTBE TAA+TAME+TBA

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	# of containers collected for analysis
MW 30	11/12/14	1600	G	GW		3	3
MW 6	11/11/14	1430					
MW 32	11/12/14	1515					
MW 33	11/12/14	1545					
MW 34	11/12/14	1425					
DW 5	11/12/14	1410					
MW 35	11/12/14	1330					
MW 3	11/11/14	1400					
MW 26	11/11/14	1410					
MW 7	11/11/14	1420					

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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)

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*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):	
Mary Davis	[signature]	11-14-14	0940	___Y ___N	____(°C)	____(N/A)
[signature]	[signature]	11-14-14	1700	___Y ___N	____(°C)	____(N/A)
	[signature]	11/15/14	9:30	___Y ___N	1.9 (°C)	____(N/A)
				___Y ___N	____(°C)	____(N/A)

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Project Work Order # 1411D32

Laboratory ID: _____

Company Name: Crawford Enviornmental

Report To: Dan Fisher

Address: 15 Church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 5403436256 Fax: 5403436259

Email: DFisher@crawfordenviornmental.com

Project ID: Clouds Chevron

Sampled By: Billy Ewing

Preservative: (*see codes) 1

Container Type: (*see codes) G

↓ REQUESTED LAB ANALYSIS: ↓ 8260B BTEX + MTBE TAA + TAME + TBA

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	# of containers collected for analysis	
MW 4	11/11/14	1350	G	GW		3	3	
MW 8	11/11/14	1300						
DW 2	11/11/14	1340						
MW 28	11/13/14	815						
MW 27	11/13/14	830						
MW 22	11/13/14	900						
MW 5AR	11/13/14	915						
MW 20	11/13/14	9:30						
DW 14	11/13/14	1125						
DW 13	11/13/14	1200	↓	↓		↓	↓	

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*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
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*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):	
Mary Davis	[illegible]	11-14-14	0940	___Y ___N	_____(°C)	_____(N/A)
[illegible]	[illegible]	11-14-14	1200	___Y ___N	_____(°C)	_____(N/A)
	Joana Pacurar	11/15/14	9:30	___Y ___N	1.9 (°C)	_____(N/A)
				___Y ___N	_____(°C)	_____(N/A)

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Project Work Order # 1411D32

Laboratory ID: _____

Company Name: Crawford Enviornmental

Report To: Dan Fisher

Address: 15 Church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 5403436256 Fax: 5403436259

Email: Dfisher@crawfordenviornmental.com

Project ID: Clouds Chevron

Sampled By: Billy Ewing

Preservative: (*see codes)

Container Type: (*see codes)

↓ REQUESTED LAB ANALYSIS: ↓ 826013 BETEX + MTN TAH + TAMETBA

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 23	11/13/14	1215	G	GW		3	3
MW 19	11/13/14	1230					
MW 9	11/11/14	940					
MW 13	11/11/14	1010					
DW 7	11/11/14	1100					
MW 12	11/11/14	1125					
MW 29	11/13/14	800					
MW 59	11/11/14	1135					
MW 53	11/11/14	1215					
MW 11	11/11/14	1230					

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*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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X Standard
___ RUSH*
*Date Required:_____
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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):	
Mary Davis	Amart	11-14-14	0940	___Y ___N	_____(°C)	_____(N/A)
Amart	Fedex	11-14-14	1700	___Y ___N	_____(°C)	_____(N/A)
	Joana Pacheco	11/15/14	9:30	___Y ___N	1.9 (°C)	_____(N/A)
				___Y ___N	_____(°C)	_____(N/A)

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Project Work Order #: 1411D32

Laboratory ID: _____

Company Name: Crawford Enviornmental

Report To: Dan Fisher

Address: 15 Church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 540 343 6256 Fax: 540 343 6259

Email: DFisher@Crawfordenviornmental.com

Project ID: Clouds Chevron

Sampled By: Billy Ewing

Preservative: (*see codes) i

Container Type: (*see codes) G

REQUESTED LAB ANALYSIS: J

8260B BETEX + MTN TAA + TAME + TBA

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 51	11/11/14	1240	G	GW		3	3
MW 43	11/11/14	800					
MW 15	11/11/14	1025					
MW 25	11/13/14	845					
PW R-1	11/12/14	1030					
DW 9	11/11/14	1200					
~~MW 52~~	11/-/14	—					
MW 2	11/11/14	1530					
DW 1	11/11/14	1520					
MW 41	11/11/14	1630	↓	↓		↓	↓

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*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):	
Mary Davis	Amat-	11-14-14	0940	___Y ___N	___(°C)	___(N/A)
A Martin	Fedex	11-14-14	1745	___Y ___N	___(°C)	___(N/A)
	Joana Pacurar	11/15/14	9:30	___Y ___N	1.9 (°C)	___(N/A)
				___Y ___N	___(°C)	___(N/A)

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Project Work Order #: 411D32

Laboratory ID: _____

Company Name: Crawford Enviornmental

Report To: Dan Fisher

Address: 15 Church Ave SW

City: Roanoke State: VA Zip: 24011

Phone: 5403436256 Fax: 5403436259

Email: Dfisher@crawfordenviornmental.com

Project ID: Clouds Chevron

Sampled By: Billy Ewing

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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
~~MW 30~~	~~11/12/14~~	~~1600~~	G	GW		3	3
Dup 1	11/11/14	1530					
Dup 2	11/12/14	1600					
Dup 3	11/13/14	845					
Trip Blank	11/ /14						
Trip Blank	11/ /14						
	11/ /14						
	11/ /14						
	11/ /14						
	11/ /14		↓	↓		↓	↓

Preservative (*see codes): 1

Container Type (*see codes): G

↓ REQUESTED LAB ANALYSIS: ↓

8260B BTEX + MTBE TAA + TAME + TBA

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):	
Mary Davis	AMart-	11-14-14	0940	___Y ___N	_____(°C)	_____(N/A)
AMart	Fedex	11-14-14	1700	___Y ___N	_____(°C)	_____(N/A)
	Joana Pacurar	11/15/14	9:30	___Y ___N	1.9 (°C)	_____(N/A)
				___Y ___N	_____(°C)	_____(N/A)

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Client: Crawford Environmental Services
Project: Clouds Chevron
Lab ID: 1411D32

Case Narrative

Sample "DW 14" was written as "DW 4" on the sample container. Sample "DW 13" was written as "DW 3" on the sample container. Sample "PW R-1" was written as "PW 1-R" on the sample container.

All samples were matched according the collection date and time and were logged in according to the COC.

Volatile Organic Compounds Analysis by Method 8260B:

Due to sample matrix, samples 1411D32-002A, -006A, -026A, -027A, -028A, -036A, -038A, -040A, -041A, -042A, -053A, and -055A required dilution during preparation and/or analysis resulting in elevated reporting limits.

Sample 1411D32-026A as received did not meet method specified preservation requirements of pH <2. The laboratory proceeded with analysis.

Analytical Environmental Services, Inc **Date:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 6
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 12:00:00 PM
Lab ID:	1411D32-001	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/20/2014 01:50	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 01:50	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 01:50	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/20/2014 01:50	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 01:50	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/20/2014 01:50	NP
Surr: 4-Bromofluorobenzene	95.2		0	70-130	%REC	199515	1	11/20/2014 01:50	NP
Surr: Dibromofluoromethane	99.7		0	70-130	%REC	199515	1	11/20/2014 01:50	NP
Surr: Toluene-d8	94.9		0	70-130	%REC	199515	1	11/20/2014 01:50	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/20/2014 01:50	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 01:50	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 01:50	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 18
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 3:30:00 PM
Lab ID:	1411D32-002	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	3100		39	100	ug/L	199515	100	11/19/2014 23:47	NP
Ethylbenzene	560		40	100	ug/L	199515	100	11/19/2014 23:47	NP
Methyl tert-butyl ether	510		42	100	ug/L	199515	100	11/19/2014 23:47	NP
Naphthalene	290	J	20	500	ug/L	199515	100	11/19/2014 23:47	NP
Toluene	11000		38	100	ug/L	199515	100	11/19/2014 23:47	NP
Xylenes, Total	8700		83	100	ug/L	199515	100	11/19/2014 23:47	NP
Surr: 4-Bromofluorobenzene	99.3		0	70-130	%REC	199515	100	11/19/2014 23:47	NP
Surr: Dibromofluoromethane	97.9		0	70-130	%REC	199515	100	11/19/2014 23:47	NP
Surr: Toluene-d8	96.7		0	70-130	%REC	199515	100	11/19/2014 23:47	NP
Oxygenates SW8260B					**(SW5030B)**				
tert-Amyl alcohol	12000		950	10000	ug/L	199515	100	11/19/2014 23:47	NP
tert-Amyl methyl ether	BRL		100	1000	ug/L	199515	100	11/19/2014 23:47	NP
tert-Butyl Alcohol	BRL		680	10000	ug/L	199515	100	11/19/2014 23:47	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 45
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 8:30:00 AM
Lab ID:	1411D32-003	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/20/2014 02:15	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 02:15	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 02:15	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/20/2014 02:15	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 02:15	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/20/2014 02:15	NP
Surr: 4-Bromofluorobenzene	88.8		0	70-130	%REC	199515	1	11/20/2014 02:15	NP
Surr: Dibromofluoromethane	98		0	70-130	%REC	199515	1	11/20/2014 02:15	NP
Surr: Toluene-d8	94.9		0	70-130	%REC	199515	1	11/20/2014 02:15	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/20/2014 02:15	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 02:15	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 44
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 8:15:00 AM
Lab ID:	1411D32-004	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/20/2014 02:39	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 02:39	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 02:39	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/20/2014 02:39	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 02:39	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/20/2014 02:39	NP
Surr: 4-Bromofluorobenzene	90.3		0	70-130	%REC	199515	1	11/20/2014 02:39	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	199515	1	11/20/2014 02:39	NP
Surr: Toluene-d8	95.5		0	70-130	%REC	199515	1	11/20/2014 02:39	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/20/2014 02:39	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 02:39	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 16
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 9:25:00 AM
Lab ID:	1411D32-005	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/20/2014 03:04	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 03:04	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 03:04	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/20/2014 03:04	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 03:04	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/20/2014 03:04	NP
Surr: 4-Bromofluorobenzene	91.4		0	70-130	%REC	199515	1	11/20/2014 03:04	NP
Surr: Dibromofluoromethane	97.8		0	70-130	%REC	199515	1	11/20/2014 03:04	NP
Surr: Toluene-d8	97.8		0	70-130	%REC	199515	1	11/20/2014 03:04	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/20/2014 03:04	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 03:04	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 03:04	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 17
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 9:10:00 AM
Lab ID:	1411D32-006	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	32		3.9	10	ug/L	199515	10	11/20/2014 15:40	NP
Ethylbenzene	450		4.0	10	ug/L	199515	10	11/20/2014 15:40	NP
Methyl tert-butyl ether	BRL		4.2	10	ug/L	199515	10	11/20/2014 15:40	NP
Naphthalene	690		2.0	50	ug/L	199515	10	11/20/2014 15:40	NP
Toluene	3000		19	50	ug/L	199515	50	11/20/2014 00:12	NP
Xylenes, Total	8300		41	50	ug/L	199515	50	11/20/2014 00:12	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	199515	50	11/20/2014 00:12	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	199515	10	11/20/2014 15:40	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	199515	50	11/20/2014 00:12	NP
Surr: Dibromofluoromethane	94.2		0	70-130	%REC	199515	10	11/20/2014 15:40	NP
Surr: Toluene-d8	96.4		0	70-130	%REC	199515	50	11/20/2014 00:12	NP
Surr: Toluene-d8	95		0	70-130	%REC	199515	10	11/20/2014 15:40	NP
Oxygenates SW8260B					**(SW5030B)**				
tert-Amyl alcohol	270	J	95	1000	ug/L	199515	10	11/20/2014 15:40	NP
tert-Amyl methyl ether	BRL		10	100	ug/L	199515	10	11/20/2014 15:40	NP
tert-Butyl Alcohol	BRL		68	1000	ug/L	199515	10	11/20/2014 15:40	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 46
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 8:45:00 AM
Lab ID:	1411D32-007	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/20/2014 03:29	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 03:29	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 03:29	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/20/2014 03:29	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 03:29	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/20/2014 03:29	NP
Surr: 4-Bromofluorobenzene	92.5		0	70-130	%REC	199515	1	11/20/2014 03:29	NP
Surr: Dibromofluoromethane	97.6		0	70-130	%REC	199515	1	11/20/2014 03:29	NP
Surr: Toluene-d8	96.4		0	70-130	%REC	199515	1	11/20/2014 03:29	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/20/2014 03:29	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 03:29	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	FB 1
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 4:45:00 PM
Lab ID:	1411D32-008	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/19/2014 22:34	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/19/2014 22:34	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/19/2014 22:34	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/19/2014 22:34	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/19/2014 22:34	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/19/2014 22:34	NP
Surr: 4-Bromofluorobenzene	91.3		0	70-130	%REC	199515	1	11/19/2014 22:34	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	199515	1	11/19/2014 22:34	NP
Surr: Toluene-d8	97		0	70-130	%REC	199515	1	11/19/2014 22:34	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/19/2014 22:34	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/19/2014 22:34	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/19/2014 22:34	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	FB 2
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 4:45:00 PM
Lab ID:	1411D32-009	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/19/2014 22:58	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/19/2014 22:58	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/19/2014 22:58	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/19/2014 22:58	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/19/2014 22:58	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/19/2014 22:58	NP
Surr: 4-Bromofluorobenzene	91		0	70-130	%REC	199515	1	11/19/2014 22:58	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	199515	1	11/19/2014 22:58	NP
Surr: Toluene-d8	96.8		0	70-130	%REC	199515	1	11/19/2014 22:58	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/19/2014 22:58	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/19/2014 22:58	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/19/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	FB 3
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 4:45:00 PM
Lab ID:	1411D32-010	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/19/2014 23:22	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/19/2014 23:22	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/19/2014 23:22	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/19/2014 23:22	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/19/2014 23:22	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/19/2014 23:22	NP
Surr: 4-Bromofluorobenzene	91.6		0	70-130	%REC	199515	1	11/19/2014 23:22	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	199515	1	11/19/2014 23:22	NP
Surr: Toluene-d8	96.1		0	70-130	%REC	199515	1	11/19/2014 23:22	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/19/2014 23:22	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/19/2014 23:22	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/19/2014 23:22	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 62
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 4:00:00 PM
Lab ID:	1411D32-011	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	51		0.39	1.0	ug/L	199515	1	11/20/2014 03:54	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 03:54	NP
Methyl tert-butyl ether	2.6		0.42	1.0	ug/L	199515	1	11/20/2014 03:54	NP
Naphthalene	65		0.20	5.0	ug/L	199515	1	11/20/2014 03:54	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 03:54	NP
Xylenes, Total	0.93	J	0.83	1.0	ug/L	199515	1	11/20/2014 03:54	NP
Surr: 4-Bromofluorobenzene	94.1		0	70-130	%REC	199515	1	11/20/2014 03:54	NP
Surr: Dibromofluoromethane	96.7		0	70-130	%REC	199515	1	11/20/2014 03:54	NP
Surr: Toluene-d8	98.8		0	70-130	%REC	199515	1	11/20/2014 03:54	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	730		9.5	100	ug/L	199515	1	11/20/2014 03:54	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 03:54	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 70
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 4:20:00 PM
Lab ID:	1411D32-012	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/20/2014 04:19	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 04:19	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 04:19	NP
Naphthalene	1.5	J	0.20	5.0	ug/L	199515	1	11/20/2014 04:19	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 04:19	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/20/2014 04:19	NP
Surr: 4-Bromofluorobenzene	90		0	70-130	%REC	199515	1	11/20/2014 04:19	NP
Surr: Dibromofluoromethane	99.5		0	70-130	%REC	199515	1	11/20/2014 04:19	NP
Surr: Toluene-d8	96		0	70-130	%REC	199515	1	11/20/2014 04:19	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/20/2014 04:19	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 04:19	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 40
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 4:45:00 PM
Lab ID:	1411D32-013	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	140		0.39	1.0	ug/L	199515	1	11/20/2014 19:22	NP
Ethylbenzene	300		8.1	20	ug/L	199515	20	11/20/2014 01:01	NP
Methyl tert-butyl ether	12		0.42	1.0	ug/L	199515	1	11/20/2014 19:22	NP
Naphthalene	150		4.0	100	ug/L	199515	20	11/20/2014 01:01	NP
Toluene	970		7.5	20	ug/L	199515	20	11/20/2014 01:01	NP
Xylenes, Total	2900		17	20	ug/L	199515	20	11/20/2014 01:01	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	199515	20	11/20/2014 01:01	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	199515	1	11/20/2014 19:22	NP
Surr: Dibromofluoromethane	88		0	70-130	%REC	199515	1	11/20/2014 19:22	NP
Surr: Dibromofluoromethane	97.9		0	70-130	%REC	199515	20	11/20/2014 01:01	NP
Surr: Toluene-d8	95.6		0	70-130	%REC	199515	1	11/20/2014 19:22	NP
Surr: Toluene-d8	97.2		0	70-130	%REC	199515	20	11/20/2014 01:01	NP
Oxygenates SW8260B					**(SW5030B)**				
tert-Amyl alcohol	600		9.5	100	ug/L	199515	1	11/20/2014 19:22	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 19:22	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 19:22	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 39
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 11:30:00 AM
Lab ID:	1411D32-014	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	11		0.39	1.0	ug/L	199515	1	11/20/2014 19:47	NP
Ethylbenzene	1000		8.1	20	ug/L	199515	20	11/20/2014 01:26	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 19:47	NP
Naphthalene	340		4.0	100	ug/L	199515	20	11/20/2014 01:26	NP
Toluene	1500		7.5	20	ug/L	199515	20	11/20/2014 01:26	NP
Xylenes, Total	3700		17	20	ug/L	199515	20	11/20/2014 01:26	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	199515	20	11/20/2014 01:26	NP
Surr: 4-Bromofluorobenzene	104		0	70-130	%REC	199515	1	11/20/2014 19:47	NP
Surr: Dibromofluoromethane	89.2		0	70-130	%REC	199515	1	11/20/2014 19:47	NP
Surr: Dibromofluoromethane	94.2		0	70-130	%REC	199515	20	11/20/2014 01:26	NP
Surr: Toluene-d8	95.3		0	70-130	%REC	199515	1	11/20/2014 19:47	NP
Surr: Toluene-d8	96.3		0	70-130	%REC	199515	20	11/20/2014 01:26	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	220		9.5	100	ug/L	199515	1	11/20/2014 19:47	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 19:47	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 19:47	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 67
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 11:40:00 AM
Lab ID:	1411D32-015	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/20/2014 04:43	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 04:43	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 04:43	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/20/2014 04:43	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 04:43	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/20/2014 04:43	NP
Surr: 4-Bromofluorobenzene	93.2		0	70-130	%REC	199515	1	11/20/2014 04:43	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	199515	1	11/20/2014 04:43	NP
Surr: Toluene-d8	96.6		0	70-130	%REC	199515	1	11/20/2014 04:43	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/20/2014 04:43	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 04:43	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 42
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 11:50:00 AM
Lab ID:	1411D32-016	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/20/2014 07:52	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 07:52	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 07:52	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/20/2014 07:52	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 07:52	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/20/2014 07:52	NP
Surr: 4-Bromofluorobenzene	93.3		0	70-130	%REC	199515	1	11/20/2014 07:52	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	199515	1	11/20/2014 07:52	NP
Surr: Toluene-d8	95.7		0	70-130	%REC	199515	1	11/20/2014 07:52	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/20/2014 07:52	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 07:52	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 38
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 12:40:00 PM
Lab ID:	1411D32-017	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/20/2014 08:17	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 08:17	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 08:17	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/20/2014 08:17	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 08:17	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/20/2014 08:17	NP
Surr: 4-Bromofluorobenzene	90.4		0	70-130	%REC	199515	1	11/20/2014 08:17	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	199515	1	11/20/2014 08:17	NP
Surr: Toluene-d8	97.4		0	70-130	%REC	199515	1	11/20/2014 08:17	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/20/2014 08:17	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 08:17	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 08:17	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 31
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 1:00:00 PM
Lab ID:	1411D32-018	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	30		0.39	1.0	ug/L	199515	1	11/20/2014 18:57	NP
Ethylbenzene	310		20	50	ug/L	199515	50	11/20/2014 00:37	NP
Methyl tert-butyl ether	4.1		0.42	1.0	ug/L	199515	1	11/20/2014 18:57	NP
Naphthalene	160		10	100	ug/L	199515	50	11/20/2014 00:37	NP
Toluene	9.8		0.38	1.0	ug/L	199515	1	11/20/2014 18:57	NP
Xylenes, Total	9.3		0.83	1.0	ug/L	199515	1	11/20/2014 18:57	NP
Surr: 4-Bromofluorobenzene	95.3		0	70-130	%REC	199515	50	11/20/2014 00:37	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	199515	1	11/20/2014 18:57	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	199515	50	11/20/2014 00:37	NP
Surr: Dibromofluoromethane	91.7		0	70-130	%REC	199515	1	11/20/2014 18:57	NP
Surr: Toluene-d8	97.9		0	70-130	%REC	199515	50	11/20/2014 00:37	NP
Surr: Toluene-d8	98.5		0	70-130	%REC	199515	1	11/20/2014 18:57	NP
Oxygenates SW8260B					**(SW5030B)**				
tert-Amyl alcohol	460		9.5	100	ug/L	199515	1	11/20/2014 18:57	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 18:57	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 18:57	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 37
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 1:15:00 PM
Lab ID:	1411D32-019	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/20/2014 14:51	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 14:51	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 14:51	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/20/2014 14:51	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 14:51	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/20/2014 14:51	NP
Surr: 4-Bromofluorobenzene	92.3		0	70-130	%REC	199515	1	11/20/2014 14:51	NP
Surr: Dibromofluoromethane	99.8		0	70-130	%REC	199515	1	11/20/2014 14:51	NP
Surr: Toluene-d8	95.3		0	70-130	%REC	199515	1	11/20/2014 14:51	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/20/2014 14:51	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 14:51	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 14:51	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 36
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 3:00:00 PM
Lab ID:	1411D32-020	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199515	1	11/20/2014 15:15	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199515	1	11/20/2014 15:15	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199515	1	11/20/2014 15:15	NP
Naphthalene	BRL		0.20	5.0	ug/L	199515	1	11/20/2014 15:15	NP
Toluene	BRL		0.38	1.0	ug/L	199515	1	11/20/2014 15:15	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199515	1	11/20/2014 15:15	NP
Surr: 4-Bromofluorobenzene	91.4		0	70-130	%REC	199515	1	11/20/2014 15:15	NP
Surr: Dibromofluoromethane	99.4		0	70-130	%REC	199515	1	11/20/2014 15:15	NP
Surr: Toluene-d8	97.6		0	70-130	%REC	199515	1	11/20/2014 15:15	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199515	1	11/20/2014 15:15	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199515	1	11/20/2014 15:15	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199515	1	11/20/2014 15:15	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 30
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 4:00:00 PM
Lab ID:	1411D32-021	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199525	1	11/21/2014 01:33	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199525	1	11/21/2014 01:33	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199525	1	11/21/2014 01:33	NP
Naphthalene	BRL		0.20	5.0	ug/L	199525	1	11/21/2014 01:33	NP
Toluene	BRL		0.38	1.0	ug/L	199525	1	11/21/2014 01:33	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199525	1	11/21/2014 01:33	NP
Surr: 4-Bromofluorobenzene	95.9		0	70-130	%REC	199525	1	11/21/2014 01:33	NP
Surr: Dibromofluoromethane	95.2		0	70-130	%REC	199525	1	11/21/2014 01:33	NP
Surr: Toluene-d8	93.2		0	70-130	%REC	199525	1	11/21/2014 01:33	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/21/2014 01:33	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/21/2014 01:33	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/21/2014 01:33	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 6
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 2:30:00 PM
Lab ID:	1411D32-022	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199525	1	11/21/2014 01:58	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199525	1	11/21/2014 01:58	NP
Methyl tert-butyl ether	0.80	J	0.42	1.0	ug/L	199525	1	11/21/2014 01:58	NP
Naphthalene	BRL		0.20	5.0	ug/L	199525	1	11/21/2014 01:58	NP
Toluene	BRL		0.38	1.0	ug/L	199525	1	11/21/2014 01:58	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199525	1	11/21/2014 01:58	NP
Surr: 4-Bromofluorobenzene	91.9		0	70-130	%REC	199525	1	11/21/2014 01:58	NP
Surr: Dibromofluoromethane	98.4		0	70-130	%REC	199525	1	11/21/2014 01:58	NP
Surr: Toluene-d8	97.1		0	70-130	%REC	199525	1	11/21/2014 01:58	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/21/2014 01:58	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/21/2014 01:58	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/21/2014 01:58	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 32
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 3:15:00 PM
Lab ID:	1411D32-023	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	4.0		0.39	1.0	ug/L	199525	1	11/22/2014 14:40	NP
Ethylbenzene	72		0.40	1.0	ug/L	199525	1	11/22/2014 14:40	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199525	1	11/22/2014 14:40	NP
Naphthalene	45		0.20	5.0	ug/L	199525	1	11/22/2014 14:40	NP
Toluene	13		0.38	1.0	ug/L	199525	1	11/22/2014 14:40	NP
Xylenes, Total	10		0.83	1.0	ug/L	199525	1	11/22/2014 14:40	NP
Surr: 4-Bromofluorobenzene	99.4		0	70-130	%REC	199525	1	11/22/2014 14:40	NP
Surr: Dibromofluoromethane	96.2		0	70-130	%REC	199525	1	11/22/2014 14:40	NP
Surr: Toluene-d8	100		0	70-130	%REC	199525	1	11/22/2014 14:40	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/22/2014 14:40	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/22/2014 14:40	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/22/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 33
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 3:45:00 PM
Lab ID:	1411D32-024	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	130		0.39	1.0	ug/L	199525	1	11/24/2014 14:30	NP
Ethylbenzene	210		8.1	20	ug/L	199525	20	11/20/2014 17:19	NP
Methyl tert-butyl ether	1.2		0.42	1.0	ug/L	199525	1	11/24/2014 14:30	NP
Naphthalene	71		0.20	5.0	ug/L	199525	1	11/24/2014 14:30	NP
Toluene	410		7.5	20	ug/L	199525	20	11/20/2014 17:19	NP
Xylenes, Total	550		17	20	ug/L	199525	20	11/20/2014 17:19	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	199525	1	11/24/2014 14:30	NP
Surr: 4-Bromofluorobenzene	96.3		0	70-130	%REC	199525	20	11/20/2014 17:19	NP
Surr: Dibromofluoromethane	91		0	70-130	%REC	199525	1	11/24/2014 14:30	NP
Surr: Dibromofluoromethane	96.8		0	70-130	%REC	199525	20	11/20/2014 17:19	NP
Surr: Toluene-d8	97.2		0	70-130	%REC	199525	1	11/24/2014 14:30	NP
Surr: Toluene-d8	94.2		0	70-130	%REC	199525	20	11/20/2014 17:19	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	1000		9.5	100	ug/L	199525	1	11/24/2014 14:30	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/24/2014 14:30	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/24/2014 14:30	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 34
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 2:25:00 PM
Lab ID:	1411D32-025	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199525	1	11/21/2014 02:23	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199525	1	11/21/2014 02:23	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199525	1	11/21/2014 02:23	NP
Naphthalene	BRL		0.20	5.0	ug/L	199525	1	11/21/2014 02:23	NP
Toluene	BRL		0.38	1.0	ug/L	199525	1	11/21/2014 02:23	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199525	1	11/21/2014 02:23	NP
Surr: 4-Bromofluorobenzene	93.2		0	70-130	%REC	199525	1	11/21/2014 02:23	NP
Surr: Dibromofluoromethane	97.9		0	70-130	%REC	199525	1	11/21/2014 02:23	NP
Surr: Toluene-d8	95.7		0	70-130	%REC	199525	1	11/21/2014 02:23	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/21/2014 02:23	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/21/2014 02:23	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/21/2014 02:23	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 5
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 2:10:00 PM
Lab ID:	1411D32-026	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	6700		19	50	ug/L	199525	50	11/21/2014 20:21	NP
Ethylbenzene	240		20	50	ug/L	199525	50	11/21/2014 20:21	NP
Methyl tert-butyl ether	1400		21	50	ug/L	199525	50	11/21/2014 20:21	NP
Naphthalene	190	J	10	250	ug/L	199525	50	11/21/2014 20:21	NP
Toluene	380		19	50	ug/L	199525	50	11/21/2014 20:21	NP
Xylenes, Total	3100		41	50	ug/L	199525	50	11/21/2014 20:21	NP
Surr: 4-Bromofluorobenzene	98.8		0	70-130	%REC	199525	50	11/21/2014 20:21	NP
Surr: Dibromofluoromethane	92.9		0	70-130	%REC	199525	50	11/21/2014 20:21	NP
Surr: Toluene-d8	93.3		0	70-130	%REC	199525	50	11/21/2014 20:21	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	5300		480	5000	ug/L	199525	50	11/21/2014 20:21	NP
tert-Amyl methyl ether	110		1.0	10	ug/L	199525	1	11/21/2014 02:47	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/21/2014 02:47	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 35
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 1:30:00 PM
Lab ID:	1411D32-027	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	6000		19	50	ug/L	199525	50	11/20/2014 16:30	NP
Ethylbenzene	2800		20	50	ug/L	199525	50	11/20/2014 16:30	NP
Methyl tert-butyl ether	330		21	50	ug/L	199525	50	11/20/2014 16:30	NP
Naphthalene	700		10	250	ug/L	199525	50	11/20/2014 16:30	NP
Toluene	7200		19	50	ug/L	199525	50	11/20/2014 16:30	NP
Xylenes, Total	7400		41	50	ug/L	199525	50	11/20/2014 16:30	NP
Surr: 4-Bromofluorobenzene	97.1		0	70-130	%REC	199525	50	11/20/2014 16:30	NP
Surr: Dibromofluoromethane	94.2		0	70-130	%REC	199525	50	11/20/2014 16:30	NP
Surr: Toluene-d8	95		0	70-130	%REC	199525	50	11/20/2014 16:30	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	4700	J	480	5000	ug/L	199525	50	11/20/2014 16:30	NP
tert-Amyl methyl ether	76	J	50	500	ug/L	199525	50	11/20/2014 16:30	NP
tert-Butyl Alcohol	BRL		340	5000	ug/L	199525	50	11/20/2014 16:30	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 3
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 2:00:00 PM
Lab ID:	1411D32-028	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					(SW5030B)				
Benzene	4600		19	50	ug/L	199525	50	11/21/2014 12:33	NP
Ethylbenzene	620		20	50	ug/L	199525	50	11/21/2014 12:33	NP
Methyl tert-butyl ether	1300		21	50	ug/L	199525	50	11/21/2014 12:33	NP
Naphthalene	280		10	250	ug/L	199525	50	11/21/2014 12:33	NP
Toluene	11000		38	100	ug/L	199525	100	11/24/2014 12:02	NP
Xylenes, Total	8700		41	50	ug/L	199525	50	11/21/2014 12:33	NP
Surr: 4-Bromofluorobenzene	99.6		0	70-130	%REC	199525	50	11/21/2014 12:33	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	199525	100	11/24/2014 12:02	NP
Surr: Dibromofluoromethane	94.8		0	70-130	%REC	199525	50	11/21/2014 12:33	NP
Surr: Dibromofluoromethane	95.2		0	70-130	%REC	199525	100	11/24/2014 12:02	NP
Surr: Toluene-d8	95.4		0	70-130	%REC	199525	50	11/21/2014 12:33	NP
Surr: Toluene-d8	92.7		0	70-130	%REC	199525	100	11/24/2014 12:02	NP
Oxygenates SW8260B					(SW5030B)				
tert-Amyl alcohol	BRL		480	5000	ug/L	199525	50	11/21/2014 12:33	NP
tert-Amyl methyl ether	310	J	50	500	ug/L	199525	50	11/21/2014 12:33	NP
tert-Butyl Alcohol	BRL		340	5000	ug/L	199525	50	11/21/2014 12:33	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 26
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 2:10:00 PM
Lab ID:	1411D32-029	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199525	1	11/22/2014 15:05	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199525	1	11/22/2014 15:05	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199525	1	11/22/2014 15:05	NP
Naphthalene	BRL		0.20	5.0	ug/L	199525	1	11/22/2014 15:05	NP
Toluene	BRL		0.38	1.0	ug/L	199525	1	11/22/2014 15:05	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199525	1	11/22/2014 15:05	NP
Surr: 4-Bromofluorobenzene	91.4		0	70-130	%REC	199525	1	11/22/2014 15:05	NP
Surr: Dibromofluoromethane	98.8		0	70-130	%REC	199525	1	11/22/2014 15:05	NP
Surr: Toluene-d8	94.7		0	70-130	%REC	199525	1	11/22/2014 15:05	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/22/2014 15:05	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/22/2014 15:05	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/22/2014 15:05	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 7
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 2:20:00 PM
Lab ID:	1411D32-030	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	0.71	J	0.39	1.0	ug/L	199525	1	11/21/2014 03:36	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199525	1	11/21/2014 03:36	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199525	1	11/21/2014 03:36	NP
Naphthalene	BRL		0.20	5.0	ug/L	199525	1	11/21/2014 03:36	NP
Toluene	BRL		0.38	1.0	ug/L	199525	1	11/21/2014 03:36	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199525	1	11/21/2014 03:36	NP
Surr: 4-Bromofluorobenzene	93		0	70-130	%REC	199525	1	11/21/2014 03:36	NP
Surr: Dibromofluoromethane	96.9		0	70-130	%REC	199525	1	11/21/2014 03:36	NP
Surr: Toluene-d8	94.2		0	70-130	%REC	199525	1	11/21/2014 03:36	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/21/2014 03:36	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/21/2014 03:36	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/21/2014 03:36	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 4
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 1:50:00 PM
Lab ID:	1411D32-031	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199525	1	11/21/2014 04:01	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199525	1	11/21/2014 04:01	NP
Methyl tert-butyl ether	1.6		0.42	1.0	ug/L	199525	1	11/21/2014 04:01	NP
Naphthalene	BRL		0.20	5.0	ug/L	199525	1	11/21/2014 04:01	NP
Toluene	BRL		0.38	1.0	ug/L	199525	1	11/21/2014 04:01	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199525	1	11/21/2014 04:01	NP
Surr: 4-Bromofluorobenzene	93.9		0	70-130	%REC	199525	1	11/21/2014 04:01	NP
Surr: Dibromofluoromethane	96.5		0	70-130	%REC	199525	1	11/21/2014 04:01	NP
Surr: Toluene-d8	95		0	70-130	%REC	199525	1	11/21/2014 04:01	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/21/2014 04:01	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/21/2014 04:01	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/21/2014 04:01	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 8
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 1:00:00 PM
Lab ID:	1411D32-032	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199525	1	11/21/2014 04:26	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199525	1	11/21/2014 04:26	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199525	1	11/21/2014 04:26	NP
Naphthalene	BRL		0.20	5.0	ug/L	199525	1	11/21/2014 04:26	NP
Toluene	BRL		0.38	1.0	ug/L	199525	1	11/21/2014 04:26	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199525	1	11/21/2014 04:26	NP
Surr: 4-Bromofluorobenzene	91.7		0	70-130	%REC	199525	1	11/21/2014 04:26	NP
Surr: Dibromofluoromethane	97.2		0	70-130	%REC	199525	1	11/21/2014 04:26	NP
Surr: Toluene-d8	96.4		0	70-130	%REC	199525	1	11/21/2014 04:26	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/21/2014 04:26	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/21/2014 04:26	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/21/2014 04:26	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 2
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 1:40:00 PM
Lab ID:	1411D32-033	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199525	1	11/21/2014 04:50	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199525	1	11/21/2014 04:50	NP
Methyl tert-butyl ether	10.0		0.42	1.0	ug/L	199525	1	11/21/2014 04:50	NP
Naphthalene	BRL		0.20	5.0	ug/L	199525	1	11/21/2014 04:50	NP
Toluene	BRL		0.38	1.0	ug/L	199525	1	11/21/2014 04:50	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199525	1	11/21/2014 04:50	NP
Surr: 4-Bromofluorobenzene	93		0	70-130	%REC	199525	1	11/21/2014 04:50	NP
Surr: Dibromofluoromethane	99.9		0	70-130	%REC	199525	1	11/21/2014 04:50	NP
Surr: Toluene-d8	97.3		0	70-130	%REC	199525	1	11/21/2014 04:50	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/21/2014 04:50	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/21/2014 04:50	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/21/2014 04:50	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 28
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 8:15:00 AM
Lab ID:	1411D32-034	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199525	1	11/21/2014 05:15	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199525	1	11/21/2014 05:15	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199525	1	11/21/2014 05:15	NP
Naphthalene	BRL		0.20	5.0	ug/L	199525	1	11/21/2014 05:15	NP
Toluene	BRL		0.38	1.0	ug/L	199525	1	11/21/2014 05:15	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199525	1	11/21/2014 05:15	NP
Surr: 4-Bromofluorobenzene	93.2		0	70-130	%REC	199525	1	11/21/2014 05:15	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	199525	1	11/21/2014 05:15	NP
Surr: Toluene-d8	96.9		0	70-130	%REC	199525	1	11/21/2014 05:15	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/21/2014 05:15	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/21/2014 05:15	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/21/2014 05:15	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 27
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 8:30:00 AM
Lab ID:	1411D32-035	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199525	1	11/21/2014 05:39	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199525	1	11/21/2014 05:39	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199525	1	11/21/2014 05:39	NP
Naphthalene	BRL		0.20	5.0	ug/L	199525	1	11/21/2014 05:39	NP
Toluene	BRL		0.38	1.0	ug/L	199525	1	11/21/2014 05:39	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199525	1	11/21/2014 05:39	NP
Surr: 4-Bromofluorobenzene	94.3		0	70-130	%REC	199525	1	11/21/2014 05:39	NP
Surr: Dibromofluoromethane	99.6		0	70-130	%REC	199525	1	11/21/2014 05:39	NP
Surr: Toluene-d8	96.3		0	70-130	%REC	199525	1	11/21/2014 05:39	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/21/2014 05:39	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/21/2014 05:39	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/21/2014 05:39	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 22
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 9:00:00 AM
Lab ID:	1411D32-036	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	6300		190	500	ug/L	199525	500	11/21/2014 18:18	NP
Ethylbenzene	700		8.1	20	ug/L	199525	20	11/20/2014 17:44	NP
Methyl tert-butyl ether	BRL		8.5	20	ug/L	199525	20	11/20/2014 17:44	NP
Naphthalene	1200		4.0	100	ug/L	199525	20	11/20/2014 17:44	NP
Toluene	23000		190	500	ug/L	199525	500	11/21/2014 18:18	NP
Xylenes, Total	21000		410	500	ug/L	199525	500	11/21/2014 18:18	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	199525	20	11/20/2014 17:44	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	199525	500	11/21/2014 18:18	NP
Surr: Dibromofluoromethane	95.2		0	70-130	%REC	199525	500	11/21/2014 18:18	NP
Surr: Dibromofluoromethane	92.9		0	70-130	%REC	199525	20	11/20/2014 17:44	NP
Surr: Toluene-d8	94.7		0	70-130	%REC	199525	500	11/21/2014 18:18	NP
Surr: Toluene-d8	96		0	70-130	%REC	199525	20	11/20/2014 17:44	NP
Oxygenates SW8260B					**(SW5030B)**				
tert-Amyl alcohol	9600		190	2000	ug/L	199525	20	11/20/2014 17:44	NP
tert-Amyl methyl ether	BRL		20	200	ug/L	199525	20	11/20/2014 17:44	NP
tert-Butyl Alcohol	BRL		140	2000	ug/L	199525	20	11/20/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 5 AR
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 9:15:00 AM
Lab ID:	1411D32-037	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	830		3.9	10	ug/L	199525	10	11/24/2014 11:37	NP
Ethylbenzene	98		0.40	1.0	ug/L	199525	1	11/24/2014 11:12	NP
Methyl tert-butyl ether	13		0.42	1.0	ug/L	199525	1	11/24/2014 11:12	NP
Naphthalene	130		0.20	5.0	ug/L	199525	1	11/24/2014 11:12	NP
Toluene	180		0.38	1.0	ug/L	199525	1	11/24/2014 11:12	NP
Xylenes, Total	670		8.3	10	ug/L	199525	10	11/24/2014 11:37	NP
Surr: 4-Bromofluorobenzene	96.5		0	70-130	%REC	199525	10	11/24/2014 11:37	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	199525	1	11/24/2014 11:12	NP
Surr: Dibromofluoromethane	93.3		0	70-130	%REC	199525	1	11/24/2014 11:12	NP
Surr: Dibromofluoromethane	98.1		0	70-130	%REC	199525	10	11/24/2014 11:37	NP
Surr: Toluene-d8	94.5		0	70-130	%REC	199525	10	11/24/2014 11:37	NP
Surr: Toluene-d8	98.1		0	70-130	%REC	199525	1	11/24/2014 11:12	NP
Oxygenates SW8260B					**(SW5030B)**				
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/24/2014 11:12	NP
tert-Amyl methyl ether	13		1.0	10	ug/L	199525	1	11/24/2014 11:12	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/24/2014 11:12	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 20
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 9:30:00 AM
Lab ID:	1411D32-038	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	1400		39	100	ug/L	199525	100	11/21/2014 19:32	NP
Ethylbenzene	500		40	100	ug/L	199525	100	11/21/2014 19:32	NP
Methyl tert-butyl ether	120		42	100	ug/L	199525	100	11/21/2014 19:32	NP
Naphthalene	1100		20	500	ug/L	199525	100	11/21/2014 19:32	NP
Toluene	12000		38	100	ug/L	199525	100	11/21/2014 19:32	NP
Xylenes, Total	14000		83	100	ug/L	199525	100	11/21/2014 19:32	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	199525	100	11/21/2014 19:32	NP
Surr: Dibromofluoromethane	96.4		0	70-130	%REC	199525	100	11/21/2014 19:32	NP
Surr: Toluene-d8	93.7		0	70-130	%REC	199525	100	11/21/2014 19:32	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		950	10000	ug/L	199525	100	11/20/2014 16:05	NP
tert-Amyl methyl ether	BRL		100	1000	ug/L	199525	100	11/20/2014 16:05	NP
tert-Butyl Alcohol	BRL		680	10000	ug/L	199525	100	11/20/2014 16:05	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 14
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 11:25:00 AM
Lab ID:	1411D32-039	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	BRL		0.39	1.0	ug/L	199525	1	11/21/2014 06:03	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199525	1	11/21/2014 06:03	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199525	1	11/21/2014 06:03	NP
Naphthalene	BRL		0.20	5.0	ug/L	199525	1	11/21/2014 06:03	NP
Toluene	1.0		0.38	1.0	ug/L	199525	1	11/21/2014 06:03	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199525	1	11/21/2014 06:03	NP
Surr: 4-Bromofluorobenzene	89.2		0	70-130	%REC	199525	1	11/21/2014 06:03	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	199525	1	11/21/2014 06:03	NP
Surr: Toluene-d8	98.6		0	70-130	%REC	199525	1	11/21/2014 06:03	NP
Oxygenates SW8260B					**(SW5030B)**				
tert-Amyl alcohol	BRL		9.5	100	ug/L	199525	1	11/21/2014 06:03	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199525	1	11/21/2014 06:03	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199525	1	11/21/2014 06:03	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 13
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 12:00:00 PM
Lab ID:	1411D32-040	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	2000		7.7	20	ug/L	199525	20	11/20/2014 18:33	NP
Ethylbenzene	2800		8.1	20	ug/L	199525	20	11/20/2014 18:33	NP
Methyl tert-butyl ether	23		8.5	20	ug/L	199525	20	11/20/2014 18:33	NP
Naphthalene	650		4.0	100	ug/L	199525	20	11/20/2014 18:33	NP
Toluene	20000		190	500	ug/L	199525	500	11/21/2014 18:43	NP
Xylenes, Total	10000		410	500	ug/L	199525	500	11/21/2014 18:43	NP
Surr: 4-Bromofluorobenzene	99		0	70-130	%REC	199525	500	11/21/2014 18:43	NP
Surr: 4-Bromofluorobenzene	97.8		0	70-130	%REC	199525	20	11/20/2014 18:33	NP
Surr: Dibromofluoromethane	96.3		0	70-130	%REC	199525	500	11/21/2014 18:43	NP
Surr: Dibromofluoromethane	91.3		0	70-130	%REC	199525	20	11/20/2014 18:33	NP
Surr: Toluene-d8	95.6		0	70-130	%REC	199525	500	11/21/2014 18:43	NP
Surr: Toluene-d8	94.3		0	70-130	%REC	199525	20	11/20/2014 18:33	NP
Oxygenates SW8260B					**(SW5030B)**				
tert-Amyl alcohol	2700		190	2000	ug/L	199525	20	11/20/2014 18:33	NP
tert-Amyl methyl ether	BRL		20	200	ug/L	199525	20	11/20/2014 18:33	NP
tert-Butyl Alcohol	BRL		140	2000	ug/L	199525	20	11/20/2014 18:33	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 23
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 12:15:00 PM
Lab ID:	1411D32-041	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	890		19	50	ug/L	199600	50	11/21/2014 20:46	NP
Ethylbenzene	450		20	50	ug/L	199600	50	11/21/2014 20:46	NP
Methyl tert-butyl ether	BRL		21	50	ug/L	199600	50	11/21/2014 20:46	NP
Naphthalene	1200		10	250	ug/L	199600	50	11/21/2014 20:46	NP
Toluene	3600		19	50	ug/L	199600	50	11/21/2014 20:46	NP
Xylenes, Total	16000		41	50	ug/L	199600	50	11/21/2014 20:46	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	199600	50	11/21/2014 20:46	NP
Surr: Dibromofluoromethane	94.2		0	70-130	%REC	199600	50	11/21/2014 20:46	NP
Surr: Toluene-d8	95.2		0	70-130	%REC	199600	50	11/21/2014 20:46	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	1500	J	480	5000	ug/L	199600	50	11/21/2014 20:46	NP
tert-Amyl methyl ether	BRL		50	500	ug/L	199600	50	11/21/2014 20:46	NP
tert-Butyl Alcohol	BRL		340	5000	ug/L	199600	50	11/21/2014 20:46	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 19
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 12:30:00 PM
Lab ID:	1411D32-042	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	1400		19	50	ug/L	199600	50	11/21/2014 00:19	NP
Ethylbenzene	1600		20	50	ug/L	199600	50	11/21/2014 00:19	NP
Methyl tert-butyl ether	BRL		21	50	ug/L	199600	50	11/21/2014 00:19	NP
Naphthalene	1400		10	250	ug/L	199600	50	11/21/2014 00:19	NP
Toluene	28000		190	500	ug/L	199600	500	11/21/2014 19:07	NP
Xylenes, Total	24000		41	50	ug/L	199600	50	11/21/2014 00:19	NP
Surr: 4-Bromofluorobenzene	96.8		0	70-130	%REC	199600	500	11/21/2014 19:07	NP
Surr: 4-Bromofluorobenzene	98.4		0	70-130	%REC	199600	50	11/21/2014 00:19	NP
Surr: Dibromofluoromethane	91.8		0	70-130	%REC	199600	50	11/21/2014 00:19	NP
Surr: Dibromofluoromethane	97.2		0	70-130	%REC	199600	500	11/21/2014 19:07	NP
Surr: Toluene-d8	93.8		0	70-130	%REC	199600	50	11/21/2014 00:19	NP
Surr: Toluene-d8	94.4		0	70-130	%REC	199600	500	11/21/2014 19:07	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	1300	J	480	5000	ug/L	199600	50	11/21/2014 00:19	NP
tert-Amyl methyl ether	BRL		50	500	ug/L	199600	50	11/21/2014 00:19	NP
tert-Butyl Alcohol	BRL		340	5000	ug/L	199600	50	11/21/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 9
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 9:40:00 AM
Lab ID:	1411D32-043	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	380		39	100	ug/L	199600	100	11/21/2014 19:57	NP
Ethylbenzene	1900		40	100	ug/L	199600	100	11/21/2014 19:57	NP
Methyl tert-butyl ether	5.0		0.42	1.0	ug/L	199600	1	11/21/2014 06:28	NP
Naphthalene	650		20	500	ug/L	199600	100	11/21/2014 19:57	NP
Toluene	11000		38	100	ug/L	199600	100	11/21/2014 19:57	NP
Xylenes, Total	13000		83	100	ug/L	199600	100	11/21/2014 19:57	NP
Surr: 4-Bromofluorobenzene	99.8		0	70-130	%REC	199600	100	11/21/2014 19:57	NP
Surr: 4-Bromofluorobenzene	108		0	70-130	%REC	199600	1	11/21/2014 06:28	NP
Surr: Dibromofluoromethane	87.8		0	70-130	%REC	199600	1	11/21/2014 06:28	NP
Surr: Dibromofluoromethane	95.3		0	70-130	%REC	199600	100	11/21/2014 19:57	NP
Surr: Toluene-d8	94.4		0	70-130	%REC	199600	100	11/21/2014 19:57	NP
Surr: Toluene-d8	96.9		0	70-130	%REC	199600	1	11/21/2014 06:28	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	1100		9.5	100	ug/L	199600	1	11/21/2014 06:28	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 06:28	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 06:28	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 13
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 10:10:00 AM
Lab ID:	1411D32-044	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199600	1	11/22/2014 15:30	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199600	1	11/22/2014 15:30	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199600	1	11/22/2014 15:30	NP
Naphthalene	BRL		0.20	5.0	ug/L	199600	1	11/22/2014 15:30	NP
Toluene	BRL		0.38	1.0	ug/L	199600	1	11/22/2014 15:30	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199600	1	11/22/2014 15:30	NP
Surr: 4-Bromofluorobenzene	92.9		0	70-130	%REC	199600	1	11/22/2014 15:30	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	199600	1	11/22/2014 15:30	NP
Surr: Toluene-d8	97		0	70-130	%REC	199600	1	11/22/2014 15:30	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	26	J	9.5	100	ug/L	199600	1	11/21/2014 06:52	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 06:52	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 06:52	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 7
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 11:00:00 AM
Lab ID:	1411D32-045	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199600	1	11/22/2014 15:54	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199600	1	11/22/2014 15:54	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199600	1	11/22/2014 15:54	NP
Naphthalene	BRL		0.20	5.0	ug/L	199600	1	11/22/2014 15:54	NP
Toluene	BRL		0.38	1.0	ug/L	199600	1	11/22/2014 15:54	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199600	1	11/22/2014 15:54	NP
Surr: 4-Bromofluorobenzene	92.8		0	70-130	%REC	199600	1	11/22/2014 15:54	NP
Surr: Dibromofluoromethane	104		0	70-130	%REC	199600	1	11/22/2014 15:54	NP
Surr: Toluene-d8	97		0	70-130	%REC	199600	1	11/22/2014 15:54	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199600	1	11/21/2014 07:17	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 07:17	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 07:17	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 12
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 11:25:00 AM
Lab ID:	1411D32-046	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	990		3.9	10	ug/L	199600	10	11/24/2014 12:27	NP
Ethylbenzene	910		4.0	10	ug/L	199600	10	11/24/2014 12:27	NP
Methyl tert-butyl ether	21		0.42	1.0	ug/L	199600	1	11/21/2014 07:42	NP
Naphthalene	180		2.0	50	ug/L	199600	10	11/24/2014 12:27	NP
Toluene	19		0.38	1.0	ug/L	199600	1	11/21/2014 07:42	NP
Xylenes, Total	140		0.83	1.0	ug/L	199600	1	11/21/2014 07:42	NP
Surr: 4-Bromofluorobenzene	99.1		0	70-130	%REC	199600	10	11/24/2014 12:27	NP
Surr: 4-Bromofluorobenzene	101		0	70-130	%REC	199600	1	11/21/2014 07:42	NP
Surr: Dibromofluoromethane	90.8		0	70-130	%REC	199600	1	11/21/2014 07:42	NP
Surr: Dibromofluoromethane	96.1		0	70-130	%REC	199600	10	11/24/2014 12:27	NP
Surr: Toluene-d8	95.2		0	70-130	%REC	199600	10	11/24/2014 12:27	NP
Surr: Toluene-d8	96.7		0	70-130	%REC	199600	1	11/21/2014 07:42	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	3600		9.5	100	ug/L	199600	1	11/21/2014 07:42	NP
tert-Amyl methyl ether	14		1.0	10	ug/L	199600	1	11/21/2014 07:42	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 07:42	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 29
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 8:00:00 AM
Lab ID:	1411D32-047	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199600	1	11/21/2014 13:22	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199600	1	11/21/2014 13:22	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199600	1	11/21/2014 13:22	NP
Naphthalene	BRL		0.20	5.0	ug/L	199600	1	11/21/2014 13:22	NP
Toluene	BRL		0.38	1.0	ug/L	199600	1	11/21/2014 13:22	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199600	1	11/21/2014 13:22	NP
Surr: 4-Bromofluorobenzene	90.2		0	70-130	%REC	199600	1	11/21/2014 13:22	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	199600	1	11/21/2014 13:22	NP
Surr: Toluene-d8	95.3		0	70-130	%REC	199600	1	11/21/2014 13:22	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199600	1	11/21/2014 13:22	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 13:22	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 59
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 11:35:00 AM
Lab ID:	1411D32-048	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	81		0.39	1.0	ug/L	199600	1	11/21/2014 13:47	NP
Ethylbenzene	730		4.0	10	ug/L	199600	10	11/24/2014 12:52	NP
Methyl tert-butyl ether	91		0.42	1.0	ug/L	199600	1	11/21/2014 13:47	NP
Naphthalene	96		0.20	5.0	ug/L	199600	1	11/21/2014 13:47	NP
Toluene	3.6		0.38	1.0	ug/L	199600	1	11/21/2014 13:47	NP
Xylenes, Total	14		0.83	1.0	ug/L	199600	1	11/21/2014 13:47	NP
Surr: 4-Bromofluorobenzene	97.3		0	70-130	%REC	199600	10	11/24/2014 12:52	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	199600	1	11/21/2014 13:47	NP
Surr: Dibromofluoromethane	93.3		0	70-130	%REC	199600	1	11/21/2014 13:47	NP
Surr: Dibromofluoromethane	97.2		0	70-130	%REC	199600	10	11/24/2014 12:52	NP
Surr: Toluene-d8	95.4		0	70-130	%REC	199600	10	11/24/2014 12:52	NP
Surr: Toluene-d8	97.6		0	70-130	%REC	199600	1	11/21/2014 13:47	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	4500		9.5	100	ug/L	199600	1	11/21/2014 13:47	NP
tert-Amyl methyl ether	27		1.0	10	ug/L	199600	1	11/21/2014 13:47	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 13:47	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 53
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 12:15:00 PM
Lab ID:	1411D32-049	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199600	1	11/24/2014 09:59	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199600	1	11/24/2014 09:59	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199600	1	11/24/2014 09:59	NP
Naphthalene	BRL		0.20	5.0	ug/L	199600	1	11/24/2014 09:59	NP
Toluene	BRL		0.38	1.0	ug/L	199600	1	11/24/2014 09:59	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199600	1	11/24/2014 09:59	NP
Surr: 4-Bromofluorobenzene	91.9		0	70-130	%REC	199600	1	11/24/2014 09:59	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	199600	1	11/24/2014 09:59	NP
Surr: Toluene-d8	98.6		0	70-130	%REC	199600	1	11/24/2014 09:59	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199600	1	11/24/2014 09:59	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/24/2014 09:59	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/24/2014 09:59	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 11
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 12:30:00 PM
Lab ID:	1411D32-050	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	0.53	J	0.39	1.0	ug/L	199600	1	11/21/2014 14:36	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199600	1	11/21/2014 14:36	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199600	1	11/21/2014 14:36	NP
Naphthalene	BRL		0.20	5.0	ug/L	199600	1	11/21/2014 14:36	NP
Toluene	BRL		0.38	1.0	ug/L	199600	1	11/21/2014 14:36	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199600	1	11/21/2014 14:36	NP
Surr: 4-Bromofluorobenzene	92.1		0	70-130	%REC	199600	1	11/21/2014 14:36	NP
Surr: Dibromofluoromethane	97.2		0	70-130	%REC	199600	1	11/21/2014 14:36	NP
Surr: Toluene-d8	97.4		0	70-130	%REC	199600	1	11/21/2014 14:36	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	80	J	9.5	100	ug/L	199600	1	11/21/2014 14:36	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 14:36	NP
tert-Butyl Alcohol	58	J	6.8	100	ug/L	199600	1	11/21/2014 14:36	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 51
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 12:40:00 PM
Lab ID:	1411D32-051	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199600	1	11/21/2014 15:01	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199600	1	11/21/2014 15:01	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199600	1	11/21/2014 15:01	NP
Naphthalene	BRL		0.20	5.0	ug/L	199600	1	11/21/2014 15:01	NP
Toluene	BRL		0.38	1.0	ug/L	199600	1	11/21/2014 15:01	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199600	1	11/21/2014 15:01	NP
Surr: 4-Bromofluorobenzene	90.5		0	70-130	%REC	199600	1	11/21/2014 15:01	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	199600	1	11/21/2014 15:01	NP
Surr: Toluene-d8	96		0	70-130	%REC	199600	1	11/21/2014 15:01	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199600	1	11/21/2014 15:01	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 15:01	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 15:01	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 43
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 8:00:00 AM
Lab ID:	1411D32-052	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199600	1	11/21/2014 15:25	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199600	1	11/21/2014 15:25	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199600	1	11/21/2014 15:25	NP
Naphthalene	BRL		0.20	5.0	ug/L	199600	1	11/21/2014 15:25	NP
Toluene	BRL		0.38	1.0	ug/L	199600	1	11/21/2014 15:25	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199600	1	11/21/2014 15:25	NP
Surr: 4-Bromofluorobenzene	91.3		0	70-130	%REC	199600	1	11/21/2014 15:25	NP
Surr: Dibromofluoromethane	101		0	70-130	%REC	199600	1	11/21/2014 15:25	NP
Surr: Toluene-d8	95.4		0	70-130	%REC	199600	1	11/21/2014 15:25	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199600	1	11/21/2014 15:25	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 15:25	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 15:25	NP

Qualifiers:

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

Analytical Environmental Services, Inc **Date:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 15
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 10:25:00 AM
Lab ID:	1411D32-053	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	40		3.9	10	ug/L	199600	10	11/24/2014 14:06	NP
Ethylbenzene	1200		4.0	10	ug/L	199600	10	11/24/2014 14:06	NP
Methyl tert-butyl ether	BRL		4.2	10	ug/L	199600	10	11/24/2014 14:06	NP
Naphthalene	1300		2.0	50	ug/L	199600	10	11/24/2014 14:06	NP
Toluene	6300		19	50	ug/L	199600	50	11/21/2014 00:44	NP
Xylenes, Total	16000		41	50	ug/L	199600	50	11/21/2014 00:44	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	199600	50	11/21/2014 00:44	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	199600	10	11/24/2014 14:06	NP
Surr: Dibromofluoromethane	93.1		0	70-130	%REC	199600	50	11/21/2014 00:44	NP
Surr: Dibromofluoromethane	91.5		0	70-130	%REC	199600	10	11/24/2014 14:06	NP
Surr: Toluene-d8	94.5		0	70-130	%REC	199600	50	11/21/2014 00:44	NP
Surr: Toluene-d8	95.7		0	70-130	%REC	199600	10	11/24/2014 14:06	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	400	J	95	1000	ug/L	199600	10	11/24/2014 14:06	NP
tert-Amyl methyl ether	BRL		10	100	ug/L	199600	10	11/24/2014 14:06	NP
tert-Butyl Alcohol	BRL		68	1000	ug/L	199600	10	11/24/2014 14:06	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 25
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 8:45:00 AM
Lab ID:	1411D32-054	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	38		0.39	1.0	ug/L	199600	1	11/24/2014 14:55	NP
Ethylbenzene	200		20	50	ug/L	199600	50	11/21/2014 01:08	NP
Methyl tert-butyl ether	1.9		0.42	1.0	ug/L	199600	1	11/24/2014 14:55	NP
Naphthalene	490		10	250	ug/L	199600	50	11/21/2014 01:08	NP
Toluene	140		0.38	1.0	ug/L	199600	1	11/24/2014 14:55	NP
Xylenes, Total	2600		41	50	ug/L	199600	50	11/21/2014 01:08	NP
Surr: 4-Bromofluorobenzene	97.6		0	70-130	%REC	199600	50	11/21/2014 01:08	NP
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	199600	1	11/24/2014 14:55	NP
Surr: Dibromofluoromethane	94.7		0	70-130	%REC	199600	50	11/21/2014 01:08	NP
Surr: Dibromofluoromethane	89.2		0	70-130	%REC	199600	1	11/24/2014 14:55	NP
Surr: Toluene-d8	94.3		0	70-130	%REC	199600	50	11/21/2014 01:08	NP
Surr: Toluene-d8	96		0	70-130	%REC	199600	1	11/24/2014 14:55	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	2800		9.5	100	ug/L	199600	1	11/24/2014 14:55	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/24/2014 14:55	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/24/2014 14:55	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	PW R-1
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 10:30:00 AM
Lab ID:	1411D32-055	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	850		19	50	ug/L	199600	50	11/21/2014 21:11	NP
Ethylbenzene	580		20	50	ug/L	199600	50	11/21/2014 21:11	NP
Methyl tert-butyl ether	BRL		21	50	ug/L	199600	50	11/21/2014 21:11	NP
Naphthalene	1300		10	250	ug/L	199600	50	11/21/2014 21:11	NP
Toluene	6900		19	50	ug/L	199600	50	11/21/2014 21:11	NP
Xylenes, Total	18000		41	50	ug/L	199600	50	11/21/2014 21:11	NP
Surr: 4-Bromofluorobenzene	102		0	70-130	%REC	199600	50	11/21/2014 21:11	NP
Surr: Dibromofluoromethane	91.7		0	70-130	%REC	199600	50	11/21/2014 21:11	NP
Surr: Toluene-d8	96.3		0	70-130	%REC	199600	50	11/21/2014 21:11	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		480	5000	ug/L	199600	50	11/21/2014 21:11	NP
tert-Amyl methyl ether	BRL		50	500	ug/L	199600	50	11/21/2014 21:11	NP
tert-Butyl Alcohol	BRL		340	5000	ug/L	199600	50	11/21/2014 21:11	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 9
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 12:00:00 PM
Lab ID:	1411D32-056	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199600	1	11/21/2014 15:50	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199600	1	11/21/2014 15:50	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199600	1	11/21/2014 15:50	NP
Naphthalene	BRL		0.20	5.0	ug/L	199600	1	11/21/2014 15:50	NP
Toluene	2.8		0.38	1.0	ug/L	199600	1	11/21/2014 15:50	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199600	1	11/21/2014 15:50	NP
Surr: 4-Bromofluorobenzene	93.3		0	70-130	%REC	199600	1	11/21/2014 15:50	NP
Surr: Dibromofluoromethane	102		0	70-130	%REC	199600	1	11/21/2014 15:50	NP
Surr: Toluene-d8	95.5		0	70-130	%REC	199600	1	11/21/2014 15:50	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199600	1	11/21/2014 15:50	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 15:50	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 15:50	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 2
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 3:30:00 PM
Lab ID:	1411D32-057	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	140		0.39	1.0	ug/L	199600	1	11/21/2014 16:15	NP
Ethylbenzene	220		4.0	10	ug/L	199600	10	11/24/2014 13:17	NP
Methyl tert-butyl ether	410		4.2	10	ug/L	199600	10	11/24/2014 13:17	NP
Naphthalene	160		2.0	50	ug/L	199600	10	11/24/2014 13:17	NP
Toluene	300		3.8	10	ug/L	199600	10	11/24/2014 13:17	NP
Xylenes, Total	1300		8.3	10	ug/L	199600	10	11/24/2014 13:17	NP
Surr: 4-Bromofluorobenzene	100		0	70-130	%REC	199600	10	11/24/2014 13:17	NP
Surr: 4-Bromofluorobenzene	105		0	70-130	%REC	199600	1	11/21/2014 16:15	NP
Surr: Dibromofluoromethane	94.2		0	70-130	%REC	199600	1	11/21/2014 16:15	NP
Surr: Dibromofluoromethane	95.8		0	70-130	%REC	199600	10	11/24/2014 13:17	NP
Surr: Toluene-d8	95.3		0	70-130	%REC	199600	10	11/24/2014 13:17	NP
Surr: Toluene-d8	98.6		0	70-130	%REC	199600	1	11/21/2014 16:15	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	210		9.5	100	ug/L	199600	1	11/21/2014 16:15	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 16:15	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 16:15	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	DW 1
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 3:20:00 PM
Lab ID:	1411D32-058	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199600	1	11/24/2014 10:23	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199600	1	11/24/2014 10:23	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199600	1	11/24/2014 10:23	NP
Naphthalene	BRL		0.20	5.0	ug/L	199600	1	11/24/2014 10:23	NP
Toluene	BRL		0.38	1.0	ug/L	199600	1	11/24/2014 10:23	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199600	1	11/24/2014 10:23	NP
Surr: 4-Bromofluorobenzene	92.6		0	70-130	%REC	199600	1	11/24/2014 10:23	NP
Surr: Dibromofluoromethane	100		0	70-130	%REC	199600	1	11/24/2014 10:23	NP
Surr: Toluene-d8	95.6		0	70-130	%REC	199600	1	11/24/2014 10:23	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199600	1	11/21/2014 16:39	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 16:39	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 16:39	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	MW 41
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 4:30:00 PM
Lab ID:	1411D32-059	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199600	1	11/21/2014 17:03	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199600	1	11/21/2014 17:03	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199600	1	11/21/2014 17:03	NP
Naphthalene	BRL		0.20	5.0	ug/L	199600	1	11/21/2014 17:03	NP
Toluene	BRL		0.38	1.0	ug/L	199600	1	11/21/2014 17:03	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199600	1	11/21/2014 17:03	NP
Surr: 4-Bromofluorobenzene	95.2		0	70-130	%REC	199600	1	11/21/2014 17:03	NP
Surr: Dibromofluoromethane	96.5		0	70-130	%REC	199600	1	11/21/2014 17:03	NP
Surr: Toluene-d8	94.7		0	70-130	%REC	199600	1	11/21/2014 17:03	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199600	1	11/21/2014 17:03	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 17:03	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 17:03	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 1
Project Name:	Clouds Chevron	**Collection Date:**	11/11/2014 3:30:00 PM
Lab ID:	1411D32-060	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	130		0.39	1.0	ug/L	199600	1	11/21/2014 17:28	NP
Ethylbenzene	200		4.0	10	ug/L	199600	10	11/24/2014 13:41	NP
Methyl tert-butyl ether	400		4.2	10	ug/L	199600	10	11/24/2014 13:41	NP
Naphthalene	150		2.0	50	ug/L	199600	10	11/24/2014 13:41	NP
Toluene	280		3.8	10	ug/L	199600	10	11/24/2014 13:41	NP
Xylenes, Total	1200		8.3	10	ug/L	199600	10	11/24/2014 13:41	NP
Surr: 4-Bromofluorobenzene	98.3		0	70-130	%REC	199600	10	11/24/2014 13:41	NP
Surr: 4-Bromofluorobenzene	103		0	70-130	%REC	199600	1	11/21/2014 17:28	NP
Surr: Dibromofluoromethane	93.3		0	70-130	%REC	199600	1	11/21/2014 17:28	NP
Surr: Dibromofluoromethane	95.3		0	70-130	%REC	199600	10	11/24/2014 13:41	NP
Surr: Toluene-d8	95.5		0	70-130	%REC	199600	10	11/24/2014 13:41	NP
Surr: Toluene-d8	97.9		0	70-130	%REC	199600	1	11/21/2014 17:28	NP
Oxygenates SW8260B					**(SW5030B)**				
tert-Amyl alcohol	200		9.5	100	ug/L	199600	1	11/21/2014 17:28	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199600	1	11/21/2014 17:28	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199600	1	11/21/2014 17:28	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 2
Project Name:	Clouds Chevron	**Collection Date:**	11/12/2014 4:00:00 PM
Lab ID:	1411D32-061	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	BRL		0.39	1.0	ug/L	199640	1	11/24/2014 10:48	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199640	1	11/24/2014 10:48	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199640	1	11/24/2014 10:48	NP
Naphthalene	BRL		0.20	5.0	ug/L	199640	1	11/24/2014 10:48	NP
Toluene	BRL		0.38	1.0	ug/L	199640	1	11/24/2014 10:48	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199640	1	11/24/2014 10:48	NP
Surr: 4-Bromofluorobenzene	92.3		0	70-130	%REC	199640	1	11/24/2014 10:48	NP
Surr: Dibromofluoromethane	103		0	70-130	%REC	199640	1	11/24/2014 10:48	NP
Surr: Toluene-d8	97.4		0	70-130	%REC	199640	1	11/24/2014 10:48	NP
Oxygenates SW8260B					**(SW5030B)**				
tert-Amyl alcohol	BRL		9.5	100	ug/L	199640	1	11/21/2014 17:53	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199640	1	11/21/2014 17:53	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199640	1	11/21/2014 17:53	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	DUP 3
Project Name:	Clouds Chevron	**Collection Date:**	11/13/2014 8:45:00 AM
Lab ID:	1411D32-062	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B					**(SW5030B)**				
Benzene	35		0.39	1.0	ug/L	199640	1	11/24/2014 15:20	NP
Ethylbenzene	220		20	50	ug/L	199640	50	11/21/2014 12:58	NP
Methyl tert-butyl ether	1.8		0.42	1.0	ug/L	199640	1	11/24/2014 15:20	NP
Naphthalene	460		10	250	ug/L	199640	50	11/21/2014 12:58	NP
Toluene	170		0.38	1.0	ug/L	199640	1	11/24/2014 15:20	NP
Xylenes, Total	2900		41	50	ug/L	199640	50	11/21/2014 12:58	NP
Surr: 4-Bromofluorobenzene	98		0	70-130	%REC	199640	50	11/21/2014 12:58	NP
Surr: 4-Bromofluorobenzene	106		0	70-130	%REC	199640	1	11/24/2014 15:20	NP
Surr: Dibromofluoromethane	97.2		0	70-130	%REC	199640	50	11/21/2014 12:58	NP
Surr: Dibromofluoromethane	89.5		0	70-130	%REC	199640	1	11/24/2014 15:20	NP
Surr: Toluene-d8	95.5		0	70-130	%REC	199640	50	11/21/2014 12:58	NP
Surr: Toluene-d8	98		0	70-130	%REC	199640	1	11/24/2014 15:20	NP
Oxygenates SW8260B					**(SW5030B)**				
tert-Amyl alcohol	2800		9.5	100	ug/L	199640	1	11/24/2014 15:20	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199640	1	11/24/2014 15:20	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199640	1	11/24/2014 15:20	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	TRIP BLANK
Project Name:	Clouds Chevron	**Collection Date:**	11/15/2014
Lab ID:	1411D32-063	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199640	1	11/21/2014 11:43	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199640	1	11/21/2014 11:43	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199640	1	11/21/2014 11:43	NP
Naphthalene	BRL		0.20	5.0	ug/L	199640	1	11/21/2014 11:43	NP
Toluene	BRL		0.38	1.0	ug/L	199640	1	11/21/2014 11:43	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199640	1	11/21/2014 11:43	NP
Surr: 4-Bromofluorobenzene	94.4		0	70-130	%REC	199640	1	11/21/2014 11:43	NP
Surr: Dibromofluoromethane	98.5		0	70-130	%REC	199640	1	11/21/2014 11:43	NP
Surr: Toluene-d8	94.8		0	70-130	%REC	199640	1	11/21/2014 11:43	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199640	1	11/21/2014 11:43	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199640	1	11/21/2014 11:43	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199640	1	11/21/2014 11:43	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:** 25-Nov-14

Client:	Crawford Environmental Services	**Client Sample ID:**	TRIP BLANK II
Project Name:	Clouds Chevron	**Collection Date:**	11/15/2014
Lab ID:	1411D32-064	**Matrix:**	Groundwater

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
Volatile Organic Compounds by GC/MS SW8260B (SW5030B)									
Benzene	BRL		0.39	1.0	ug/L	199640	1	11/21/2014 12:08	NP
Ethylbenzene	BRL		0.40	1.0	ug/L	199640	1	11/21/2014 12:08	NP
Methyl tert-butyl ether	BRL		0.42	1.0	ug/L	199640	1	11/21/2014 12:08	NP
Naphthalene	BRL		0.20	5.0	ug/L	199640	1	11/21/2014 12:08	NP
Toluene	BRL		0.38	1.0	ug/L	199640	1	11/21/2014 12:08	NP
Xylenes, Total	BRL		0.83	1.0	ug/L	199640	1	11/21/2014 12:08	NP
Surr: 4-Bromofluorobenzene	89.5		0	70-130	%REC	199640	1	11/21/2014 12:08	NP
Surr: Dibromofluoromethane	99.9		0	70-130	%REC	199640	1	11/21/2014 12:08	NP
Surr: Toluene-d8	95.1		0	70-130	%REC	199640	1	11/21/2014 12:08	NP
Oxygenates SW8260B (SW5030B)									
tert-Amyl alcohol	BRL		9.5	100	ug/L	199640	1	11/21/2014 12:08	NP
tert-Amyl methyl ether	BRL		1.0	10	ug/L	199640	1	11/21/2014 12:08	NP
tert-Butyl Alcohol	BRL		6.8	100	ug/L	199640	1	11/21/2014 12:08	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.

Sample/Cooler Receipt Checklist

Client Access Work Order Number 1411D32

Checklist completed by [signature] 11/15/14
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? (4°C±2)* Yes ✓ No __

Cooler #1 1.9 Cooler #2 _____ 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) _____

(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.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample-Receipt Checklists\Sample_Cooler_Receipt_Checklist

Analytical Environmental Services, Inc

Date: 28-Nov-14

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199515

Sample ID: **MB-199515**	Client ID:				Units: **ug/L**		Prep Date: **11/19/2014**		Run No: **280400**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**				BatchID: **199515**		Analysis Date: **11/19/2014**		Seq No: **5929237**

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	45.18	0	50.00		90.4	70	130				
Surr: Dibromofluoromethane	49.47	0	50.00		98.9	70	130				
Surr: Toluene-d8	47.42	0	50.00		94.8	70	130				

Sample ID: **MB-199515**	Client ID:				Units: **ug/L**		Prep Date: **11/19/2014**		Run No: **280400**
SampleType: **MBLK**	TestCode: **Oxygenates** **SW8260B**				BatchID: **199515**		Analysis Date: **11/19/2014**		Seq No: **5929314**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									

Sample ID: **LCS-199515**	Client ID:				Units: **ug/L**		Prep Date: **11/19/2014**		Run No: **280400**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**				BatchID: **199515**		Analysis Date: **11/19/2014**		Seq No: **5929236**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	49.86	1.0	50.00		99.7	70	130				
Ethylbenzene	52.02	1.0	50.00		104	70	130				
Naphthalene	44.06	5.0	50.00		88.1	70	130				
Toluene	50.55	1.0	50.00		101	70	130				
Xylenes, Total	154.5	1.0	150.0		103	70	130				
Surr: 4-Bromofluorobenzene	48.92	0	50.00		97.8	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: 28-Nov-14

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199515

Sample ID: **LCS-199515**	Client ID:				Units: **ug/L**		Prep Date: **11/19/2014**		Run No: **280400**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **199515**		Analysis Date: **11/19/2014**		Seq No: **5929236**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Dibromofluoromethane	48.70	0	50.00		97.4	70	130				
Surr: Toluene-d8	47.23	0	50.00		94.5	70	130				

Sample ID: **LCS-199515**	Client ID:				Units: **ug/L**		Prep Date: **11/19/2014**		Run No: **280400**
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**				BatchID: **199515**		Analysis Date: **11/19/2014**		Seq No: **5929311**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	1013	100	1000		101	70	130				
tert-Amyl methyl ether	217.6	10	200.0		109	70	130				
tert-Butyl Alcohol	973.0	100	1000		97.3	70	130				

Sample ID: **1411D32-002AMS**	Client ID: **MW 18**				Units: **ug/L**		Prep Date: **11/19/2014**		Run No: **280414**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **199515**		Analysis Date: **11/20/2014**		Seq No: **5930099**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	8629	100	5000	3115	110	70.2	138				
Ethylbenzene	6136	100	5000	558.0	112	71.9	133				
Naphthalene	5000	500	5000	288.0	94.2	54.6	130				
Toluene	16220	100	5000	10530	114	70	139				
Xylenes, Total	25820	100	15000	8710	114	70.7	136				
Surr: 4-Bromofluorobenzene	5114	0	5000		102	70	130				
Surr: Dibromofluoromethane	4977	0	5000		99.5	70	130				
Surr: Toluene-d8	4838	0	5000		96.8	70	130				

Sample ID: **1411D32-002AMS**	Client ID: **MW 18**				Units: **ug/L**		Prep Date: **11/19/2014**		Run No: **280414**
SampleType: **MS**	TestCode: **Oxygenates SW8260B**				BatchID: **199515**		Analysis Date: **11/20/2014**		Seq No: **5932243**

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: 28-Nov-14

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199515

Sample ID: **1411D32-002AMS**	Client ID: **MW 18**				Units: **ug/L**		Prep Date: **11/19/2014**		Run No: **280414**	
SampleType: **MS**	TestCode: **Oxygenates** **SW8260B**				BatchID: **199515**		Analysis Date: **11/20/2014**		Seq No: **5932243**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	125100	10000	100000	11570	114	54.6	145				
tert-Amyl methyl ether	22130	1000	20000		111	71.1	129				
tert-Butyl Alcohol	106100	10000	100000		106	50.3	149				

Sample ID: **1411D32-002AMSD**	Client ID: **MW 18**				Units: **ug/L**		Prep Date: **11/19/2014**		Run No: **280414**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**				BatchID: **199515**		Analysis Date: **11/20/2014**		Seq No: **5930125**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	8483	100	5000	3115	107	70.2	138	8629	1.71	20	
Ethylbenzene	6077	100	5000	558.0	110	71.9	133	6136	0.966	20	
Naphthalene	5342	500	5000	288.0	101	54.6	130	5000	6.61	21.4	
Toluene	15820	100	5000	10530	106	70	139	16220	2.48	20	
Xylenes, Total	25490	100	15000	8710	112	70.7	136	25820	1.28	20	
Surr: 4-Bromofluorobenzene	4987	0	5000		99.7	70	130	5114	0	0	
Surr: Dibromofluoromethane	4918	0	5000		98.4	70	130	4977	0	0	
Surr: Toluene-d8	4840	0	5000		96.8	70	130	4838	0	0	

Sample ID: **1411D32-002AMSD**	Client ID: **MW 18**				Units: **ug/L**		Prep Date: **11/19/2014**		Run No: **280414**	
SampleType: **MSD**	TestCode: **Oxygenates** **SW8260B**				BatchID: **199515**		Analysis Date: **11/20/2014**		Seq No: **5932244**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	129300	10000	100000	11570	118	54.6	145	125100	3.33	23.5	
tert-Amyl methyl ether	21720	1000	20000		109	71.1	129	22130	1.87	20	
tert-Butyl Alcohol	116100	10000	100000		116	50.3	149	106100	9.01	33.5	

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: 28-Nov-14

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199525

Sample ID: **MB-199525**	Client ID:			Units: **ug/L**	Prep Date: **11/20/2014**	Run No: **280414**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**			BatchID: **199525**	Analysis Date: **11/20/2014**	Seq No: **5929758**

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	44.80	0	50.00		89.6	70	130				
Surr: Dibromofluoromethane	50.29	0	50.00		101	70	130				
Surr: Toluene-d8	47.24	0	50.00		94.5	70	130				

Sample ID: **MB-199525**	Client ID:			Units: **ug/L**	Prep Date: **11/20/2014**	Run No: **280414**
SampleType: **MBLK**	TestCode: **Oxygenates** **SW8260B**			BatchID: **199525**	Analysis Date: **11/20/2014**	Seq No: **5932242**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									

Sample ID: **LCS-199525**	Client ID:			Units: **ug/L**	Prep Date: **11/20/2014**	Run No: **280414**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**			BatchID: **199525**	Analysis Date: **11/20/2014**	Seq No: **5929756**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	55.41	1.0	50.00		111	70	130				
Ethylbenzene	57.65	1.0	50.00		115	70	130				
Naphthalene	50.46	5.0	50.00		101	70	130				
Toluene	56.83	1.0	50.00		114	70	130				
Xylenes, Total	171.3	1.0	150.0		114	70	130				
Surr: 4-Bromofluorobenzene	49.12	0	50.00		98.2	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: 28-Nov-14

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199525

Sample ID: **LCS-199525**	Client ID:				Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280414**	
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **199525**		Analysis Date: **11/20/2014**		Seq No: **5929756**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Dibromofluoromethane	49.29	0	50.00		98.6	70	130				
Surr: Toluene-d8	46.99	0	50.00		94.0	70	130				

Sample ID: **LCS-199525**	Client ID:				Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280414**	
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**				BatchID: **199525**		Analysis Date: **11/20/2014**		Seq No: **5932240**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	1228	100	1000		123	70	130				
tert-Amyl methyl ether	226.4	10	200.0		113	70	130				
tert-Butyl Alcohol	1166	100	1000		117	70	130				

Sample ID: **1411D32-038AMS**	Client ID: **MW 20**				Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280414**	
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **199525**		Analysis Date: **11/20/2014**		Seq No: **5932189**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	6653	100	5000	1430	104	70.2	138				
Ethylbenzene	6233	100	5000	494.0	115	71.9	133				
Naphthalene	7960	500	5000	1171	136	54.6	130				S
Toluene	17490	100	5000	12050	109	70	139				
Xylenes, Total	31180	100	15000	13730	116	70.7	136				
Surr: 4-Bromofluorobenzene	5118	0	5000		102	70	130				
Surr: Dibromofluoromethane	4697	0	5000		93.9	70	130				
Surr: Toluene-d8	4771	0	5000		95.4	70	130				

Sample ID: **1411D32-038AMS**	Client ID: **MW 20**				Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280414**	
SampleType: **MS**	TestCode: **Oxygenates SW8260B**				BatchID: **199525**		Analysis Date: **11/20/2014**		Seq No: **5932259**	
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: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199525

Sample ID: **1411D32-038AMS** Client ID: **MW 20** Units: **ug/L** Prep Date: **11/20/2014** Run No: **280414**
SampleType: **MS** TestCode: **Oxygenates SW8260B** BatchID: **199525** Analysis Date: **11/20/2014** Seq No: **5932259**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	121600	10000	100000		122	54.6	145				
tert-Amyl methyl ether	22030	1000	20000		110	71.1	129				
tert-Butyl Alcohol	115900	10000	100000		116	50.3	149				

Sample ID: **1411D32-038AMSD** Client ID: **MW 20** Units: **ug/L** Prep Date: **11/20/2014** Run No: **280414**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **199525** Analysis Date: **11/20/2014** Seq No: **5932190**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	6443	100	5000	1430	100	70.2	138	6653	3.21	20	
Ethylbenzene	5989	100	5000	494.0	110	71.9	133	6233	3.99	20	
Naphthalene	6021	500	5000	1171	97.0	54.6	130	7960	27.7	21.4	R
Toluene	16680	100	5000	12050	92.7	70	139	17490	4.69	20	
Xylenes, Total	29880	100	15000	13730	108	70.7	136	31180	4.27	20	
Surr: 4-Bromofluorobenzene	4935	0	5000		98.7	70	130	5118	0	0	
Surr: Dibromofluoromethane	4646	0	5000		92.9	70	130	4697	0	0	
Surr: Toluene-d8	4696	0	5000		93.9	70	130	4771	0	0	

Sample ID: **1411D32-038AMSD** Client ID: **MW 20** Units: **ug/L** Prep Date: **11/20/2014** Run No: **280414**
SampleType: **MSD** TestCode: **Oxygenates SW8260B** BatchID: **199525** Analysis Date: **11/20/2014** Seq No: **5932260**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	119900	10000	100000		120	54.6	145	121600	1.39	23.5	
tert-Amyl methyl ether	21240	1000	20000		106	71.1	129	22030	3.65	20	
tert-Butyl Alcohol	115800	10000	100000		116	50.3	149	115900	0.105	33.5	

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: 28-Nov-14

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199600

Sample ID: **MB-199600**	Client ID:				Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280527**	
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**				BatchID: **199600**		Analysis Date: **11/20/2014**		Seq No: **5932801**	
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	46.88	0	50.00		93.8	70	130				
Surr: Dibromofluoromethane	47.04	0	50.00		94.1	70	130				
Surr: Toluene-d8	46.47	0	50.00		92.9	70	130				

Sample ID: **MB-199600**	Client ID:				Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280527**	
SampleType: **MBLK**	TestCode: **Oxygenates** **SW8260B**				BatchID: **199600**		Analysis Date: **11/20/2014**		Seq No: **5933018**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									

Sample ID: **LCS-199600**	Client ID:				Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280527**	
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**				BatchID: **199600**		Analysis Date: **11/20/2014**		Seq No: **5932800**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	46.15	1.0	50.00		92.3	70	130				
Ethylbenzene	49.37	1.0	50.00		98.7	70	130				
Naphthalene	47.77	5.0	50.00		95.5	70	130				
Toluene	47.52	1.0	50.00		95.0	70	130				
Xylenes, Total	147.7	1.0	150.0		98.4	70	130				
Surr: 4-Bromofluorobenzene	50.72	0	50.00		101	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: 28-Nov-14

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199600

Sample ID: **LCS-199600**	Client ID:				Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280527**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**				BatchID: **199600**		Analysis Date: **11/20/2014**		Seq No: **5932800**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Dibromofluoromethane	47.43	0	50.00		94.9	70	130				
Surr: Toluene-d8	46.72	0	50.00		93.4	70	130				

Sample ID: **LCS-199600**	Client ID:				Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280599**
SampleType: **LCS**	TestCode: **Oxygenates** **SW8260B**				BatchID: **199600**		Analysis Date: **11/22/2014**		Seq No: **5934589**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	1034	100	1000		103	70	130				
tert-Amyl methyl ether	207.0	10	200.0		103	70	130				
tert-Butyl Alcohol	1019	100	1000		102	70	130				

Sample ID: **1411D32-041AMS**	Client ID: **MW 23**				Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280604**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**				BatchID: **199600**		Analysis Date: **11/24/2014**		Seq No: **5937205**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	26060	500	25000	785.0	101	70.2	138				
Ethylbenzene	26560	500	25000		106	71.9	133				
Naphthalene	22590	2500	25000	820.0	87.1	54.6	130				
Toluene	29230	500	25000	3060	105	70	139				
Xylenes, Total	93220	500	75000	11910	108	70.7	136				
Surr: 4-Bromofluorobenzene	25590	0	25000		102	70	130				
Surr: Dibromofluoromethane	23470	0	25000		93.9	70	130				
Surr: Toluene-d8	23640	0	25000		94.5	70	130				

Sample ID: **1411D32-041AMS**	Client ID: **MW 23**				Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280604**
SampleType: **MS**	TestCode: **Oxygenates** **SW8260B**				BatchID: **199600**		Analysis Date: **11/24/2014**		Seq No: **5937214**

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: 28-Nov-14

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199600

Sample ID: **1411D32-041AMS**	Client ID: **MW 23**			Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280604**	
SampleType: **MS**	TestCode: **Oxygenates** **SW8260B**			BatchID: **199600**		Analysis Date: **11/24/2014**		Seq No: **5937214**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	597500	50000	500000		119	54.6	145				
tert-Amyl methyl ether	107600	5000	100000		108	71.1	129				
tert-Butyl Alcohol	584800	50000	500000		117	50.3	149				

Sample ID: **1411D32-041AMSD**	Client ID: **MW 23**			Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280604**	
SampleType: **MSD**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**			BatchID: **199600**		Analysis Date: **11/24/2014**		Seq No: **5937207**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	25390	500	25000	785.0	98.4	70.2	138	26060	2.59	20	
Ethylbenzene	25900	500	25000		104	71.9	133	26560	2.52	20	
Naphthalene	23920	2500	25000	820.0	92.4	54.6	130	22590	5.72	21.4	
Toluene	28140	500	25000	3060	100	70	139	29230	3.78	20	
Xylenes, Total	90600	500	75000	11910	105	70.7	136	93220	2.86	20	
Surr: 4-Bromofluorobenzene	24430	0	25000		97.7	70	130	25590	0	0	
Surr: Dibromofluoromethane	23350	0	25000		93.4	70	130	23470	0	0	
Surr: Toluene-d8	23470	0	25000		93.9	70	130	23640	0	0	

Sample ID: **1411D32-041AMSD**	Client ID: **MW 23**			Units: **ug/L**		Prep Date: **11/20/2014**		Run No: **280604**	
SampleType: **MSD**	TestCode: **Oxygenates** **SW8260B**			BatchID: **199600**		Analysis Date: **11/24/2014**		Seq No: **5937219**	
Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	638000	50000	500000		128	54.6	145	597500	6.57	23.5	
tert-Amyl methyl ether	104100	5000	100000		104	71.1	129	107600	3.34	20	
tert-Butyl Alcohol	632500	50000	500000		127	50.3	149	584800	7.84	33.5	

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: 28-Nov-14

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199640

Sample ID: **MB-199640**	Client ID:				Units: **ug/L**		Prep Date: **11/21/2014**		Run No: **280596**
SampleType: **MBLK**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**				BatchID: **199640**		Analysis Date: **11/21/2014**		Seq No: **5934503**

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	47.47	0	50.00		94.9	70	130				
Surr: Dibromofluoromethane	48.09	0	50.00		96.2	70	130				
Surr: Toluene-d8	46.50	0	50.00		93.0	70	130				

Sample ID: **MB-199640**	Client ID:				Units: **ug/L**		Prep Date: **11/21/2014**		Run No: **280596**
SampleType: **MBLK**	TestCode: **Oxygenates** **SW8260B**				BatchID: **199640**		Analysis Date: **11/21/2014**		Seq No: **5934530**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	BRL	100									
tert-Amyl methyl ether	BRL	10									
tert-Butyl Alcohol	BRL	100									

Sample ID: **LCS-199640**	Client ID:				Units: **ug/L**		Prep Date: **11/21/2014**		Run No: **280596**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS** **SW8260B**				BatchID: **199640**		Analysis Date: **11/21/2014**		Seq No: **5934502**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	51.03	1.0	50.00		102	70	130				
Ethylbenzene	54.26	1.0	50.00		109	70	130				
Naphthalene	44.13	5.0	50.00		88.3	70	130				
Toluene	52.58	1.0	50.00		105	70	130				
Xylenes, Total	161.0	1.0	150.0		107	70	130				
Surr: 4-Bromofluorobenzene	49.86	0	50.00		99.7	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: 28-Nov-14

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199640

Sample ID: **LCS-199640**	Client ID:				Units: **ug/L**		Prep Date: **11/21/2014**		Run No: **280596**
SampleType: **LCS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **199640**		Analysis Date: **11/21/2014**		Seq No: **5934502**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Dibromofluoromethane	47.67	0	50.00		95.3	70	130				
Surr: Toluene-d8	47.98	0	50.00		96.0	70	130				

Sample ID: **LCS-199640**	Client ID:				Units: **ug/L**		Prep Date: **11/21/2014**		Run No: **280596**
SampleType: **LCS**	TestCode: **Oxygenates SW8260B**				BatchID: **199640**		Analysis Date: **11/21/2014**		Seq No: **5934529**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	1237	100	1000		124	70	130				
tert-Amyl methyl ether	218.5	10	200.0		109	70	130				
tert-Butyl Alcohol	1182	100	1000		118	70	130				

Sample ID: **1411D32-062AMS**	Client ID: **DUP 3**				Units: **ug/L**		Prep Date: **11/21/2014**		Run No: **280604**
SampleType: **MS**	TestCode: **Volatile Organic Compounds by GC/MS SW8260B**				BatchID: **199640**		Analysis Date: **11/24/2014**		Seq No: **5937226**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	2595	50	2500	39.50	102	70.2	138				
Ethylbenzene	2931	50	2500	224.0	108	71.9	133				
Naphthalene	2684	250	2500	461.0	88.9	54.6	130				
Toluene	2802	50	2500	169.0	105	70	139				
Xylenes, Total	11070	50	7500	2919	109	70.7	136				
Surr: 4-Bromofluorobenzene	2616	0	2500		105	70	130				
Surr: Dibromofluoromethane	2402	0	2500		96.1	70	130				
Surr: Toluene-d8	2405	0	2500		96.2	70	130				

Sample ID: **1411D32-062AMS**	Client ID: **DUP 3**				Units: **ug/L**		Prep Date: **11/21/2014**		Run No: **280604**
SampleType: **MS**	TestCode: **Oxygenates SW8260B**				BatchID: **199640**		Analysis Date: **11/24/2014**		Seq No: **5937250**

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: 28-Nov-14

Client: Crawford Environmental Services
Project Name: Clouds Chevron
Workorder: 1411D32

ANALYTICAL QC SUMMARY REPORT

BatchID: 199640

Sample ID: **1411D32-062AMS** Client ID: **DUP 3** Units: **ug/L** Prep Date: **11/21/2014** Run No: **280604**
SampleType: **MS** TestCode: **Oxygenates SW8260B** BatchID: **199640** Analysis Date: **11/24/2014** Seq No: **5937250**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	56470	5000	50000		113	54.6	145				
tert-Amyl methyl ether	10770	500	10000		108	71.1	129				
tert-Butyl Alcohol	55980	5000	50000		112	50.3	149				

Sample ID: **1411D32-062AMSD** Client ID: **DUP 3** Units: **ug/L** Prep Date: **11/21/2014** Run No: **280604**
SampleType: **MSD** TestCode: **Volatile Organic Compounds by GC/MS SW8260B** BatchID: **199640** Analysis Date: **11/24/2014** Seq No: **5937227**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Benzene	2572	50	2500	39.50	101	70.2	138	2595	0.890	20	
Ethylbenzene	2820	50	2500	224.0	104	71.9	133	2931	3.86	20	
Naphthalene	2635	250	2500	461.0	87.0	54.6	130	2684	1.82	21.4	
Toluene	2756	50	2500	169.0	103	70	139	2802	1.69	20	
Xylenes, Total	10770	50	7500	2919	105	70.7	136	11070	2.73	20	
Surr: 4-Bromofluorobenzene	2460	0	2500		98.4	70	130	2616	0	0	
Surr: Dibromofluoromethane	2422	0	2500		96.9	70	130	2402	0	0	
Surr: Toluene-d8	2410	0	2500		96.4	70	130	2405	0	0	

Sample ID: **1411D32-062AMSD** Client ID: **DUP 3** Units: **ug/L** Prep Date: **11/21/2014** Run No: **280604**
SampleType: **MSD** TestCode: **Oxygenates SW8260B** BatchID: **199640** Analysis Date: **11/24/2014** Seq No: **5937251**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
tert-Amyl alcohol	57830	5000	50000		116	54.6	145	56470	2.37	23.5	
tert-Amyl methyl ether	10910	500	10000		109	71.1	129	10770	1.24	20	
tert-Butyl Alcohol	57030	5000	50000		114	50.3	149	55980	1.85	33.5	

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

W. Marshall Taylor Jr., Acting 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

MAR 30 2015

UST 252 tech 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 February 19, 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 2014 groundwater sampling event. The Agency has noted that the report documents a 65.17% reduction has been achieved to date. The Agency agrees with Crawford's recommendation to install injection wells in proximity to monitoring wells MW-10 and MW-15 and begin surfactant injections.

The next semi-annual CASE report is due on or before May 5, 2015.

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
W. Marshall Taylor Jr., Acting Director
Promoting and protecting the health of the public and the environment

SYLVAN FOOD SYSTEMS INC
1245 BOSTON AVE
WEST COLUMBIA SC 29170

MAR 30 2015

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 February 19, 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

D H E C

PROMOTE PROTECT PROSPER

W. Marshall Taylor Jr., Acting 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

MAR 30 2015

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 February 19, 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

W. Marshall Taylor Jr., Acting 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

MAR 30 2015

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 February 19, 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

W. Marshall Taylor Jr., Acting Director

Promoting and protecting the health of the public and the environment

1500 MILLWOOD AVE LLC
1330 DEVONSHIRE DR
COLUMBIA SC 29204

MAR 30 2015

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 February 19, 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

D H E C

PROMOTE PROTECT PROSPER

W. Marshall Taylor Jr., Acting Director

Promoting and protecting the health of the public and the environment

JOHN M SUDDETH
1410 N MILLWOOD AVE
COLUMBIA SC 29204

MAR 30 2015

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 February 19, 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

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

W. Marshall Taylor Jr., Acting Director

Promoting and protecting the health of the public and the environment

FUNG LAU
2300 TAYLOR ST SUITE D
COLUMBIA SC 29204

MAR 30 2015

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

cc: Technical File

Document Receipt Information

☒ Hard Copy ☒ CD ☐ Email

Date Received 7-1-15

Permit Number

Project Manager Sonya Utz Crawford

Name of Contractor

UST Certification Number

Docket Number

Scanned

CASE Report

D H E C

Underground Storage Tank Management Division
Field Data Information Sheet – Monitoring Well Gauging

Site Information Handy Pantry/651 University Mart

Date: 8-7-15	Site ID #: 07584 4077774 12352	Site Name: Cloud's Chevron
County: Richland	Project Manager: Sutz	Field Personnel: S. Utz J. Bryant

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?
MW-62				20.75					N	
MW-10				16.64						
MW-63				2.2591					N	
MW-31				~~22.80~~ 24.76					N	
MW-29				18.99					N	
MW-20				23.04	SHEEN					
PW-1R				23.75						
MW-2				22.83						
MW-3				22.61						
MW-15			17.75	17.84	0.09'					

Notes: 10 BAILERS
29 CAP OFF
31 CAP OFF
PW-1R OBJECT IN WELL/CASING BENT
15 NO CAP - CASING MISSED UP

Signature: Sutz

UST DOCKETING

DHEC 0424 (10/2012)

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

~~Benedict College~~
~~Dr. David Swinton, president~~

~~Groundskeeper~~

JOHN TUCKER (803)705 4846
NOTIFIED

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

AUG 2 4 2015

UST DOCKETING 255 tech

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 July 1, 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 May/June 2015 groundwater sampling event. The findings have been noted.

The next semi-annual CASE report is due on or before December 5, 2015.

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 F. Heigel, Director

Promoting and protecting the health of the public and the environment

SYLVAN FOOD SYSTEMS INC
1245 BOSTON AVE
WEST COLUMBIA SC 29170

AUG 24 2015

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 July 1, 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.

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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

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

AUG 24 2015

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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Release reported December 31, 1991
UST Permit # 12352, Clouds Chevron, 1600 Two Notch Rd., Columbia, SC
Release reported December 30, 1991
CASE report received July 1, 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.

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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

AUG 2 4 2015

Re: **Corrective Action System Evaluation (CASE) Report Review**
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Release #1 reported January 30, 1991
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CASE report received July 1, 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.

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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

AUG 2 4 2015

Re: **Corrective Action System Evaluation (CASE) Report Review**
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Corrective Action Section
UST Management Division
Bureau of Land and Waste Management

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D H E C
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

AUG 2 4 2015

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Corrective Action Section
UST Management Division
Bureau of Land and Waste Management

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2300 TAYLOR ST SUITE D
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Corrective Action Section
UST Management Division
Bureau of Land and Waste Management

cc: Technical File

Document Receipt Information

☒ Hard Copy ☒ CD ☐ Email

Date Received 12-16-2015

Permit Number 07584/07777/12352

Project Manager Joel Padgett

Name of Contractor Crawford Environmental

UST Certification Number

Docket Number 07584 - 256 tech
07777 - 190 tech
12352 - 125 tech

Scanned

CASE - November 2015 (Sampling Data)

CRAWFORD
ENVIRONMENTAL
SERVICES

December 13, 2015

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 – November 2015 (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 November 2015 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
December 13, 2015
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

December 13, 2015
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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Table 2: Groundwater Laboratory Analytical Result Summary
Table 3: Site Specific Target Level Summary

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

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 November 3 and 4, 2015. 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 208-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 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-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-51, MW-53, MW-54, MW-55, MW-56, MW-58, MW-59, MW-62, MW-63, MW-67, MW-70, PWR-1, DW-1, DW-2, DW-3, DW-4, DW-5, DW-6, DW-7, DW-8 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-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 wells MW-15 and MW-62 maintained free phase petroleum and were not sampled. Monitoring wells MW-1, MW-5 and MW-52 did not maintain sufficient water columns to collect groundwater samples.

CES sampled the monitoring wells, as part of the November 2015 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-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 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-25, MW-33, MW-35, MW-37, 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 concentration of concern reduction of 35.64 percent during this phase of work.

3. Free-phase petroleum was observed at monitoring wells MW-15 and MW-62. CES is mobilizing to the subject site on December 16, 2015 to confirm the presence of free product at MW-62. If free product is not detected, a sample will be collected and the results will be presented in a letter report.

4. In accordance with SCDHEC directives, CES mobilized to the subject site on November 30, 2015 to complete well repairs. CES installed expansion type well caps at monitoring wells MW-15, MW-29 and MW-30. Inspection of PW-1R revealed a bent casing and re-installation will be required. CES also inspected all wells at the site to ensure they were secured with bolts. Due to the age of many of the wells, a minimum of 9 monitoring well surface completions require replacement.

5. 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 is in continuing negotiations with the property owners of Churches Chicken to obtain access to install injection wells. CES estimates that access will be granted in by January 2016 and the well installation and first injection can be completed by March 15, 2016.

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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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 — 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-17	22	20	30	92.45	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	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	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	11/3/2015	NA	20.18	NA	NA	73.94
					5/28/2015	22.67	22.61	0.06	-22.67	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	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	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	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	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	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	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	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	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	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	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	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 — 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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	11/3/2015	Unable to Access - Locked Gate				
					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	11/3/2015	Unable to Access - Locked Gate				
					5/29/2015					
					11/11/2014					
					4/2/2014					
MW-51	35	20	35	93.91	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	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	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	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	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	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	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	11/3/2015	Unable to Locate				
					5/28/2015					
					11/11/2014					
					4/2/2014					
MW-62	35	20	35	94.05	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	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	11/3/2015	Unable to Locate - Paved over				
					5/28/2015					
					11/11/2014					
					4/2/2014					
MW-67	35	20	35	96.10	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	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	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	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	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	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	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	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	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	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	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	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	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									
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
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
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
MW-5	4/2/2014	Dry								
	11/11/2014									
	5/29/2015									
	11/3/2015									
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
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
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
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
MW-10	4/1/2014	1800	5700	350	8500	50	690	5000	500.000	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
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
MW-12	4/2/2014	2.9	0.67	1.6	0.91	18	4.7	630	9.300	<100
	11/11/2014	990	19	910	140	21	180	3600	14.000	<100
	5/28/2015	53	2.7	430	14	22	44	2300	<10	<100
	11/4/2015	110	2	53	25	<1	10	1800	8.200	<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
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								
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

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-17	4/2/2014	280	5100	450	13000	50	850	2200	500.000	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
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
MW-19	4/3/2014	300	1800	490	12000	50	900	610	500.000	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
MW-20	4/3/2014	1800	11000	460	11000	50	960	3100	65.000	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
MW-22	4/3/2014	5700	12000	880	23000	50	990	3600	500.000	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
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
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
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
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
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
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
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
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
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
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
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

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-35	4/1/2014	3700	4300	2000	6200	160	550	5600	54.000	5000
	11/12/2014	6000	7200	2800	7400	330	700	4700	76.000	<100
	5/28/2015	3300	5100	1500	4700	<50	640	4400	<500	<5000
	11/3/2015	1900	2200	1100	3300	84	530	2300	28.000	<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
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
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
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
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
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
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
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
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
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
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
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								
MW-49	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
MW-50	4/2/2014	Unable to Access - Locked Gate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
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

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-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
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
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
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
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
MW-59	4/2/2014	28	2.8	300	6.4	130	45	2600	42.000	160
	11/11/2014	81	3.6	730	14	91	96	4500	27.000	<100
	5/28/2015	1400	23	1100	620	89	290	3900	34.000	<100
	11/4/2015	1300	48	440	850	58	250	2800	19.000	<100
MW-60	4/2/2014	Unable to Locate								
	11/11/2014									
	5/29/2015									
	11/3/2015									
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								
	11/3/2015	0.52-Feet of Free Product								
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
MW-65	4/2/2014	Unable to Locate - Paved over								
	11/11/2014									
	5/29/2015									
	11/3/2015									
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
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
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
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
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
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

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	190.000	<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	50.000	<2000
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
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
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
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
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
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
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

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	
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	0.61	0.48	1.40	5.5	1.0	2.6	100.0	10.0	100.0	221.6	
	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	3000.0	8700.0	600.0	7200.0	720.0	360.0	2000.0	140.0	2000.0		
	SSTL	111.0	7400.0	260.0	4500.0	1976.0	108.0	2000.0	340.0	1300.0	17995.0	
	Subsequent > SSTL	2889.0	1300.0	340.0	2700.0	0.0	252.0	0.0	0.0	700.0	8181.0	
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											Dry
	SSTL	50.0	50.0	50.0	30.5	946.0	50.0	1000.0	100.0	1000.0	3276.5	
	Subsequent > SSTL					Dry						
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	520	6200	1100	8600	50	470	3000	500	5000	25440.0	
	SSTL	35.0	7134.0	2500.0	19000.0	150.0	68.0	809.0	270.0	15628.0	45594.0	
	Subsequent > SSTL	485.0	0.0	0.0	0.0	0.0	402.0	2191.0	0.0	0.0	3078.0	
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	10	18	4.5	120	1	46	100	10	100		
	SSTL	24.0	7800.0	2500.0	15000.0	294.0	53.0	793.0	707.0	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	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	110	2	53	25	1	10	1800	8.200	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	108.3	0.0	42.0	20.0	0.0	5.3	1430.0	6.7	81.0	1693.3	
MW-15	Initial					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											Free Product
	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	280	10000	660	13000	100	720	10000	1000.0	10000	45760.0	
	SSTL	32.0	6631.0	2500.0	21680.0	1000.0	66.0	773.0	263.0	14286.0	47231.0	
	Subsequent > SSTL	248.0	3369.0	0.0	0.0	0.0	654.0	9227.0	737.0	0.0	14235.0	
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	990	5800	600	8900	93	260	10000	1000.00	10000	37643.0	
	SSTL	40.0	19326.0	3700.0	21680.0	4260.0	348.0	938.0	4989.0	54462.0	109743.0	
	Subsequent > SSTL	950.0	0.0	0.0	0.0	0.0	0.0	9062.0	0.0	0.0	10012.0	
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	2900	19000	720	17000	100	1100	5400	1000.00	10000	57220.0	
	SSTL	54.0	11081.0	3700.0	21680.0	16080.0	86.0	1065.0	320.0	26814.0	80880.0	
	Subsequent > SSTL	2846.0	7919.0	0.0	0.0	0.0	1014.0	4335.0	680.0	0.0	16794.0	
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	930.0	11000.0	1000.0	17000.0	50.0	1400.0	5000.0	500.0	5000.0	41880.0	
	SSTL	83.0	2930.0	728.0	8820.0	88.7	108.0	1403.0	200.0	2000.0	16360.7	
	Subsequent > SSTL	847.0	8070.0	272.0	8180.0	0.0	1292.0	3597.0	300.0	3000.0	25558.0	
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	6400	20000	740	24000	100	1000	3900	1000.00	10000	67140.0	
	SSTL	90.0	17000.0	2900.0	20000.0	1000.0	112.0	1469.0	130.0	20000.0	62701.0	
	Subsequent > SSTL	6310.0	3000.0	0.0	4000.0	0.0	888.0	2431.0	870.0	0.0	17499.0	
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	2.9	8.5	1.5	190	1	52	100	10.000	100	465.9	
	SSTL	72.0	14880.0	3700.0	21680.0	33368.0	100.0	1279.0	359.0	38475.0	113913.0	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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	14	150	200	2600	1	340	390	10	100	3805.0	
	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	219.0	0.0	0.0	0.0	219.0	

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	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	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	240	7500	1600	11000	50	430	5000	500.00	5000	31320.0	
	SSTL	53.0	7200.0	1500.0	7200.0	500.0	410.0	1136.0	1000.0	10000.0	28999.0	
	Subsequent > SSTL	187.0	300.0	100.0	3800.0	0.0	20.0	3864.0	0.0	0.0	8271.0	
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	1900	2200	1100	3300	84	530	2300	28.000	100	11542.0	
	SSTL	56.0	2000.0	1700.0	3500.0	300.0	542.0	1181.0	51.0	5000.0	14330.0	
	Subsequent > SSTL	1844.0	200.0	0.0	0.0	0.0	0.0	1119.0	0.0	0.0	3163.0	
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	3.5	1	1	5.4	1	5.5	77	10	100	204.4	
	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	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	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	0.51	1	1	1	1	5	100	10	100	219.5	
	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	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. — 7.0547

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	1.5	5	100	10	100	220.5	
	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	0.0	8.0	86.0	94.0	
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	5200	10000	810	5300	100	580	10000	1000.00	10000	42990.0	
	SSTL	83.0	1000.0	1400.0	4400.0	160.0	108.0	1300.0	381.0	10000.0	18832.0	
	Subsequent > SSTL	5117.0	9000.0	0.0	900.0	0.0	472.0	8700.0	619.0	0.0	24808.0	
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	830.0	20000.0	1200.0	14000.0	500.0	600.0	50000.0	5000.0	50000.0	142130.0	
	SSTL	58.0	11928.0	3700.0	21680.0	290.0	19298.0	1114.0	330.0	29344.0	87742.0	
	Subsequent > SSTL	772.0	8072.0	0.0	0.0	210.0	0.0	48886.0	4670.0	20656.0	62610.0	
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	4300	16000	2300	11000	230	800	2600	50.000	2000	39280.0	
	SSTL	45.0	8470.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	47935.0	
	Subsequent > SSTL	4255.0	7530.0	100.0	1000.0	0.0	180.0	0.0	0.0	0.0	13065.0	
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	
	Subsequent	1	1	1	1	0.76	5	44	10	100	163.8	
	SSTL	5.0	2.8	23.0	36.0	17.0	6.5	240.0	2.6	23.0	355.9	
	Subsequent > SSTL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	77.0	84.4	

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

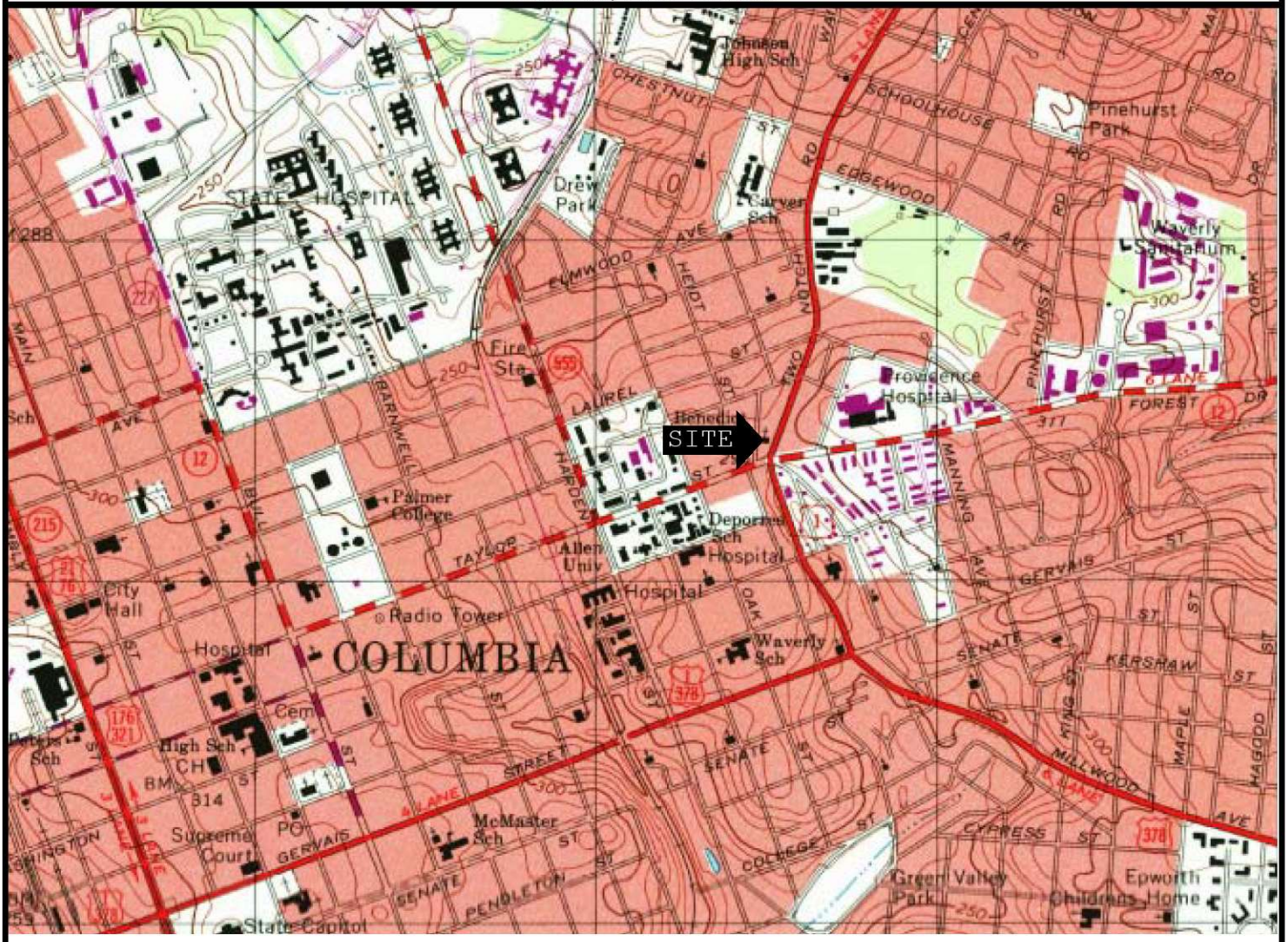
Initial>SSTL	325262.00
Subsequent>SSTL	209326.70
COC Reduction	35.64%

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

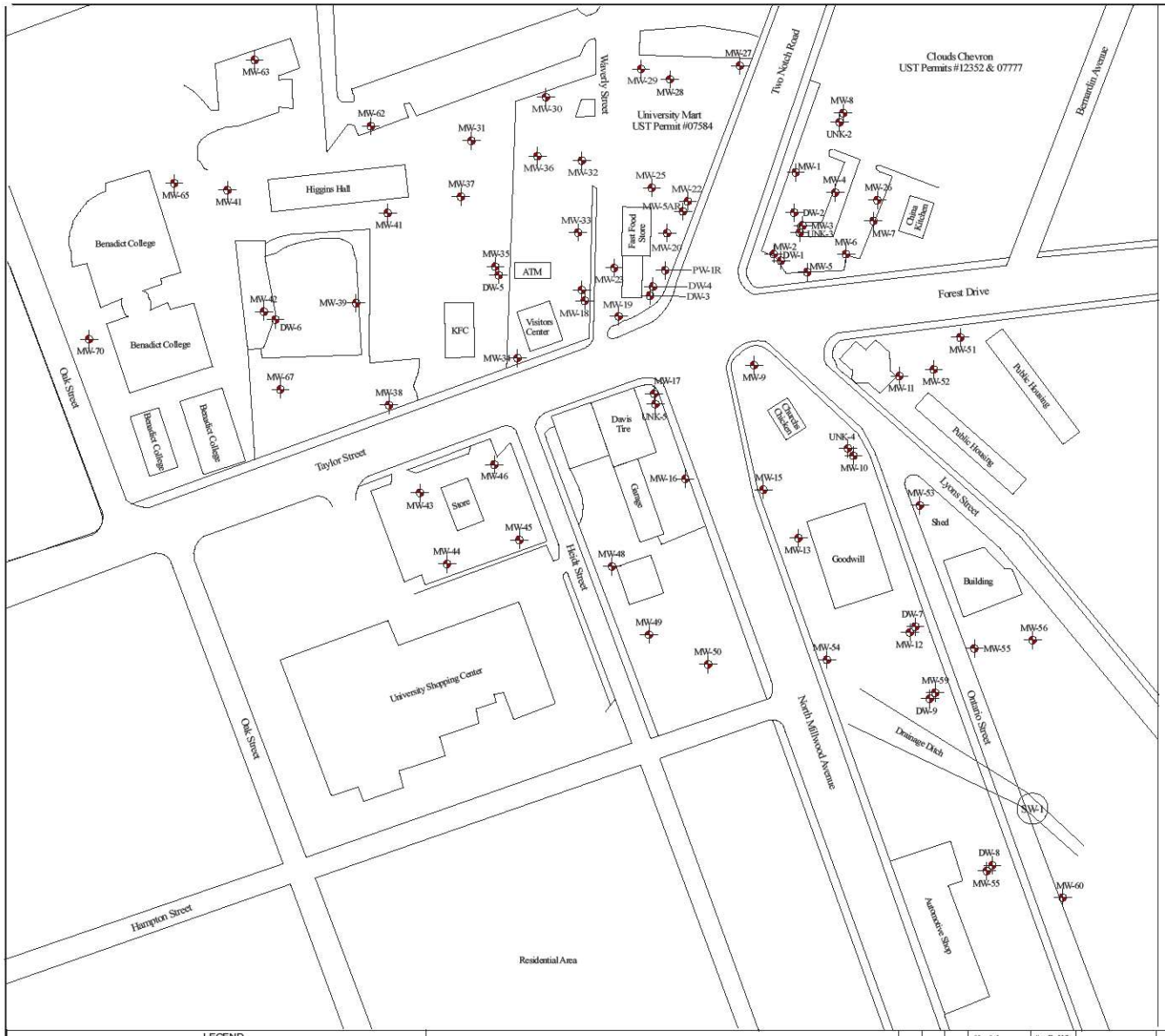
Source: U.S.G.S. Topographic Map of the Columbia North Quadrangle, Virginia, 7.5 Minute Series (1977, revised 1988)
Scale: 1:24,000 Contour Interval: 20 Feet
Vertical Datum: National Geodetic Vertical Datum 1929
Horizontal Datum: North American Datum1927

Project: CASE Report

Client: SCDHEC

CES Job #: 7.0547

Latitude:
034”00’42.72”N
Longitude:
081”01’00.13”W



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

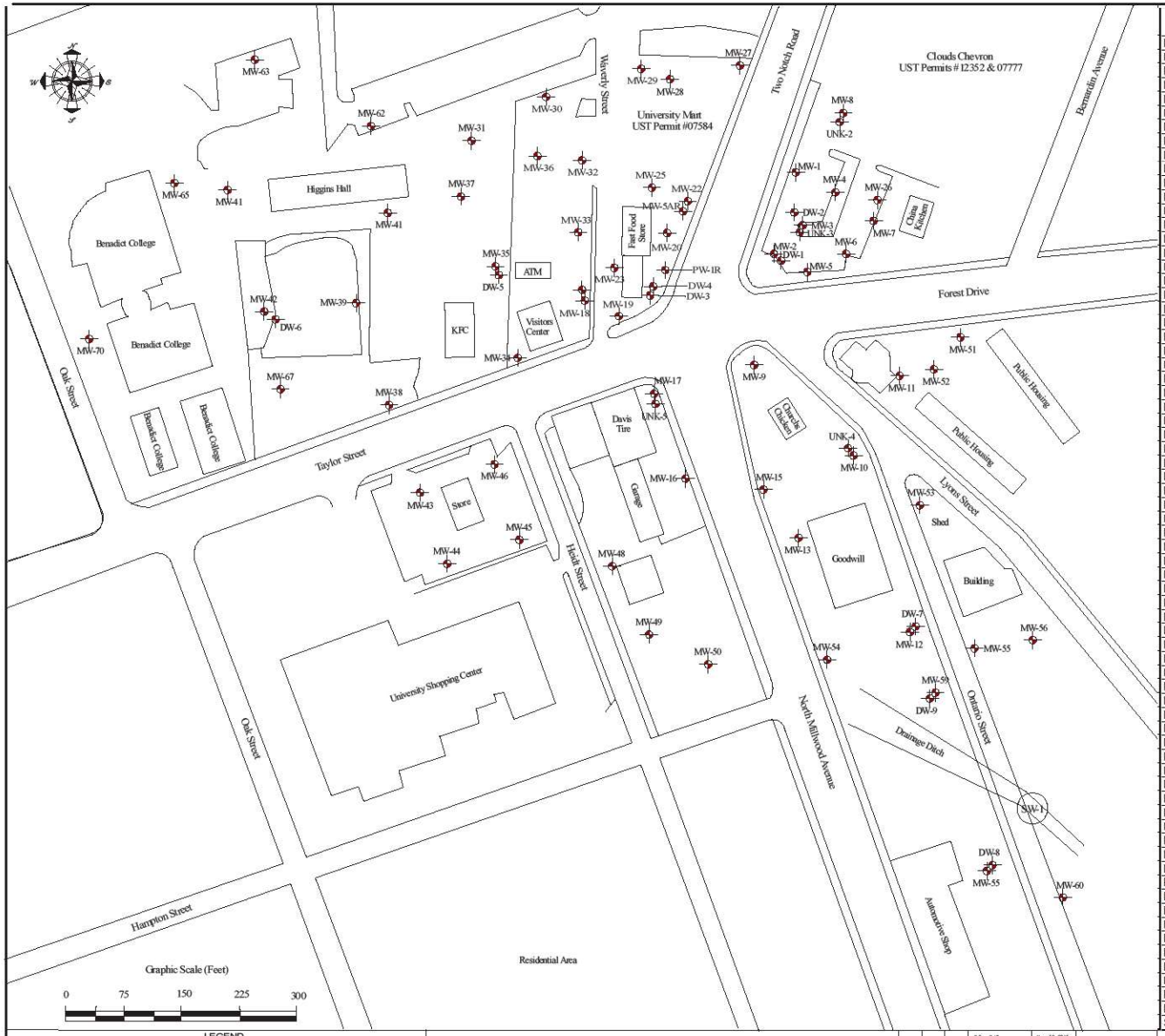
DR.: BJF Nov 30, 2015
CK.:
APP'D.:
SCALE: As Shown
CES PROJ. NO.: 7.0547

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	REV
Figure 2	0



Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-1	11/3/2015					Dry				
MW-2	11/4/2015	0.61	0.48	1.4	5.5	<1	2.6	<100	<10	<100
MW-3	11/4/2015	3000	8700	600	7200	720	360	<2000	140	<2000
MW-4	11/4/2015	<1	<1	<1	<1	1.9	<5	<100	<10	<100
MW-5	11/3/2015					Dry				
MW-6	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-7	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-8	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-9	11/4/2015	520	6200	1100	8600	<50	470	3000	<500	<5000
MW-10	11/4/2015	10	18	4.5	120	<1	46	<100	<10	<100
MW-11	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-12	11/4/2015	110	2	53	25	<1	10	1800	8.200	<100
MW-13	11/4/2015	<1	<1	<1	<1	<1	<1	<100	<10	<100
MW-15	11/3/2015					0.14-Feet of Free Product				
MW-16	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-17	11/4/2015	280	10000	660	13000	<100	720	<10000	<1000	<10000
MW-18	11/3/2015	990	5800	600	8900	93	260	<10000	<1000	<10000
MW-19	11/3/2015	2900	19000	720	17000	<100	1100	5400	<1000	<10000
MW-20	11/3/2015	930	11000	1000	17000	<50	1400	<5000	<500	<5000
MW-22	11/3/2015	6400	20000	740	24000	<100	1000	3900	<1000	<10000
MW-23	11/3/2015	2.9	8.5	1.5	190	<1	52	<100	<10	<100
MW-25	11/3/2015	14	150	200	2600	<1	340	390	<10	<100
MW-26	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-27	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-28	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-29	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-30	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-31	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-32	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-33	11/3/2015	240	7500	1600	11000	<50	430	<5000	<500	<5000
MW-34	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-35	11/3/2015	1900	2200	1100	3300	84	530	2300	28.000	<100
MW-36	11/3/2015	0.74	<1	1.6	<1	<1	16	<100	<10	<100
MW-37	11/3/2015	3.5	<1	<1	5.4	<1	5.5	77	<10	<100
MW-38	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-39	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-40	11/4/2015	0.51	<1	<1	<1	<1	<5	<100	<10	<100
MW-41	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-42	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-43	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-44	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-45	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-46	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-48	11/3/2015					Unable to Access - Locked Gate				
MW-49	11/3/2015					Unable to Access - Locked Gate				
MW-50	11/3/2015					Unable to Access - Locked Gate				
MW-51	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-53	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-54	11/4/2015	<1	<1	<1	<1	1.5	<5	<100	<10	<100
MW-55	11/4/2015	640	64	200	230	160	120	1200	11	56
MW-56	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-58	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-59	11/4/2015	1300	48	440	850	58	250	2800	19.000	<100
MW-60	11/3/2015					Unable to Locate				
MW-62	11/3/2015					0.52-Feet of Free Product				
MW-63	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-65	11/3/2015					Unable to Locate - Paved over				
MW-67	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-70	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-5AR	11/3/2015	5200	10000	810	5300	<100	580	<10000	<1000	<10000
PW-1R	11/3/2015	830	20000	1200	14000	<500	600	<50000	<5000	<50000
DW-1	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-2	11/4/2015	<1	<1	<1	<1	8.7	<5	<100	<10	<100
DW-3	11/3/2015	4300	16000	2300	11000	230	800	2600	50.000	<2000
DW-4	11/3/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-5	11/4/2015	5900	490	200	1800	1100	170	4800	89.000	<100
DW-6	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-7	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-8	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-9	11/4/2015	<1	<1	<1	<1	<1	<5	<100	<10	<100
SW-1	11/4/2015	<1	<1	<1	<1	<1	<5	44	<10	<100

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.: DJF Nov 30 2015
CK.:
APP'D.:
SCALE: As Shown
CES PROJ. NO.: 7.0547

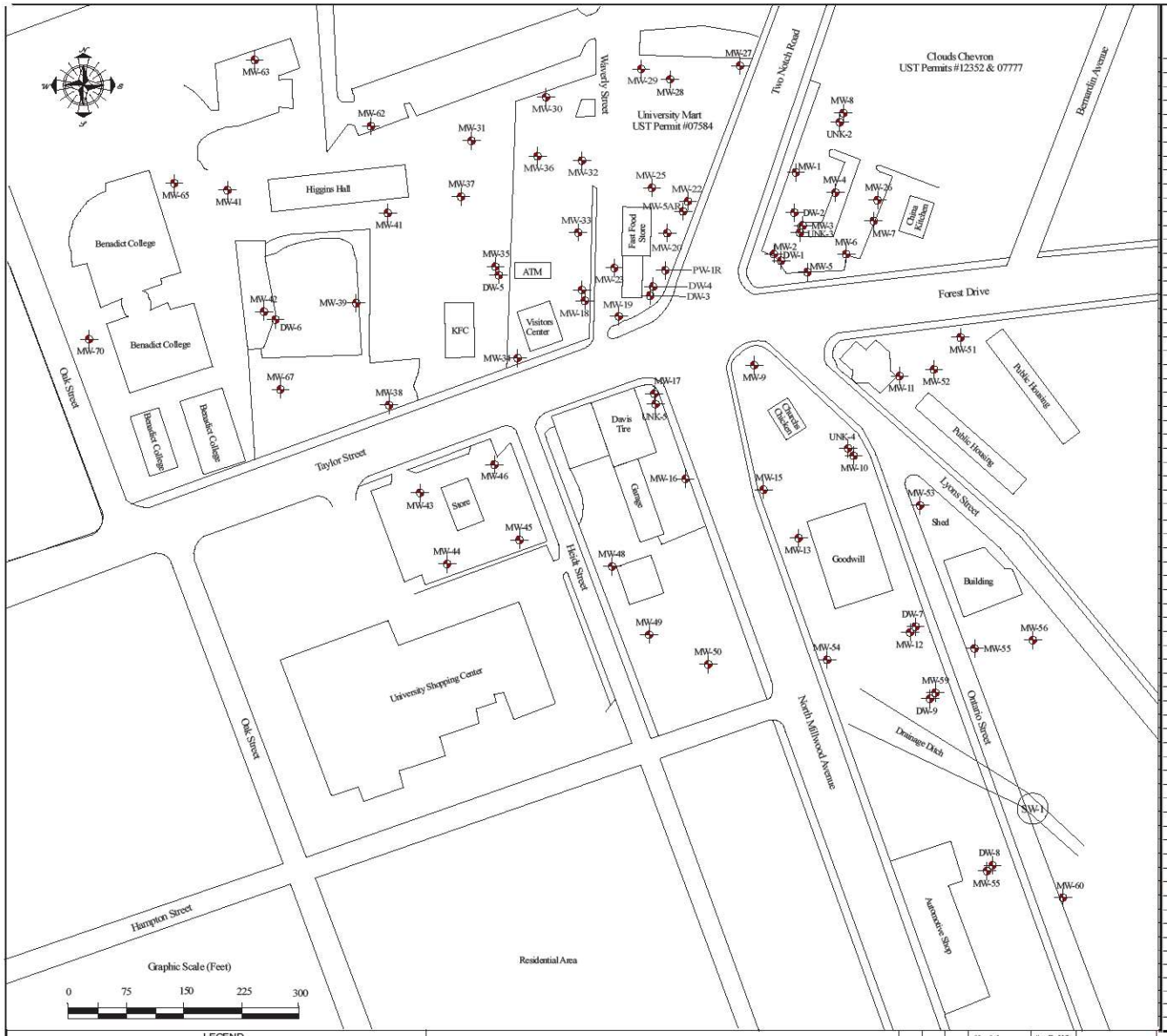
REV	BY	DATE

Corrective Action System Evaluation

CRAWFORD ENVIRONMENTAL SERVICES
15 Church Avenue, SW
Roanoke, Virginia 24011
540-343-6256
540-343-6259 (fax)

Figure Title
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	11/3/2015	NA	DRY	NA	NA	DRY
MW-2	94.70	11/3/2015	NA	20.32	NA	NA	74.38
MW-3	94.45	11/3/2015	NA	23.29	NA	NA	71.16
MW-4	94.85	11/3/2015	NA	20.35	NA	NA	74.50
MW-5	95.26	11/3/2015	NA	DRY	NA	NA	DRY
MW-6	94.96	11/3/2015	NA	21.21	NA	NA	73.75
MW-7	95.93	11/3/2015	NA	21.79	NA	NA	74.14
MW-8	94.79	11/3/2015	NA	19.19	NA	NA	75.60
MW-9	92.30	11/3/2015	NA	20.04	NA	NA	72.26
MW-10	85.98	11/3/2015	NA	14.58	NA	NA	71.40
MW-11	88.46	11/3/2015	NA	17.16	NA	NA	71.30
MW-12	72.80	11/3/2015	NA	3.15	NA	NA	69.65
MW-13	80.44	11/3/2015	NA	9.82	NA	NA	70.62
MW-15	86.44	11/3/2015	14.51	14.64	0.13	71.93	71.80
MW-16	88.19	11/3/2015	NA	16.29	NA	NA	72.17
MW-17	92.45	11/3/2015	NA	20.47	NA	NA	71.98
MW-18	94.81	11/3/2015	NA	22.28	NA	NA	72.53
MW-19	93.96	11/3/2015	NA	21.81	NA	NA	72.15
MW-20	94.12	11/3/2015	NA	20.18	NA	NA	73.94
MW-22	94.25	11/3/2015	NA	19.01	NA	NA	75.24
MW-23	94.43	11/3/2015	NA	21.95	NA	NA	72.48
MW-25	93.09	11/3/2015	NA	17.73	NA	NA	75.36
MW-26	95.96	11/3/2015	NA	21.06	NA	NA	74.90
MW-27	91.40	11/3/2015	NA	11.21	NA	NA	80.19
MW-28	91.46	11/3/2015	NA	13.08	NA	NA	78.38
MW-29	91.09	11/3/2015	NA	13.19	NA	NA	77.90
MW-30	92.77	11/3/2015	NA	17.43	NA	NA	75.34
MW-31	95.20	11/3/2015	NA	22.53	NA	NA	72.67
MW-32	92.87	11/3/2015	NA	19.12	NA	NA	73.75
MW-33	93.84	11/3/2015	NA	21.48	NA	NA	72.36
MW-34	94.77	11/3/2015	NA	21.52	NA	NA	73.25
MW-35	93.71	11/3/2015	NA	21.37	NA	NA	72.34
MW-36	93.89	11/3/2015	NA	21.36	NA	NA	72.53
MW-37	93.78	11/3/2015	NA	21.36	NA	NA	72.42
MW-38	95.53	11/3/2015	NA	22.89	NA	NA	72.64
MW-39	96.19	11/3/2015	NA	23.79	NA	NA	72.40
MW-40	95.69	11/3/2015	NA	23.43	NA	NA	72.26
MW-41	94.85	11/3/2015	NA	22.77	NA	NA	72.08
MW-42	95.81	11/3/2015	NA	23.46	NA	NA	72.35
MW-43	95.15	11/3/2015	NA	22.21	NA	NA	72.94
MW-44	94.57	11/3/2015	NA	20.33	NA	NA	74.24
MW-45	92.51	11/3/2015	NA	19.45	NA	NA	73.06
MW-46	94.50	11/3/2015	NA	21.84	NA	NA	72.66
MW-48	89.95	11/3/2015	Unable to Access - Locked Gate				
MW-49	88.18	11/3/2015	Unable to Access - Locked Gate				
MW-50	84.09	11/3/2015	Unable to Access - Locked Gate				
MW-51	93.91	11/3/2015	NA	21.87	NA	NA	72.04
MW-53	79.60	11/3/2015	NA	8.49	NA	NA	71.11
MW-54	77.58	11/3/2015	NA	9.83	NA	NA	67.75
MW-55	71.22	11/3/2015	NA	1.19	NA	NA	70.03
MW-56	76.39	11/3/2015	NA	6.4	NA	NA	69.99
MW-58	76.37	11/3/2015	NA	4.52	NA	NA	71.85
MW-59	68.02	11/3/2015	NA	5.04	NA	NA	62.98
MW-60	67.94	11/3/2015	Unable to Locate				
MW-62	94.05	11/3/2015	22.15	22.67	0.52	71.90	71.38
MW-63	94.65	11/3/2015	NA	24.05	NA	NA	70.60
MW-65	94.04	11/3/2015	Unable to Locate				
MW-67	96.10	11/3/2015	NA	23.52	NA	NA	72.58
MW-70	95.49	11/3/2015	NA	22.89	NA	NA	72.60
MW-5AR	94.18	11/3/2015	NA	16.39	NA	NA	77.79
PW-1R	93.75	11/3/2015	NA	21.43	NA	NA	72.32
DW-1	94.66	11/3/2015	NA	46.28	NA	NA	48.38
DW-2	94.02	11/3/2015	NA	43.07	NA	NA	50.95
DW-3	93.75	11/3/2015	NA	21.29	NA	NA	72.46
DW-4	93.79	11/3/2015	NA	43.34	NA	NA	50.45
DW-5	93.74	11/3/2015	NA	42.89	NA	NA	50.85
DW-6	95.90	11/3/2015	NA	44.59	NA	NA	51.31
DW-7	72.79	11/3/2015	NA	22.97	NA	NA	49.82
DW-8	68.63	11/3/2015	NA	19.43	NA	NA	49.20
DW-9	76.47	11/3/2015	NA	23.62	NA	NA	52.85

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 30, 2015
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 30, 2015

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 208 gallons were treated on November 3 and 4, 2014 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
Project Manager
Crawford Environmental Services

APPENDIX B

Groundwater Sampling Data Sheets

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: Clads 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, 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-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.): 20 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 20.32		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)	1345							
~~PH (s.u.)~~	6.15							
Specific Conductivity (µS/cm)	100.0							
Water Temperature (°C)	24.3							
Turbidity (NTU)	65.2							
Dissolved Oxygen (mg/L)	1.62							

Sampling Data

Sampled By:	Sampling Time: 1345	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: LH, MP, BE
County: Richland	Project Manager: Dan 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: 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.): 19 to 29		Total Well Depth (TWD) (ft.): 29
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 20.15		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)	1350							
~~PH (s.u.)~~	5.71							
Specific Conductivity (µS/cm)	130.2							
Water Temperature (°C)	25.5							
Turbidity (NTU)	65.3							
Dissolved Oxygen (mg/L)	0.90							

Sampling Data

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

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Monday			
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.): 28
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 20.35		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)	1340							
~~PH (s.u.)~~	7.94							
Specific Conductivity (µS/cm)	201.2							
Water Temperature (°C)	24.5							
Turbidity (NTU)	154							
Dissolved Oxygen (mg/L)	2.10							

Sampling Data

Sampled By:	Sampling Time: 1340	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 #: 07854	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: 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-5AR	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.): N/A	Depth to Groundwater (DGW) (ft.): 16.39		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 11.64	1 casing volume (CV = LWC x C) (gals.): 1.86		3 casing volumes (3 x CV) (gals.): 5.59

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)		DRY						
Time (military)	850	855						
PH (s.u.)	6.57	6.56						
Specific Conductivity (µS/cm)	242.1	491.0						
Water Temperature (°C)	23.9	23.6						
Turbidity (NTU)	6.15	over						
Dissolved Oxygen (mg/L)	1.55	1.81						

Sampling Data

Sampled By: WH, BE	Sampling Time: 855	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Bolts, Dry on 1st Vol

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, 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-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.): N/A	Depth to Groundwater (DGW) (ft.): 21.21		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)	1330							
~~PH (s.u.)~~	6.17							
Specific Conductivity (µS/cm)	151							
Water Temperature (°C)	24.5							
Turbidity (NTU)	63.4							
Dissolved Oxygen (mg/L)	1.73							

Sampling Data

Sampled By:	Sampling Time: 1330	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: BE, MP, WH
County: Richland	Project Manager: Don Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, military			
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.): N/A	Depth to Groundwater (DGW) (ft.): 21.79		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)	1325							
~~PH (s.u.)~~	6.29							
Specific Conductivity (µS/cm)	255.6							
Water Temperature (°C)	22.5							
Turbidity (NTU)	244							
Dissolved Oxygen (mg/L)	1.94							

Sampling Data

Sampled By:	Sampling Time: 1325	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: 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.): 20 to 30	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 20.04		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)	1010							
PH (s.u.)	5.95							
Specific Conductivity (µS/cm)	231.0							
Water Temperature (°C)	24.3							
Turbidity (NTU)	39.2							
Dissolved Oxygen (mg/L)	1.93							

Sampling Data

Sampled By:	Sampling Time: 1010	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: Clads Chevron	Field Personnel: BE, MP, LW
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65

Quality Assurance

Meter Name	Serial #:	Calibration: Yes, Holiday			
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.): 18.5 to 28	Total Well Depth (TWD) (ft.): 28
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 19.99		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)	1320							
~~PH (s.u.)~~	6.47							
Specific Conductivity (µS/cm)	48.4							
Water Temperature (°C)	25.1							
Turbidity (NTU)	25.1							
Dissolved Oxygen (mg/L)	1.51							

Sampling Data

Sampled By:	Sampling Time: 1320	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: 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-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: ___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.): N/A	Depth to Groundwater (DGW) (ft.): 14.58		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)	1015							
PH (s.u.)	6.30							
Specific Conductivity (µS/cm)	100.8							
Water Temperature (°C)	24.5							
Turbidity (NTU)	42.1							
Dissolved Oxygen (mg/L)	2.29							

Sampling Data

Sampled By:	Sampling Time: 1015	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: _____

Signature: D. Lee

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, Mornings			
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	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 Unknown	Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 17.16		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)	1100							
PH (s.u.)	8.22							
Specific Conductivity (µS/cm)	105.2							
Water Temperature (°C)	22.5							
Turbidity (NTU)	~~618~~ 58.5							
Dissolved Oxygen (mg/L)	2.00							

Sampling Data

Sampled By:	Sampling Time: 1160	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: MW-12	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 Unknown	Total Well Depth (TWD) (ft.): 24.65
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 3.15		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)	1115							
PH (s.u.)	7.62							
Specific Conductivity (µS/cm)	306.9							
Water Temperature (°C)	23.9							
Turbidity (NTU)	156							
Dissolved Oxygen (mg/L)	2.23							

Sampling Data

Sampled By:	Sampling Time: 1115	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, 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-13	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	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)	1030							
PH (s.u.)	6.63							
Specific Conductivity (µS/cm)	106.5							
Water Temperature (°C)	24.4							
Turbidity (NTU)	24.6							
Dissolved Oxygen (mg/L)	2.83							

Sampling Data

Sampled By:	Sampling Time: 1030	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: 11-3-15	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): 67°

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: 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.): 14.51	Depth to Groundwater (DGW) (ft.): 14.63		Free Product Thickness (ft.): 0.12
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)								
PH (s.u.)								
Specific Conductivity (µS/cm)								
Water Temperature (°C)								
Turbidity (NTU)								
Dissolved Oxygen (mg/L)								

Sampling Data

Sampled By: Not Sampled	Sampling Time:	Duplicate: Y or N	If yes, Duplicate Time:

Notes: Free Product

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: 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-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: ___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.): N/A	Depth to Groundwater (DGW) (ft.): 16.29		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)	940							
PH (s.u.)	6.37							
Specific Conductivity (µS/cm)	256.9							
Water Temperature (°C)	25.1							
Turbidity (NTU)	99.6							
Dissolved Oxygen (mg/L)	1.92							

Sampling Data

Sampled By:	Sampling Time: 940	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-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: ___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.): N/A	Depth to Groundwater (DGW) (ft.): 20.47		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)	935							
PH (s.u.)	5.62							
Specific Conductivity (µS/cm)	394.5							
Water Temperature (°C)	29.0							
Turbidity (NTU)	29.5							
Dissolved Oxygen (mg/L)	2.69							

Sampling Data

Sampled By:	Sampling Time: 935	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: WH, BE, MP
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 or N	pH 10.0 or N	S.C. or N
YSI 55 (Dissolved Oxygen)		or N			
LaMotte (Turbidity)		0.0 NTU: or N	1.0 NTU: or N	10.0 NTU: 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
___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.): N/A	Depth to Groundwater (DGW) (ft.): 22.13		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)	1050							
PH (s.u.)	5.39							
Specific Conductivity (µS/cm)	254.3							
Water Temperature (°C)	24.3							
Turbidity (NTU)	185							
Dissolved Oxygen (mg/L)	3.22							

Sampling Data

Sampled By: WH, BE	Sampling Time: 1050	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge, No Bolts, Missing Cap

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): 65-0	

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-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.): N/A	Depth to Groundwater (DGW) (ft.): 21.81		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)	825							
~~PH (s.u.)~~	6.13							
Specific Conductivity (µS/cm)	388.7							
Water Temperature (°C)	24.3							
Turbidity (NTU)	4.14							
Dissolved Oxygen (mg/L)	1.61							

Sampling Data

Sampled By: BE, MP, WH	Sampling Time: 825	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge, No Bolts, Pad Cracked

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: BE, MP, WH
County: Richland	Project Manager: Dan Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65°

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-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.): 20 to 30		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 20.18		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)	905							
PH (s.u.)	6.57							
Specific Conductivity (µS/cm)	299.9							
Water Temperature (°C)	24.2							
Turbidity (NTU)	2.64							
Dissolved Oxygen (mg/L)	5.10							

Sampling Data

Sampled By:	Sampling Time: 905	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge, No Bolts, Cracked Pad, Water in vault

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 Fister	General Weather Conditions: Overcast		Ambient Air Temp (°F): 65°

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-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.): 30
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 19.01		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 10.99	1 casing volume (CV = LWC x C) (gals.): 1.76		3 casing volumes (3 x CV) (gals.): 5.28

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)		1.76	3.52	5.27				
Time (military)	910	915	917	920				
~~PH (s.u.)~~	6.03	6.11	6.15	6.12				
Specific Conductivity (µS/cm)	313.9	396.6	377.4	383.9				
Water Temperature (°C)	23.9	23.9	23.9	23.9				
Turbidity (NTU)	2.47	343	304	352				
Dissolved Oxygen (mg/L)	3.28	2.33	3.24	3.12				

Sampling Data

Sampled By: BE, WH	Sampling Time: 0920	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, MP, WH
County: Richland	Project Manager: Da Fisher	General Weather Conditions: Overcast	Ambient Air Temp (°F): 65°

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-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.): N/A	Depth to Groundwater (DGW) (ft.): 21.95		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)	815							
PH (s.u.)	6.46							
Specific Conductivity (µS/cm)	192.0							
Water Temperature (°C)	23.6							
Turbidity (NTU)	8.09							
Dissolved Oxygen (mg/L)	1.94							

Sampling Data

Sampled By: BE, WH	Sampling Time: 815	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge, Pad Broken

Signature: T.

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): 65°

Quality Assurance

Meter Name	Serial #:	Calibration: Yes. AM Test			
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) ORP		(Y) or N 210			
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.): to N/A		Total Well Depth (TWD) (ft.): 25.6
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 17.76		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)	800							
~~PH (s.u.)~~	6.66							
Specific Conductivity (µS/cm)	469.5							
Water Temperature (°C)	21.1							
Turbidity (NTU)	5.65							
Dissolved Oxygen (mg/L)	5.10							

Sampling Data

Sampled By: WH, BE	Sampling Time: 805	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Purge, No Bolts, Pad Damaged

Signature: T. Hill

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, 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-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 UNKNOWN		Total Well Depth (TWD) (ft.): 30
Depth to Free Product (DFP) (ft.): N/A	Depth to Groundwater (DGW) (ft.): 21.06		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)	1345							
PH (s.u.)	5.37							
Specific Conductivity (µS/cm)	99.3							
Water Temperature (°C)	24.2							
Turbidity (NTU)	27.0							
Dissolved Oxygen (mg/L)	2.32							

Sampling Data

Sampled By:	Sampling Time: 1345	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: 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-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.): NA	Depth to Groundwater (DGW) (ft.): 11.21		Free Product Thickness (ft.): N/A
Length of water column (LWC = TWD – DGW) (ft.): 18.79	1 casing volume (CV = LWC x C) (gals.): 3.00		3 casing volumes (3 x CV) (gals.): 9.00

Purging Data

	Initial	1st Vol.	2nd Vol.	3rd Vol.	4th Vol.	5th Vol.	Post	Sampling
Volume Purged (gallons)		3	6	9				
Time (military)	1000	1005	1010	1015				
PH (s.u.)	6.03	6.03	5.98	5.71				
Specific Conductivity (µS/cm)	640	765	695	710				
Water Temperature (°C)	24.4	24.2	23.4	22.9				
Turbidity (NTU)	237	934	Over	Over				
Dissolved Oxygen (mg/L)	4.34	5.50	5.30	4.80				

Sampling Data

Sampled By: BE, WH	Sampling Time: 1015	Duplicate: Y or (N)	If yes, Duplicate Time:

Notes: No Bails

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: 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: ~~Y~~ or 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-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: ~~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: 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						

ACCESS ANALYTICAL, INC.

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

*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):	
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)

See Reverse for Terms and Conditions

Original Copy - Returned w/Report
Yellow Copy - Access File Copy
Pink Copy - Client Copy

Pg_____of_____

Access Analytical - Chain of Custody Record

LAB USE ONLY

Project Work Order # 15T103

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. 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						

ACCESS ANALYTICAL, INC.

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

*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):	
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)

See Reverse for Terms and Conditions

Original Copy - Returned w/Report
Yellow Copy - Access File Copy
Pink Copy - Client Copy

Pg_____of_____

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.

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. EWING, M. PRICE

Preservative: (*see codes) 1

Container Type: (*see codes) G

REQUESTED LAB ANALYSIS: BTEX/N/M/OXY

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 = 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

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

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]	[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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Project Work Order # 1511103

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Report To: West HUBARD

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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

Preservative: (*see codes) 1

Container Type: (*see codes) G

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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

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/N/M/OXY
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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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]	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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Preservative: (*see codes) 1

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↓ REQUESTED LAB ANALYSIS ↓ BTEX/NM/OXY

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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/NM/OXY	NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)
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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X SC
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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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Email: whubard@crawfordenvironmental.com

Project ID: CLOUD'S CHEVRON

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

Preservative: (*see codes) 2

Container Type: (*see codes) G

↓ REQUESTED LAB ANALYSIS ↓ BTEX/NM/OXY

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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/NM/OXY	NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)
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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__ NC
__ Other
(specify) _____

Relinquished By:	Received By:	Date (mm-dd-yy)	Time (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
T. [signature]	J. Stit	11-4-15	1540	✓ Y __ N	____ (°C)	____ (N/A)
J. Stit	FedEx	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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Preservative: (*see codes) 1

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

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 feet

07777 - 193 feet

12358 - 128 feet

From: C. WARGO BOW - 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.

CRAWFORD
ENVIRONMENTAL SERVICES

UST
JUN 1 3 2016
PROGRAM

UST
07584 - 257 tech
DOCKETING
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

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	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	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	5/18/2016	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	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	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	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 — 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	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	5/15/2016	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	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
					5/29/2015	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 3

Facility Name: Handy Pantry #65 / University Mart & Clouds Chevron
Address: 2367 Taylor Street Columbia, South Carolina
UST
Crawford Project No. 07584 / 07777 / 12352
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	11.00	0.83	0.98	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	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	7800.0	22000.0	1800.0	21000.0	2500.0	870.0	5000.0	500.0	5000.0	66470.0	
	SSTL	111.0	7400.0	260.0	4500.0	1976.0	108.0	2000.0	340.0	1300.0	17995.0	
	Subsequent > SSTL	7689.0	14600.0	1540.0	16500.0	524.0	762.0	0.0	0.0	0.0	41615.0	
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	78	1900	1000	4300	1	440	200	10	100	8029.0	
	SSTL	35.0	7134.0	2500.0	19000.0	150.0	68.0	809.0	270.0	15628.0	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	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	88	11	22	97	1	170	100	10	100	599.0	
	SSTL	24.0	7800.0	2500.0	15000.0	294.0	53.0	793.0	707.0	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	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	260	83	710	330	17	190	1300	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	258.3	78.0	699.0	325.0	11.4	185.3	930.0	0.0	0.0	2487.0	
MW-15	Initial	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											Free Product
	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
Address: 2367 Taylor Street Columbia, South Carolina
UST 07584 / 07777 / 12352
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	280	10000	650	13000	100	720	10000	1000.0	10000	45760.0	
	SSTL	32.0	6631.0	2500.0	21680.0	1000.0	66.0	773.0	263.0	14286.0	47231.0	
	Subsequent > SSTL	248.0	3369.0	0.0	0.0	0.0	654.0	9227.0	737.0	0.0	14235.0	
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	260	1900	220	4900	20	220	690	10.00	100	8320.0	
	SSTL	40.0	19326.0	3700.0	21680.0	4260.0	348.0	938.0	4989.0	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	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	2900	19000	1100	22000	200	1400	4300	500.00	5000	56400.0	
	SSTL	54.0	11081.0	3700.0	21680.0	16080.0	86.0	1065.0	320.0	26814.0	80880.0	
	Subsequent > SSTL	2846.0	7919.0	0.0	320.0	0.0	1314.0	3235.0	0.0	0.0	15634.0	
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	690.0	10000.0	2100.0	23000.0	50.0	1600.0	5000.0	500.0	5000.0	47940.0	
	SSTL	83.0	2930.0	728.0	8820.0	88.7	108.0	1403.0	200.0	2000.0	16360.7	
	Subsequent > SSTL	607.0	7070.0	1372.0	14180.0	0.0	1492.0	0.0	0.0	0.0	24721.0	
MW-22	Initial	3300.0	17000.0	2900.0	20000.0	1000.0	540.0	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	1900	11000	1500	28000	50	1400	5000	500.00	5000	54350.0	
	SSTL	90.0	17000.0	2900.0	20000.0	1000.0	112.0	1469.0	130.0	20000.0	62701.0	
	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	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	280	990	110	4200	7.3	470	520	10	100	6687.3	
	SSTL	72.0	14880.0	3700.0	21680.0	33368.0	100.0	1279.0	359.0	38475.0	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	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	14	150	200	2600	1	340	390	10	100	3805.0	
	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	219.0	0.0	0.0	0.0	219.0	

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	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	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	260	3200	1400	4700	4.3	390	2100	10.00	100	12164.3	
	SSTL	53.0	7200.0	1500.0	7200.0	500.0	410.0	1136.0	1000.0	10000.0	28999.0	
	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	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	130	130	23	490	4.6	46	120	10	100	1053.6	
	SSTL	56.0	2000.0	1700.0	3500.0	300.0	542.0	1181.0	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	0.95	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	56.0	56.0	
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	1.2	1.9	4.9	1	5	100	10	100	225.0	
	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	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	0.51	1	1	1	1	5	100	10	100	219.5	
	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	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
Address: 2367 Taylor Street Columbia, South Carolina

UST
Crawford Project No. 07584 / 07777 / 12352
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	0.6	1	1	1	5	5	60	10	100	183.6	
	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	0.0	0.0	0.0	0.0	
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	7000	6400	1200	8000	100	890	10000	1000.00	10000	44590.0	
	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	5400.0	0.0	3600.0	0.0	782.0	0.0	0.0	0.0	16699.0	
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	210.0	1200.0	170.0	3200.0	6.8	200.0	380.0	10.0	1000.0	6376.8	
	SSTL	58.0	11928.0	3700.0	21680.0	290.0	19298.0	1114.0	330.0	29344.0	87742.0	
	Subsequent > SSTL	152.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	152.0	
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	2600	10000	1400	8200	160	410	5000	500.000	5000	33270.0	
	SSTL	45.0	8470.0	2200.0	10000.0	1000.0	620.0	3600.0	2000.0	20000.0	47935.0	
	Subsequent > SSTL	2555.0	1530.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4085.0	
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	
	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

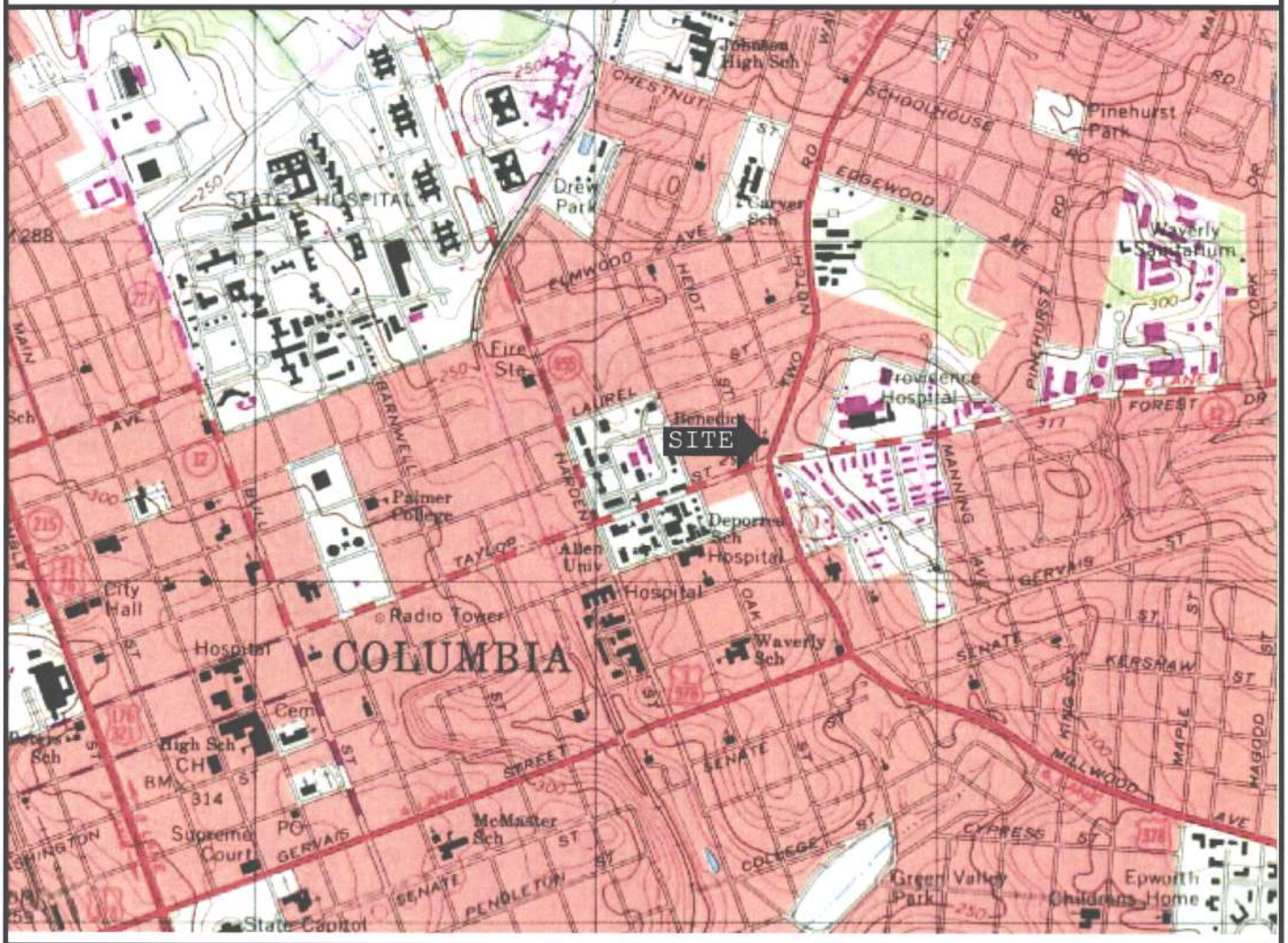
Initial>SSTL	325262.00
Subsequent>SSTL	133969.10
COC Reduction	58.81%

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

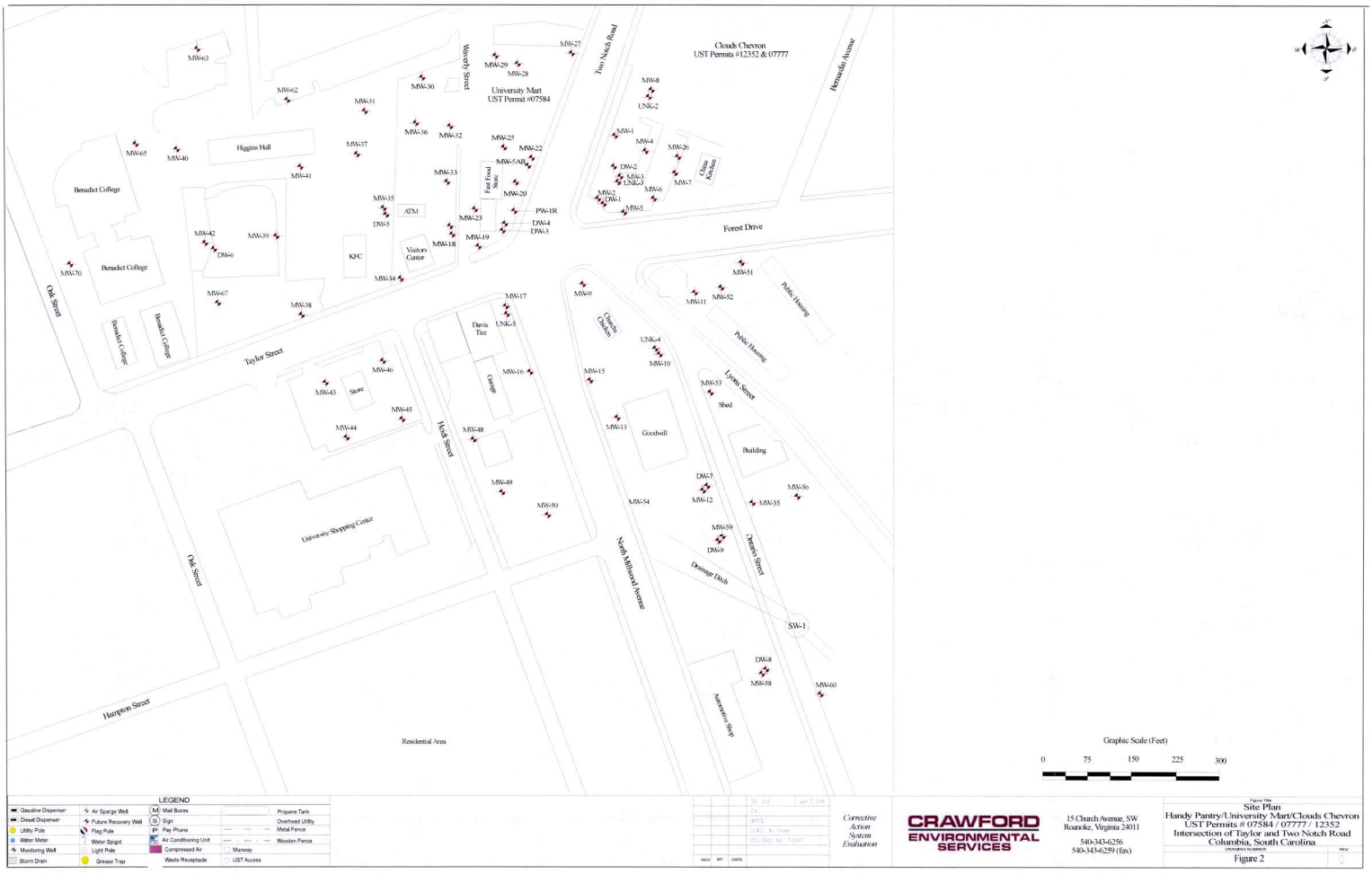
Source: U.S.G.S. Topographic Map of the Columbia North Quadrangle, Virginia, 7.5 Minute Series (1977, revised 1988)
Scale: 1:24,000 Contour Interval: 20 Feet
Vertical Datum: National Geodetic Vertical Datum 1929
Horizontal Datum: North American Datum1927

Project: CASE Report

Client: SCDHEC

CES Job #: 7.0547

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



Corrective Action System Evaluation

CRAWFORD ENVIRONMENTAL SERVICES

15 Church Avenue, SW
Roanoke, Virginia 24011

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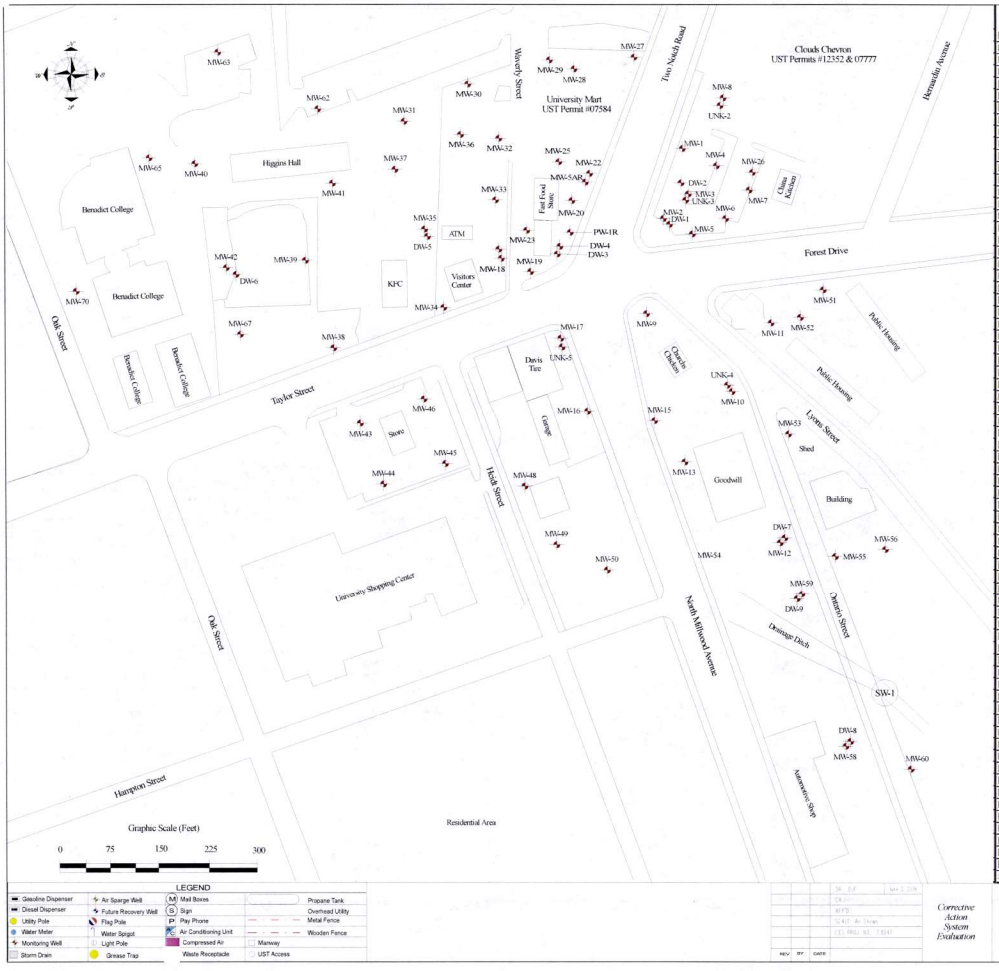
Figure Title
Site Plan
Handy Pantry/University Mart/Clouds Chevron
UST Permits # 07584 / 07777 / 12352
Intersection of Taylor and Two Notch Road
Columbia, South Carolina

DRAWING NUMBER
Figure 2

REV



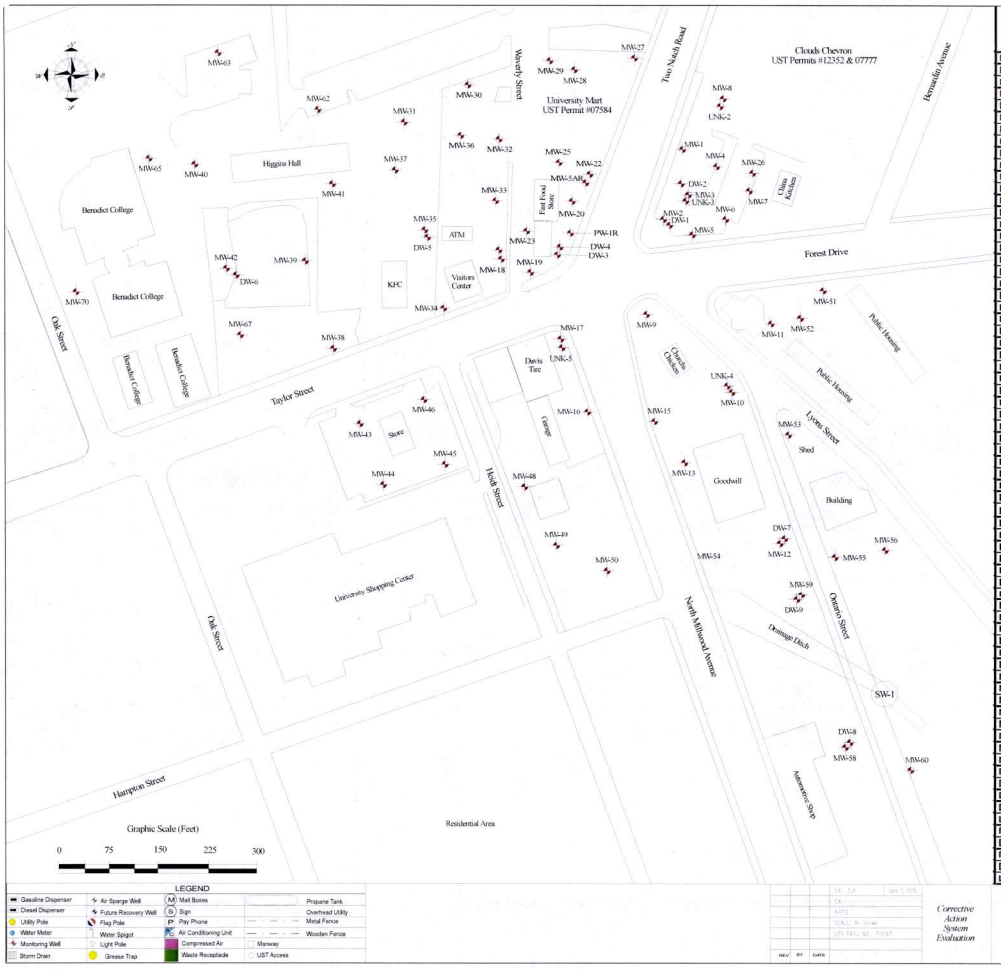
Well ID:	Date:	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	MTBE	Naphthalene	TAA	TAME	TBA
MW-1	5/15/2016	Dry								
MW-2	5/16/2016	11	9.83 J	0.98 J	49	18	12	<100	<10	<100
MW-3	5/16/2016	7800	22000	1800	21000	2500	870	<5000	410 J	<5000
MW-4	5/16/2016	<1	<1	<1	<1	0.87 J	<5	<100	<10	<100
MW-5	5/16/2016	0.29 J	<1	<1	<1	<1	<5	<100	<10	<100
MW-6	5/17/2016	<1	<1	<1	<1	1.7	<5	<100	<10	<100
MW-7	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-8	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-9	5/16/2016	70	1900	1000	4300	<1	440	200	<10	<100
MW-10	5/18/2016	88	11	22	97	<1	170	<100	<10	<100
MW-11	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-12	5/18/2016	260	83	710	330	17	190	1300	<10	<100
MW-13	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-15	5/15/2016	0.44-Feet of Free Product								
MW-16	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-17	5/15/2016	Not Sampled due to Obstruction								
MW-18	5/15/2016	260	1900	220	4900	20	220	690	<10	<100
MW-19	5/18/2016	2900	19000	1100	22000	200	1400	4300 J	<500	<5000
MW-20	5/15/2016	690	10000	2100	23000	<50	1600	<5000	<500	<5000
MW-22	5/15/2016	1900	11000	1500	28000	<50	1400	<5000	<500	<5000
MW-23	5/18/2016	280	990	110	4200	7.3	470	520	<10	<100
MW-25	5/15/2016	Unable to Locate								
MW-26	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-27	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-28	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-29	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-30	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-31	5/17/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-32	5/17/2016	<1	<1	<1	<1	<1	2.8 J	<100	<10	<100
MW-33	5/15/2016	260	3200	1400	4700	4.3	390	210	<10	<100
MW-34	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-35	5/16/2016	130	130	23	490	4.6	46	120	<10	<100
MW-36	5/15/2016	1	<1	14	0.47 J	<1	54	<100	<10	<100
MW-37	5/16/2016	<1	<1	<1	<1	<1	0.95 J	<100	<10	<100
MW-38	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-39	5/16/2016	<1	1.2	1.9	4.9	<1	<5	<100	<10	<100
MW-40	5/18/2016	<1	<1	1.4	<1	<1	<5	<100	<10	<100
MW-41	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-42	5/18/2016	<1	<1	0.31 J	<1	<1	<5	<100	<10	<100
MW-43	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-44	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-45	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-46	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-48	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-49	5/15/2016	Unable to Access - Locked Gate								
MW-50	5/15/2016	Unable to Access - Locked Gate								
MW-51	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-53	5/15/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-54	5/18/2016	0.60 J	<1	<1	<1	5.0	<5	60 J	<10	<100
MW-55	5/18/2016	950	44	320	210	220	130	2600	15	<100
MW-56	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-58	5/15/2016	Not Sampled due to Obstruction								
MW-59	5/18/2016	1900	51	950	760	96	260	4300	28	<100
MW-60	5/15/2016	Unable to Locate								
MW-62	5/15/2016	Not Sampled due to Obstruction								
MW-63	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-65	5/15/2016	Unable to Locate - Paved over								
MW-67	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
MW-70	5/18/2016	<1	<1	<1	0.44 J	<1	<5	<100	<10	<100
MW-5AR	5/15/2016	7000	6400	1200	8000	<100	990	<10000	<1000	<10000
PW-1R	5/18/2016	210	1200	170	3200	6.8	200	380	<10	<100
DW-1	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-2	5/16/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-3	5/18/2016	2600	10000	1400	8200	160	410	<5000	<500	<5000
DW-4	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-5	5/16/2016	9200	1600	750	5300	1400	470	4300	95 J	<100
DW-6	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-7	5/18/2016	<1	<1	<1	<1	<1	<5	<100	<10	<100
DW-8	5/18/2016	Not Sampled due to Obstruction								
DW-9	5/18/2016	<1	42	<1	<1	<1	<5	<100	<10	<100
SW-1	5/18/2016	130	18	53	92	12	16	430	<10	<100

Corrective Action System Evaluation

CRAWFORD ENVIRONMENTAL SERVICES
15 Church Avenue, SW
Roanoke, Virginia 24011
540-343-6256
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:



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	5/15/2016	NA	DRY	NA	NA	DRY
MW 2	94.70	5/16/2016	NA	20.08	NA	NA	74.62
MW-3	94.45	5/16/2016	NA	19.84	NA	NA	74.61
MW-4	94.85	5/16/2016	NA	19.20	NA	NA	75.65
MW-5	95.26	5/16/2016	NA	19.75	NA	NA	75.51
MW-6	94.96	5/17/2016	NA	20.59	NA	NA	74.37
MW 7	95.93	5/16/2016	NA	20.98	NA	NA	74.95
MW-8	94.79	5/17/2016	NA	18.75	NA	NA	76.04
MW 9	92.30	5/16/2016	NA	18.78	NA	NA	73.52
MW-10	85.98	5/18/2016	NA	14.52	NA	NA	71.46
MW-11	88.46	5/18/2016	NA	16.66	NA	NA	71.80
MW-12	72.80	5/18/2016	NA	2.73	NA	NA	70.07
MW-13	80.44	5/16/2016	NA	9.71	NA	NA	70.73
MW 16	86.44	5/18/2016	14.68	15.02	0.13	71.86	71.42
MW-16	88.19	5/18/2016	NA	16.29	NA	NA	69.69
MW-17	92.45	5/18/2016	Not Sampled due to Obstruction				
MW-18	94.81	5/15/2016	NA	22.04	NA	NA	72.77
MW-19	93.96	5/18/2016	NA	21.76	NA	NA	72.20
MW 20	94.12	5/15/2016	NA	20.41	NA	NA	73.71
MW-22	94.25	5/15/2016	NA	19.61	NA	NA	74.64
MW 23	94.43	5/18/2016	NA	21.95	NA	NA	72.48
MW-25	93.09	5/15/2016	Not Located				
MW-26	95.96	5/17/2016	NA	20.24	NA	NA	75.72
MW-27	91.40	5/17/2016	NA	15.62	NA	NA	75.78
MW-28	91.46	5/17/2016	NA	15.90	NA	NA	75.56
MW 29	91.09	5/17/2016	NA	15.88	NA	NA	75.21
MW-30	92.77	5/17/2016	NA	19.27	NA	NA	73.50
MW-31	95.20	5/17/2016	NA	22.98	NA	NA	72.22
MW-32	92.87	5/17/2016	NA	19.75	NA	NA	73.12
MW-33	93.84	5/15/2016	NA	21.57	NA	NA	72.27
MW 34	94.77	5/15/2016	NA	21.57	NA	NA	73.20
MW-35	93.71	5/16/2016	NA	21.48	NA	NA	72.23
MW 36	93.89	5/15/2016	NA	21.36	NA	NA	72.53
MW-37	93.78	5/18/2016	NA	21.61	NA	NA	72.17
MW-38	95.53	5/18/2016	NA	24.83	NA	NA	70.70
MW-39	96.19	5/18/2016	NA	24.02	NA	NA	72.17
MW-40	96.69	5/18/2016	NA	25.25	NA	NA	70.44
MW 41	94.85	5/18/2016	NA	23.71	NA	NA	71.14
MW 42	95.81	5/18/2016	NA	23.73	NA	NA	72.08
MW 43	95.15	5/18/2016	NA	22.04	NA	NA	73.11
MW-44	94.57	5/18/2016	NA	20.11	NA	NA	74.46
MW 45	92.51	5/18/2016	NA	19.43	NA	NA	73.08
MW-46	94.50	5/16/2016	NA	21.70	NA	NA	72.80
MW-48	89.95	5/18/2016	NA	18.21	NA	NA	71.74
MW-49	88.18	5/15/2016	Unable to Access - Locked Gate				
MW-50	84.09	5/15/2016	Unable to Access - Locked Gate				
MW 51	93.91	5/18/2016	NA	20.76	NA	NA	73.15
MW-52	79.00	5/15/2016	Unable to Locate- Overgrown Field				
MW-54	77.58	5/18/2016	NA	10.15	NA	NA	67.43
MW-55	71.22	5/18/2016	NA	1.55	NA	NA	69.67
MW-56	76.39	5/18/2016	NA	6.76	NA	NA	69.63
MW 58	76.37	5/18/2016	Not Sampled due to Obstruction				
MW-59	68.02	5/18/2016	NA	5.46	NA	NA	62.56
MW 60	67.94	5/18/2016	Unable to Locate- Overgrown Field				
MW-62	94.05	5/18/2016	Not Sampled due to Obstruction				
MW-63	94.65	5/18/2016	NA	21.66	NA	NA	72.99
MW-65	94.04	5/15/2016	Unable to Locate- Paved Over				
MW-67	96.10	5/18/2016	NA	23.73	NA	NA	72.37
MW 70	95.49	5/18/2016	NA	23.11	NA	NA	72.38
MW-OAK	94.19	5/18/2016	NA	19.59	NA	NA	74.59
PW-1R	93.75	5/18/2016	NA	21.03	NA	NA	72.72
DW-1	94.66	5/16/2016	NA	42.71	NA	NA	51.95
DW-2	94.02	5/16/2016	NA	41.99	NA	NA	52.03
DW 3	93.75	5/18/2016	NA	21.70	NA	NA	72.05
DW-4	93.79	5/18/2016	NA	42.31	NA	NA	51.48
DW 5	93.74	5/16/2016	NA	42.17	NA	NA	51.57
DW-6	95.90	5/18/2016	NA	44.10	NA	NA	51.80
DW-7	72.79	5/18/2016	NA	21.82	NA	NA	50.97
DW 8	68.63	5/18/2016	Not Sampled due to Obstruction				
DW-9	76.47	5/18/2016	NA	22.42	NA	NA	54.05

Corrective Action System Evaluation

CRAWFORD ENVIRONMENTAL SERVICES
15 Church Avenue, SW
Roanoke, Virginia 24011
540-343-6256
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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

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

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): 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 = (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. (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 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	# 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:

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 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-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) (gallons/foot)

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	TEMP (°C)		pH (std)		COND. (µS)		DO (mg/L)		TURB. IDITY (NTU)		COLOR	ODOR
1252	—	—	22.6	—	5.74	—	84.9	—	1.42	—	32.	—	Gray	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): CS | SAMPLER'S SIGNATURE: | SAMPLING DATE: 5/16/16 | SAMPLING TIME: 1252

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

TURBIDITY (NTU) EQUIPMENT: Hanna Instrument

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID (MW-02)	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	ADDITIONAL PRESERVATIVES (ml)	FINAL pH			
	3	CG	40 ml	HCL			82608	B	
	3	CG	40 ml	HCL					

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 = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SS = 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: 19 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 - STATIC DEPTH TO WATER X WELL CAPACITY

feet feet X gallons/feet = 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
0950	–	–	23.2	–	6.19	–	176.4	–	0.74	–	12	–	Clr	Stony

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: 0950
PUMP OR TUBING DEPTH IN WELL (feet): –	TUBING MATERIAL CODE: –	FIELD FILTERED: Y / N (Filtration Equipment Type): 0	FILTER SIZE:
DUPLICATE COLLECTED: Y / N 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 USED	TOTAL VOL ADDED IN FIELD (ml)	FINAL pH			
–	3	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 = 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-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 - STATIC DEPTH TO WATER) X WELL CAPACITY
= 28 feet X gallons/foot = gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	∆	pH (su)	∆	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 (circled)
FILTER SIZE: Filtration Equipment Type:
DUPLICATE COLLECTED: Y N (circled)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE ID CODE	DURATION	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	TOTAL WELL ADDED (ml)	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 = Alter Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SP = Straw Method (Using 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-5 | SAMPLE ID: MW05 | DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2 | Total Well Depth (feet): 26 | WELL SCREEN INTERVAL DEPTH: 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 = gallons

TIME	VOLUME PURGED (gallons)	CUM'L VOLUME PURGED (gallons)	TEMP (°C)	±	pH (su)	±	COND. (mS)	±	DO (mg/L)	±	TURB. IDITY (NTU)	±	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" = 2.68

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				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE BOTTLE LOT NO.	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
–	#3	CG	40 ml	HCL	–	–	82608	B	–
–	#1	CG	40 ml	HCL	–	–	[illegible]		

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 = Alex 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
SAMPLE ID: MW06
DATE: 5/17/16

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): 20.59
PURGE PUMP TYPE OR BAILER: N/A

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

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (Sp)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
1536	—	—	22.3	—	5.86	—	134.6	—	1.50	—	24	—	Sl dy	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'S SIGNATURE(S): [illegible]
SAMPLING DATE: 5/17/16
SAMPLING TIME: 1536
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y / (N) FILTER SIZE: Filtration Equipment Type: 0
DUPLICATE COLLECTED: Y / 0

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			[illegible]		—

REMARKS: missing lock. N.P. well 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 = Alloy Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electrical 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%



[illegible]

GROUNDWATER SAMPLING LOG

STF 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 (CASING CAPACITY feet) = (TOTAL WELL DEPTH feet − STATIC DEPTH TO WATER feet) × WELL CAPACITY (gallons/feet)

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
1415	—	—	22.1	—	5.60	—	206	—	6.00	—	8.6	—	clr	none

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02, 4" = 0.65, 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): QG
SAMPLER SIGNATURE: [signature]
SAMPLING DATE: 5/16/16
SAMPLING TIME: 1415
PUMP OR TUBING DEPTH IN WELL (feet): —
TUBING MATERIAL CODE: —
FIELD FILTERED: Y
FILTER SIZE: —
FILTRATION EQUIPMENT TYPE: —

SAMPLE CONTAINER SPECIFICATION: LABORATORY ID	NO. CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE TYPE	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	—
—	1	CG	40 ml	HCl	—	—	[illegible]	—	—

REMARKS: N.D.

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; SM = Straw Method (Tubing Only, Do Not Submerge); 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 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
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 (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	CONTAINER	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	—	—	[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; 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 | DATE: 5/16/16

WELL NO: MW-9 | SAMPLE ID: MW09

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 30 feet − STATIC DEPTH TO WATER 18.78 feet) × WELL CAPACITY 0.16 gal/ft = 1.80 gallons

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (unit)	Δ	COND (mS)	Δ	ORP (mV)	Δ	TURBIDITY (NTU)	Δ	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	slcly	
1205	.5	4	23.2	.1	4.52	.16	.260	.2	1.26	.07	31	53	slcly	
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" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.80

SAMPLING DATA

PURGED BY (Print): RG | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING DATE: 5/16/16 | SAMPLING TIME: 1238

PURGING INTERMITTENT OR PUMPING CONTINUOUS: N | DUPLICATE COLLECTED: Y (N) | FIELD FILTERED: Y (N) | If Filtered, Equipment Type: | FILTER SIZE:

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE CONTAINER [1]	QUANTITY	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	B	
—	4	CG	40 ml	HCL	—	—	4		

REMARKS:

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

SAMPLING EQUIPMENT CODES: APP = Alle 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 (if > 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) - (STATIC DEPTH TO WATER) x WELL CAPACITY

= 28 feet 14.52 feet x 0.16 gallons/foot = 2.16 gallons

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (pH)		COND (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	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 Per Foot): 0.75" = 0.02; 1" = 0.01; 1.25" = 0.06; 2" = 0.15; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLER BY (PRINT): DE | SAMPLER'S SIGNATURE(S): [signature] | SAMPLING DATE: 5/18/16 | SAMPLING TIME: 1028

PURGE OR TURBIDITY DEPTH IN WELL (feet): — | TUBING MATERIAL CODE: — | FIELD FILTERED Y: O | FILTER SIZE

DUPLICATE COLLECTED: Y: O N: @ 1030 | 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 (Cal)	TOTAL VOLUME ADDED (ml)	FINAL (A)			
—	3	CG	40 ml	HCL	—	—	8260B	B	—
—	[illegible]	[illegible]	[illegible] 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 = Blade Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Stainless 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-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: RSP

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 (Liters)	CUMM VOLUME PURGED (Gallons)	TEMP (°C)	Δ	pH (Std)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (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	1000	—	Cldy	
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	7.2	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	2.2	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): DB | SAMPLER SIGNATURE: [signature] | SAMPLING DATE: 5.18.16 | SAMPLING TIME: 1350

PUMP OR TUBING DEPTH IN WELL (feet): — | TUBING MATERIAL CODE: — | FIELD-FILTERED: Y (O) | FILTER SIZE:

DUPLICATE COLLECTED:

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
CONTAINER MATERIAL CODE	CONTAINER QUANTITY	MATERIAL CODE	VOLUME	PRESERVATIVE USED	ADDITIONAL PRESERVATIVE (ml)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	B	

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Steel; 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; S = Syringe; 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 | STATIC DEPTH TO WATER (feet): 2.73 | PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME (TOTAL WELL DEPTH 24.65 feet − STATIC DEPTH TO WATER 2.73 feet) × WELL CAPACITY 0.16 gallons/foot = 3.51 gallons

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (SU)	Δ	COND (µS/cm)	Δ	DO (mg/L)	Δ	TURB (NTU) (JITER)	Δ	COLOR	ODOR
0930	—	—	24.7	—	4.59		319	—	1.92	—	21	—	clr	slight
0935	5	5	23.9	.8	4.17	.42	246	73	1.71	.21	372	351	cly	
0940	2	7	23.6	.3	4.06	.11	214	32	1.60	.11	147	225	cly	
0945	1	8	23.7	.1	4.09	.03	216	2	1.62	.02	63	84	cly	
0950	1	9	23.7	—	4.10	.01	220	4	1.57	.05	14	49	clr	
0955	1	10	23.6	.1	4.12	.02	218	2	1.58	.01	18	4	clr	
1000	1	11	23.7	.1	4.15	.03	217	1	1.57	.01	12	6	clr	
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" = 1.02; 6" = 1.47; 12" = 5.8

SAMPLING DATA

SAMPLED BY (PRINT): [illegible] | SAMPLER SIGNATURE: [signature] | SAMPLING DATE: 5/18/16 | SAMPLING TIME: 1006

PURGE OR PUMP RATE: — | TUBING MATERIAL CODE: — | FILTERED: Y / N | FILTER SIZE: 0 µm

DEPTH IN WELL (feet): | DUPLICATE: Y / N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
LABEL NO.	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	B	

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 = Alex Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; FPP = Fisher & Porter Pressure Pump; WS = Weighted Stainless Steel Sampler; 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 ± N/A

GROUNDWATER SAMPLING LOG

SITE NAME: Cloud's Chevron | SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-13 | PREVIOUS WELL ID: MW13 | DATE: 5/16/16

PURGING DATA

WELL DIAMETER (inches): 2 | TOTAL WELL DEPTH (feet): 30.1 | WELL SCREEN INTERVAL DEPTH (feet): ? to ? | STATIC DEPTH TO WATER (feet): 9.7 | PURGE PUMP TYPE OR BAILER: ESP

WELL VOLUME PURGE: 1 WELL VOLUME (gallons/foot) = TOTAL WELL DEPTH (feet) 30.1 − STATIC DEPTH TO WATER (feet) 9.71 × WELL CAPACITY (gallons/foot) 0.16 = 3.26 (gallons)

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (unit)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	COLOR	ODOR
1105	—	—	23.3	—	4.42	—	39.7	—	3.27	—	26	—	clr	hvy
1116	2	2	23.3	-	3.41	1.01	31.6	8.1	3.21	.06	442	466	cldy	↓
1125	2	4	23.1	.2	3.99	.08	21.2	10.4	3.14	.52	186	306	↓	
1132	1	5	22.9	.2	4.06	.07	26.1	4.9	3.20	.01	35	151	clr	
1141	1	6	22.8	.1	4.01	.05	25.5	.6	3.19	.01	15	20	↓	
1146	1	7	22.7	.1	4.00	.01	25.1	.4	3.19	—	26	11		
1151	1	8	22.8	.1	3.45	.05	25.3	.2	3.18	.01	78	8		
1200	1	9	22.7	.1	3.45	—	24.8	.5	3.17	.01	14	4		
1206	1	10	22.6	.1	3.92	.03	24.4	.1	3.18	.01	12	2		
1212	1	11	22.8	.2	3.93	.11	25.2	.3	3.18	—	7.8	42	clr	↓ mbc

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): [illegible] | SAMPLER(S) SIGNATURE(S): [illegible]

PUMP OR TUBING DEPTH IN WELL (feet): — | TUBING MATERIAL CODE: —

TASKS/LOT NO. (OPTIONAL): C | CALIBRATION DATE: 5/16/16 | CALIBRATION TIME: 1212

FIELD-FILTERED: Y (N) | FILTER SIZE: [illegible]

Filtration Equipment Type: [illegible]

SAMPLE CONTAINER SPECIFICATION: SAMPLE ID	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)
MW13	CG	40 ml	HCl	—	—	8260B	B	—
~~—~~	~~CG~~	~~40 ml~~	~~HCl~~					

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 Positive Displacement Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Portable Pump; RFPP = Reverse Flow Peristaltic Pump; S = Syringe Sampler; 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 - 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. (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" = 0.37; 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 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 PROCESS	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	TOTAL VOLUME ADDED IN FIELD (ml)	FINAL pH			
---	2	CG	40 ml	HCL	---	---	8260B		---
---	2	CG	40 ml	HCL	---	---	8011		---

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 = 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-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 (feet) - STATIC DEPTH TO WATER (feet)) X WELL CAPACITY (Gallons Per Foot)

TIME	GALLONS PURGED (Gallons)	CUMULATIVE GALLONS PURGED (Gallons)	TEMP (°C)	±	pH (SU)	±	COND. (µS)	±	DO (mg/L)	±	TURB. (NTU)	±	COLOR	ODOR
0958	--	--	22.7	--	3.94	--	217	--	1.58	--	546	--	Clay/Bright	

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" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RE | SAMPLER'S SIGNATURE: [signature] | SAMPLING DATE: 5/18/16 | SAMPLING TIME: 0958

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

SAMPLE CONTAINER SPECIFICATION: SAMPLE CONTAINER QUANTITY	SAMPLE CONTAINER MATERIAL CODE	SAMPLE CONTAINER VOLUME	SAMPLE PRESERVATION: PRESERVATION TYPE	TOTAL VOLUME MODIFIED (ml)	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~~			~~NPW~~		

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 = Alex Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Positive Displacement Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

SAMPLE PRESERVATION CONTENTS:

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 (22 feet) STATIC DEPTH TO WATER (feet) X WELL CAPACITY (gallons/foot) = gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Y	pH (SU)	Y	COND (mS)	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" = 1.0; 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
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 (ml)	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATION USED	TOTAL VOLUME ADDED IN FIELD (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 (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-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 - 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 (su)	Y	COND. (mS)	Y	DO (mg/L)	Y	TURBIDITY (NTU)	Y	COLOR	ODOR
1231	—	—	22.0	—	5.12	—	254	—	1.09	—	42	—	slow	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): 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 / 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 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; 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-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 | DEPTH TO WATER (feet): 21.76 | 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)

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	±	pH (std)	±	COND (µS)	±	ORP (mV)	±	TURBIDITY (NTU)	±	COLOR	ODOR
1326	—	—	22.7	—	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; 6" = 1.47; 8" = 2.61; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RS | SAMPLER SIGNATURE: | SAMPLING DATE: 5.18.16 | SAMPLING TIME: 1326

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

DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION: SAMPLE CONTAINER (mL)	# CONTAINERS	MATERIAL CODE	VOLUME	SAMPLE PRESERVATION: PRESERVATIVE USED	TOTAL VOLUME PRESERVATIVE ADDED (ml)	FINAL pH	INTENDED ANALYSES AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
—	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 = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; BSP = Bladder Submersible Pump; PP = Peristaltic Pump; 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 (ft) − STATIC DEPTH TO WATER (ft) × WELL CAPACITY (gal/ft)

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	%	pH (SU)	%	COND (mS)	%	DO (mg/L)	%	TURBIDITY (NTU)	%	COLOR	ODOR
0921	–	–	21.7	–	5.60	–	253	–	1.03	–	16	–	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): DB

SAMPLER SIGNATURE(S):

SAMPLING DATE: 5/15/16

SAMPLING TIME: 0921

PUMP OR TUBING DEPTH IN WELL (feet):

TUBING MATERIAL CODE:

FIELD FILTERED: Y

Filtration Equipment Type:

FILTER SIZE:

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	FINAL pH	VOLUME ADDED (ml)			
	3	CG	40 ml	HCL			8260B	B	
	2	~~CG~~	~~40 ml~~	~~HCL~~			~~VOA~~		

REMARKS: NP. No well keylock.

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; RSFPP = Reverse Flow Forward Suction 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: 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) × WELL CAPACITY 0.16 = 1.66 gallons

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (SU)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURB (NTU)	Δ	COLOR	ODOR
0940		—	21.09	—	5.72		374		1.47		21	—	clr	Strong
0945	1	1	21.7	.2	5.61	.11	361	13	1.12	.35	82	61	slang	
0950	1.5	2.5	21.4	.3	5.50	.11	318	43	1.11	.01	96	14	1	
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	294	—	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; 6" = 1.47; 8" = 2.61; 12" = 5.90

SAMPLING DATA

SAMPLED BY (PRINT): RS | SAMPLER SIGNATURE(S): [signature] | SAMPLING DATE: 5/15/16 | SAMPLING TIME: 1020

PUMP OR TUBING: — | TUBING MATERIAL CODE: — | FIELD FILTERED: Y | FILTER SIZE: —

DUPLICATE COLLECTED: Y

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
NUMBER	MATERIAL CODE	VOLUME	TYPE	ADDITIVES	FINAL pH				
3	CG	40 ml	HCL				8260B	B	
~~2~~	~~CG~~	~~40 ml~~	~~HCL~~				~~8260B~~		

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: ± 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-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
feet x feet x gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	±	pH (stn)	±	COND (µS)	±	DO (mg/L)	±	TURB IDITY (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(S): [signature]
SAMPLING DATE: 5·18·16
SAMPLING TIME: 1342

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	# CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
–	~~4~~ 3	CG	40 ml	HCL	–	–	8260B	B	–
–	~~4~~	~~CG~~	~~40 ml~~	~~HCL~~	–	–	~~[illegible]~~		–

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; 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) X WELL CAPACITY
(feet - feet X gallons/feet = 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

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 (ml)	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATION (CFS)	ACTUAL VOLUME ADDED IN FIELD (ml)	FINAL pH			
---	2	CG	40 ml	HCL	---	---	8260B		---
---	2	CG	40 ml	HCL	---	---	8011		---

REMARKS: Not Located

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%

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: 20.24 feet

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)	Δ	pH (ph)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	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		slwy	↓
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(S)): [signature]

SAMPLING DATE: 5/17/16

SAMPLING TIME: 1547

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	TYPE OF CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (ml)	FINAL 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 = 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: 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

DEPTH TO WATER (feet): 15.62

PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - DEPTH TO WATER) x WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	pH (units)	SPECIFIC CONDUCTANCE (µS/cm)	DISSOLVED OXYGEN (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; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RE

SAMPLER(S) SIGNATURE(S): [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: µm

SAMPLE CONTAINER SPECIFICATION

CONTAINER QUANTITY	CONTAINER MATERIAL CODE	CONTAINER VOLUME	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	

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 = Alternistaltic Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Positive Displacement 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-28 | SAMPLE ID: MW28 | DATE: 5/17/16

PURGING DATA

WELL DIAM. (inches): 2 | T.D. Well Depth (feet): 30 | WELL SCREEN INTERVAL DEPTH (feet): 5 - 30 | 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 (gallons/foot)

TIME	VOLUME PURGED (gallons)	CUMM VOLUME PURGED (gallons)	TEMP (°C)		pH (Std. Units)		COND (µS)		DO (mg/L)		TURB (NTU)		COLOR	ODOR
1350	—	—	19.4	—	6.07	—	171.7	—	1.16	—	19.6	—	Strong	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" = 5.80

SAMPLING DATA

SAMPLED BY (PRINT): RS | SAMPLER 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:

FIELD DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
LABORATORY ID	# OF CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
—	3	CG	40 ml	HCl	—	—	82605	B	—

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 = Alum Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SFS = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILITY TOLERANCES:

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 - STATIC DEPTH TO WATER) x WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	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" = 1.02; 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:

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 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 = Atlas 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-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: ___ WELL VOLUME = TOTAL WELL DEPTH ___ feet − STATIC DEPTH TO WATER ___ feet × WELL CAPACITY ___ gallons/foot = ___ gallons

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 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" = 2.61; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): DS | SAMPLER'S SIGNATURE(S): [signature] | SAMPLING EVENT: 5/15/16 | SAMPLE TIME: 1753

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

DUPLICATE COLLECTED: Y (N)

SAMPLE CONTAINER SPECIFICATION: SAMPLE ID	# 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~~ 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 = 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-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/feet) = gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)		pH (pH)		CONC (mS)		DO (mg/L)		TURB IDITY (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): [illegible]

SAMPLER(S) SIGNATURE(S): [illegible]

SAMPLING DATE: 5/17/16

SAMPLING TIME: 1701

PUMP OR TUBING DEPTH IN WELL (feet): —

TUBING MATERIAL CODE: —

FIELD-FILTERED: Y

FILTER SIZE: 0

DUPLICATE COLLECTED: [illegible]

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 USED	TOTAL VOL ADDED (ml)	FINAL pH			
	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; 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: Circuits 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

Feet 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	CUMULATIVE PURGED (gallons)	DEPTH TO WATER PURGED (DTW feet)	TEMP (°C)	√	pH (std)	√	COND (µS)	√	DO (mg/L)	√	TURBIDITY (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) & (Sign): [illegible]

SAMPLE WITNESSED BY: [illegible]

PUMP OR TUBING DEPTH IN WELL (feet): —

DUPLICATE COLLECTED: —

TUBING MATERIAL CODE: —

SAMPLING DATE: 5/17/16

SAMPLING TIME: 1633

FIELD FILTERED: Y

Filtration Equipment Type: —

FILTER SIZE: —

SAMPLE CONTAINER SPECIFICATION

SAMPLE BOTTLE QUANTITY	PRESERVATIVE USED	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME RECEIVED (ml)	FIELD (F)	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
—	3	CG	40 ml	HCL			8260B	B	
4	~~CG~~	~~CG~~	~~40 ml~~	~~HCL~~			~~MW~~		

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; FFPP = Positive Gas Displacement Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

STABILIZATION CRITERIA

pH: ± 0.2 units; Temperature: ± 0.2 °C; Specific Conductance: ± 1%; 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 (inches): 2

Total Well Depth (feet): 35

WELL SCREEN INTERVAL DEPTH: 20 feet 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) x WELL CAPACITY (gallons/foot)

TIME	VOLUME PURGED (gallons)	CUM. VOLUME PURGED (gallons)	TEMP (°C)	√	pH (Std)	√	COND (µS)	√	DO (mg/l)	√	TURBIDITY (NTU)	√	COLOR	ODOR
0829	—	—	22.4	—	5.44	—	250	—	1.29	—	96	—	Gry	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):

PUMP OR TUBING DEPTH IN WELL (feet):

TUBING MATERIAL CODE:

FIELD FILTERED: Y / N

SAMPLING DATE: 5/15/16

SAMPLING TIME: 0829

WATER SUPPLY WELL: 0

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 USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
—	3	CG	40 ml	HCl			8260B	B	
	"	CG	40 ml	HCl			601		

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 = Alternative Peristaltic Pump; B = Bailer; BP = Bennett Pump; FSP = Fultz Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

FIELD PARAMETER STABILIZATION [if required]: 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) X WELL CAPACITY (gallons/foot) gallons

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (s.u.)	Δ	COND (mS)	Δ	DO (mg/L)	Δ	TURB (NTU)	Δ	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" = 1.0; 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:
DUPLICATE COLLECTED: O		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 USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
	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 = Air-Free 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-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 - 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 (pH)	Y	COND (pS)	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" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RG	SAMPLER 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 ID CODE	# CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED IN FIELD (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; 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-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 - STATIC DEPTH TO WATER) x WELL CAPACITY

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
1601	–	–	21.9	–	5.34	–	142.6	–	1.09	–	29	–	Slohy	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: 5/15/16	SAMPLING TIME: 1601
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 TYPE	TOTAL VOLUME ADDED IN FIELD (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 = 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-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)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (su)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURB (NTU)	Δ	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" = 0.17; 3" = 0.37; 4" = 0.65; 6" = 1.02; 8" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): DG
SAMPLER'S SIGNATURE(S): [signature]
SAMPLING DATE: 5/16/16
SAMPLING TIME: 1725
PUMP OR TUBING DEPTH IN WELL (feet): –
TUBING MATERIAL CODE: –
FIELD FILTERED: Y / N
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	# 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~~	–		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 = 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-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) × 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
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; 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: 1338
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	CONTAINER #	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~~			~~8010~~		—

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 = Aller 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-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) x WELL CAPACITY gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	V	pH (pH)	V	COND (µS)	V	DO (mg/L)	V	TURBIDITY (NTU)	V	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; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 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: –

DUPLICATE COLLECTED: Y (N)

FIELD FILTERED: Y (N) Filtration Equipment Type: FILTER SIZE:

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 VOL ADDED IN FIELD (ml)	FINAL pH			
	~~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 = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Snow 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

WELL NO: MW-40

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

SAMPLE ID:

DATE:

PURGING DATA

WELL DIAMETER (inches):

Total Well Depth (feet): 35

WELL VOLUME PURGE: 1 WELL VOLUME (CASING VOLUME + WATER IN PACK)

SCREEN INTERVAL (feet): 20 to 35

SETTLED DEPTH TO WATER (feet):

WATER DEPTH (feet):

WELL CAPACITY:

PURGE PUMP TYPE OR BAILER:

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	TEMP (°C)	pH	SPEC. COND. (µS)	DO (mg/L)	TURB. (NTU)	COLOR	ODOR

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): 23.7 | 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)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)		pH (std. units)		COND (µS)		DO (mg/L)		TURBIDITY (NTUs)		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" = 0.10, 3" = 0.37, 4" = 0.65, 5" = 1.02, 6" = 1.47, 12" = 5.80

SAMPLING DATA

SAMPLED BY (PRINT): DS | SAMPLER'S SIGNATURE: [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

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE PUMP FLOW RATE (ml/min)	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH			
–	3	CG	40 ml	HCL	–	–	8260B	B	–
–	~~2~~	~~CG~~	~~Sleeve~~	~~HCL~~	–	–	~~8021~~		–

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 = 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-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): 23.78 | 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)	Δ	pH (pH)	Δ	COND (pS)	Δ	DO (mg/L)	Δ	TURB DITY (NTU)	Δ	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" = 5.88

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:

DUPLICATE COLLECTED: (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE IN CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL # ADDED AT LAB (ml)	LIMIT pH			
---	13	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 = 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 (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: Clariant Corporation

WELL NO: MW-43

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

SAMPLE ID: MW43

DATE: 5/18/16

PURGING DATA

WELL DIAMETER (inches): 2

WELL VOLUME PURGE: 40

WELL SCREEN INTERVAL DEPTH: 20 feet 40

STATIC DEPTH TO WATER (feet): 22.04

PURGE PUMP TYPE OR BAILER: N/A

TIME	CUMULATIVE PURGED (gallons)	TOTAL VOLUME PURGED (gallons)	TEMP (°C)	pH	SPC (µmhos/cm)	DO (mg/L)	TURBIDITY (NTUs)	COLOR	ODOR
0859	—	—	22.4	7.01	96.7	6.34	015	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; 6" = 1.47; 8" = 2.61; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): RS

SAMPLER SIGNATURE:

PUMP OR TUBING DEPTH IN WELL (feet):

DUPLICATE COLLECTED: N

TUBING MATERIAL CODE:

SAMPLING DATE: 5/18/16

SAMPLING TIME: 0859

FILTERED: Y / N

FIELD-FILTERED: Y / N

FILTER SIZE:

SAMPLE CONTAINER SPECIFICATION

SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	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~~		~~8260B~~		

REMARKS: Bottles missing cap / mislabeled, will bring to lab

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

SAMPLING EQUIPMENT CODES: APP = Air Powered Pump; RFPP = Reverse Flow Peristaltic Pump; BP = Bladder Pump; BSP = Bennett Submersible Pump; O = Other (Specify)

FIELD WATER QUALITY 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

feet feet X gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (s.u.)	Δ	COND. (µS)	Δ	DO (mg/L)	Δ	TURB. (NTU)	Δ	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" = 0.1; 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

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)
[illegible]	# CONTAINERS	CATEGORY CODE	VOLUME	PRESERVATIVE (TYPE)	TOTAL VOL. ADDED (ml)	FINAL pH			
—	~~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 - 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-45

SAMPLE ID: MW45

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): 19.43

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)

GMT	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
0915	—	—	21.9	—	4.71	—	32.3	—	5.09	—	18	—	Cir	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: [illegible]

SAMPLING DATE: 5/18/16

SAMPLING TIME: 0915

PUMP OR TUBING DEPTH IN WELL (feet): —

TUBING MATERIAL CODE: —

FIELD FILTERED: Y / N (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	CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL ACCUMULATED ALL USED (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; 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-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) x WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	pH (pH)	CONO (µS)	DO (mg/L)	TURBIDITY (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" = 1.02; 6" = 1.47; 12" = 5.88

SAMPLING DATA

SAMPLED BY (PRINT): 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 (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	# CONTAINER	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~~			[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; 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-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)	Δ	pH (pH)	Δ	COND (µS)	Δ	DO (mg/L)	Δ	TURBIDITY (NTU)	Δ	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): DS
SAMPLER'S 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	CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL ACID ADDED IN FIELD (ml)	FINAL pH			
—	3	CG	40 ml	HCL	—	—	8260B	B	—
—	~~2~~	~~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 = 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: 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

feet feet X gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	Δ	pH (stn)	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: | 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 IDENTIFICATION	# 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: Gate Locked, Not Sampled

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: 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 OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = | TOTAL WELL DEPTH feet | STATIC DEPTH TO WATER: X 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 (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	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL PRESERVATIVE ADDED (ml)	FINAL 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 - 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-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)		DO (mg/L)		TURBIDITY (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: [signature] | SAMPLING DATE: 5.18.16 | SAMPLING TIME: 1405

PUMP OR TUBING DEPTH IN WELL (feet): - | FIELD FILTERED: Y / N | FILTER SIZE: - µm

DUPLICATE COLLECTED: Y / N | FIELD DECONTAMINATION: Y / N | DECONTAMINATION 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	PRESERVATIVE USED	TOTAL VOL ADDED (ml)	FINAL pH			
-	-3	CG	40 ml	HCL	-	-	8260B	B	
-	~~-~~	~~CG~~	~~40 ml~~	~~HCL~~	-	-	~~8021~~		

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-Pac Prop Positive 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-53

SAMPLE ID:

DATE:

PURGING DATA

WELL DIAMETER (inches): | Total Well Depth (feet): 20 | WELL SCREEN INTERVAL DEPTH: 5 feet to 20 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)	∆	pH (su)	∆	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(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 VOL 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 = 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-54

SAMPLE ID: MW54

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): 10.15

PURGE PUMP TYPE OR BAILER: N/A

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH 20 feet) - (STATIC DEPTH TO WATER) feet x WELL CAPACITY gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	±	pH (Ph)	±	COND (µS)	±	DO (mg/L)	±	TURBIDITY (NTU)	±	COLOR	ODOR
1230	—	—	22.6	—	4.04	—	301	—	0.96	—	43	—	slcly	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: 1230

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 PER. PE	# CONTAINER	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL. ADDED IN FIELD (ml)	FINAL pH			
—	13	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 - After Peristaltic Pump; B - Bailer; BP - Bladder Pump; ESP - Electric Submersible Pump; RFPP - Reverse Flow Peristaltic Pump; SM - Slowly 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: X WELL VOLUME = (TOTAL WELL DEPTH) = 14 feet (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 (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	# OF 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 = 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-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) x WELL CAPACITY gallons/foot gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	±	pH (s.u.)	±	COND (µS)	±	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; 6" = 1.02; 8" = 1.47; 12" = 1.86

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 FILTERED: Filtration Equipment Type: ⊘
FILTER SIZE:
DUPLICATE COLLECTED: ⊘

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	–	–	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: Clowns Clinton

SITE LOCATION: Taylor & Two Notch Road, Columbia, South Carolina

WELL NO: MW-58

PROJECT NO:

DATE:

PURGING DATA

WELL DIAMETER (inches):

TOTAL WELL DEPTH (feet): 19

WELL SCREEN INTERVAL DEPTH: 4 to 19 feet

STATIC DEPTH TO WATER (feet):

PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGED: 1 WELL VOLUME = (TOTAL WELL DEPTH feet - STATIC DEPTH TO WATER feet) x WELL CAPACITY

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	±	pH (pH units)	±	COND (µS)	±	DO (mg/L)	±	PURGE RATE (GPM)	±	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; 8" = 2.61

SAMPLING DATA

SAMPLED BY (PRINT): SAMPLER'S SIGNATURE: SAMPLING EVENT: SAMPLING TIME:

PUMP OR TUBING DEPTH IN WELL (feet):

TUBING MATERIAL CODE:

FIELD FILTERED: Y / N FILTER SIZE:

DUPLICATE: Y / N

SAMPLE CONTAINER SPECIFICATION

SAMPLE ID CODE	CONTAINER QUANTITY	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOLUME ADDED (ml)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
	2	CG	40 ml	HCL			8260B		
	2	CG	40 ml	HCL			9011		

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 = Alpha Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; FFPP = Flexible 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 (feet): 17 | WELL SCREEN INTERVAL DEPTH: 2 feet to 17 feet | DEPTH TO WATER (Pre-Purge): 5.40 | PURGE PUMP TYPE OR BAILER: N/A

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

TIME	VOLUME PURGED (gallons)	CUM'N VOLUME PURGED (gallons)	TEMP (°C)	∆	pH (s.u.)	∆	COND (mS)	∆	DO (mg/L)	∆	TURB UNITY (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; 6" = 1.47; 8" = 2.60

SAMPLING DATA

SAMPLED BY (PRINT): DS | SAMPLER'S SIGNATURE: | SAMPLING DATE: 5-18-16 | SAMPLING TIME: 1240

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

SAMPLE CONTAINER SPECIFICATION: SAMPLE ID CODE	# 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	
—	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 = 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-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 - 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 (pH)	Y	COND (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" = 0.15; 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)	FINAL pH			
---	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 = 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: MW-62

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) x WELL CAPACITY (gallons per foot)

Time	Volume Purged (gallons)	Cumm Volume Purged (gallons)	Temp (°C)	±	pH (std)	±	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: (Please Specify)

DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION: Container Material	# Containers	Container Volume	SAMPLE PRESERVATION: Preservative Used	Preservative Added (ml)	Final pH	Intended Analysis and/or Method	Sampling Equipment Code	Sample Pump Flow Rate (ml/min)
	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 | SWL 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)) × WELL CAPACITY (gallons/foot) = (gallons)

TIME	VOLUME PURGED (gallons)	CUMULATIVE VOLUME PURGED (gallons)	TEMP (°C)	±	pH (SU)	±	COND (µS)	±	DO (mg/L)	±	TURBIDITY (NTU)	±	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): | 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:

SAMPLE CONTAINER SPECIFICATION: SAMPLE I.D.	# 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	—

REMARKS: NO Purge

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Steel; 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: ± 1 (<10) 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

feet feet X 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

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	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	TOTAL VOL ADDED PER CO 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 = 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-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)	X	pH (Vol)	X	COND (µS)	X	DO (mg/L)	X	TURBIDITY (NTU)	X	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" = 5.88

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)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	TOTAL ACID/NAOH VOLUME (ml)	FINAL (X)			
	13	CG	40 ml	HCl			8260B	13	
	~~1~~	~~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 = Alto 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-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)	Y	pH (su)	Y	COND (µS)	Y	DO (mg/L)	Y	TURB (NTU)	Y	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)
LAMBDA (ft CO2)	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE TYPE	TOTAL VOLUME ADDED (ml)	FINAL pH		B	
–	13	CG	40 ml	HCL	–	–	8260B	1	
–	1	~~CG~~	~~40 ml~~	~~HCL~~	–	–	~~9011~~		

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-5AR | SAMPLE ID: MW5AR | DATE: 5/15/16

PURGING DATA

WELL DIAMETER (inches): | Total Well Depth (feet): 28 | WELL SCREEN INTERVAL DEPTH: 18 feet to 28 feet | STATIC DEPTH TO WATER (feet): 19.59 | PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) / WELL CAPACITY

= (feet - feet) / gallons/foot = gallons

TIME	VOLUME PURGED (gallons)	CUMUL VOLUME PURGED (gallons)	TEMP (°C)	%	pH (stn)	%	COND (mS)	%	DO (mg/L)	%	TURB IDITY (NTU)	%	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" = 1.02; 8" = 1.47; 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 / O | FILTER SIZE:

DUPLICATE COLLECTED: Y / O | Filtration Equipment Type:

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml/min)
SAMPLE IDENTIFICATION	# 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: M, 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	PW-1R	SAMPLE ID:	PW-1R	DATE:	5·18·16

+DUP

PURGING DATA

WELL DIAMETER (inches):	Total Well Depth (feet):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
4	50	45 feet to 50 feet	21.03	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	TURB IDITY (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):	SAMPLER'S SIGNATURE(S):	SAMPLING DATE:	SAMPLING TIME:
DS		5·18·16	1312

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 Peristaltic Pump; B = Bailer; BP = Bladder Pump; BSP = 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):	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	42.71	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	62.3	3.15	.19	26	8	Clr	
1136	5	9	23.1	.5	6.56	.39	62.1	26.4	3.12	.27	74	33	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:	SAMPLING TIME:
		5/16/16	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 VOL ADDED IN FIELD (mL)	FINAL pH			
---	3	CG	40 ml	HCL	---	---	8260B	B	---
---	~~1~~	~~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:	Clouds 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):	Total Well Depth (feet):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	75	70 feet to 75 feet	49.99	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	TURBIDITY (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	43	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	mod

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:
[illegible]	[illegible]	5/16/16	1101

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			
---	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:	47 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. (µS)	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	—	cm	
1214	3	8	23.7	.2	4.99	.13	201.6	7.5	1.04	.102	521	—	cm	
1221	2	10	23.6	.1	4.47	.102	199.3	2.3	0.95	.16	106	215		
1238	2	12	23.5	.1	4.61	.136	199.9	.6	0.40	.103	62	54	Slmy	
1246	2	14	23.5	—	4.25	.136	199.6	.3	0.96	.100	18	34	CW	
1251	1	15	23.6	.1	4.23	.102	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	221	25	1.11	.15	846	821	cldy	
1240	4	8	23.8	.2	4.05	.56	216	5	1.09	.02	192	654	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	clr	
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]" = 0.10; 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	--	--	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-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
1330	5	5	22.7	1.4	6.32	.42	161.5	30.6	1.06	.86	846	RS	CLR	
1335	4	9	22.6	.1	6.21	.11	137.3	24.2	1.11	.05	209	637		
1340	2	11	23.5	.1	6.00	.21	136.4	5.9	1.12	.01	133	76		
1345	2	13	23.4	.1	5.97	.03	130.2	1.2	1.15	.03	42	91	CLR	
1350	1	14	23.2	.2	5.96	.01	130.6	.4	1.17	.02	16	26		
1355	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): [illegible]	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	---
---	1	CG	40 ml	HCL	---	---	9071		---

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:	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. (µS)	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; 6" = 1.02; 8" = 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; RFPP = 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):	Total Well Depth (feet):	WELL SCREEN INTERVAL DEPTH:	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
2	55	50 feet to 55 feet	21.82	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. (µS)	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):	SAMPLER(S) SIGNATURES:	SAMPLING DATE:	SAMPLING TIME:
RS		5/18/16	1057

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			
—	#3	CG	40 ml	HCL	—	—	8260B	B	—
—	A	~~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 - 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
	---	---		---		---		---		---		---		

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; 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-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	TURBIDITY (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	10.3	77.3	27	6.81	.15	380	181		
1142	3	12	22.6	.1	4.60	.05	79.6	23	0.71	.10	21	307	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	14	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):	DE	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 = 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: 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	TURB IDITY (NTU)	Δ	COLOR	ODOR
	---	---	26.3	---	6.94	—	192.3	---	3.16	---	142	—	Cmp	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 = 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: 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. (µS)	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; BSP = 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(S) 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 # ADDED IN FIELD	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 = Alex Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RPPP = Reverse Flow Peristaltic Pump; SS = 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 # 1605G81

Sales Order # _____ PO # _____ Access Quote # _____

Laboratory ID: AES

Company Name: Crawford Env.

Report To: West Hubard

Address: 15 Church Ave

City: Roanoke State: Va Zip: 24011

Phone: 540 343 6256 Fax: 540 343 6259

Email: whubard@crawfordenvironmental.com

Project ID: Clouds Chevron

Sampled By: tslack.

Preservative: (*see codes)

Container Type: (*see codes)

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 = 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

Sample ID/Description	Date Collected:	Time Collected:	Type: (grab or composite)	Matrix: (see codes)	Program Area (see codes)	TOTAL # of containers	↓ REQUESTED LAB ANALYSIS: ↓ 8260B BTEX+MNT Boxy	NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)
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	C1
PW-1R	5/18	1312	↓	↓		↓	X	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 (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
[signature]	[signature]	5/19/16	1213	✓ Y ___ N	___ (°C)	___ (N/A)
[signature]	FEDEX	5/19/16	1700	✓ Y ___ N	___ (°C)	___ (N/A)
FEDEX	[signature] (FedEX)	5/20/16	9:25 AM	✓ Y ___ N	4.1° (°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 #: 1605681

Laboratory ID: AES

Company Name: Crawford Env.

Report To:

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Chevron

Sampled By: T. Sluk

Preservative: (*see codes)

Container Type: (*see codes)

↓ REQUESTED LAB ANALYSIS: ↓ 8260B BTEX+MN+8*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 | # of containers collected per analysis | # of containers collected per analysis

LAB USE ONLY

Access Analytical - Chain of Custody Record

Project Work Order # 1605G81

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: (*see codes)

Container Type: (*see codes)

↓ REQUESTED LAB ANALYSIS: ↓

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Irmo, SC 29063

Phone: (803) 781-4243
Fax: 781-4303

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*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	8260B BTEX+MTN+BOXY	NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)
Dw01	5/16/16	1216	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~~	~~1310~~						
Dw09	5/18	1218					X	
Sw01	5/18	1245					X	

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]	[signature]	5/19/16	1213	✓ Y __ N	___ (°C)	___ (N/A)
[signature]	FEDEX	5/19/16	1700	✓ Y __ N	___ (°C)	___ (N/A)
FEDEX	[signature] (FedEX)	5/20/16	9:25AM	✓ Y __ N	4.1° (°C)	___ (N/A)
				__ Y __ N	Page 4 of 103	___ (N/A)

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LAB USE ONLY

Access Analytical - Chain of Custody Record

Project Work Order # 1605G81

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

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)

REQUESTED LAB ANALYSIS: ↓ 8260B BTEX+MTN +80xy

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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	8260B BTEX+MTN +80xy	NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)
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

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]	[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	9:25AM	✓Y ___N	4.1° (°C)	___(N/A)
				___Y ___N		___(N/A)

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LAB USE ONLY

Access Analytical - Chain of Custody Record

Project Work Order # 1605G81

Sales Order # _____ PO # _____ Access Quote # _____

Laboratory ID: AES

Company Name: Crawford Env

Report To:

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Chavrin

Sampled By:

Preservative: (*see codes)

Container Type: (*see codes)

REQUESTED LAB ANALYSIS: ↓ 8260B BTEX/MAN +8oxy

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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

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	8260B BTEX/MAN +8oxy	NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)
MW-1	5/16/16	1252	G	Env		3		X	C1
MW-3	5/16/16	0950						X	C1
MW-4	5/16/16	1001						X	C1
MW-5	5/16/16	1350						X	C1
MW-6	5/17/16	1536						X	C1
MW-7	5/16/16	1415						X	C1
MW-8	5/17/16	1618						X	C1
MW-9	5/16	1238						X	C2
MW10	5/18	1028						X	C1
Duplicate A	5/18	1030						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 (mm/dd-yy)	Time (24HR)	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	9:25AM	✓ Y __ N	4.1° (°C)	__ (N/A)
				__ Y __ N		__ (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: AES

Company Name: Cranford Env

Report To:

Address:

City: State: Zip:

Phone: Fax:

Email:

Project ID: Clouds Chevron

Sampled By:

Preservative: (*see codes)

Container Type: (*see codes)

↓ REQUESTED LAB ANALYSIS: ↓

8260B BTEX+MTBE 8015

| 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 | # of containers collected per analysis | # of containers collected per analysis

LAB USE ONLY

Access Analytical - Chain of Custody Record

Project Work Order # 1605G81

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: (*see codes)

Container Type: (*see codes)

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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	↓ REQUESTED LAB ANALYSIS: ↓ 8260B BTEX+MTN+SOXY	NOTES / COMMENTS (if sample is a composite please use space below to note start/finish times & dates)
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:

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]	[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	9:25AM	✓ Y __ N	4.1° (°C)	__ (N/A)
				__ Y __ N		__ (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 Chevron

Sampled By:

Preservative: (*see codes)

Container Type: (*see codes)

ACCESS ANALYTICAL, INC.

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Irmo, SC 29063

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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	↓ REQUESTED LAB ANALYSIS: ↓ 82603 BTEX+M+N+Bay	NOTES / COMMENTS (if sample is a composite please use space below to note starting times & dates)
Duplicate (PWIR)	5/18/16	1312	G	GW		3	X	C2
Duplicate (3S)	5/16/16	1814	G	GW		3	X	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 (24HR)	Samples Rec'd on Ice	Sample Temp. Upon Receipt (°C):	
[signature]	[signature]	5/19/16	1215	✓Y ___N	___(°C)	___(N/A)
[signature]	FEDEX	5/19/16	1700	✓Y ___N	___(°C)	___(N/A)
FEDEX	[signature] (FedEx)	5/20/16	9:25AM	✓Y ___N	4.1° (°C)	___(N/A)
				___Y ___N	___(°C)	___(N/A)

Page 9 of 103

Pg 8 of 8

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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 Parry 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

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		

[redacted]

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
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 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		

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		

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: **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	B	Analyte detected in the associated method blank
DRL	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: **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		

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

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: **1605G81-065AMSD**	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:				

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. Servcs

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

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 – Injection Well Installation Summary
Appendix E - Data Verification Checklist

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

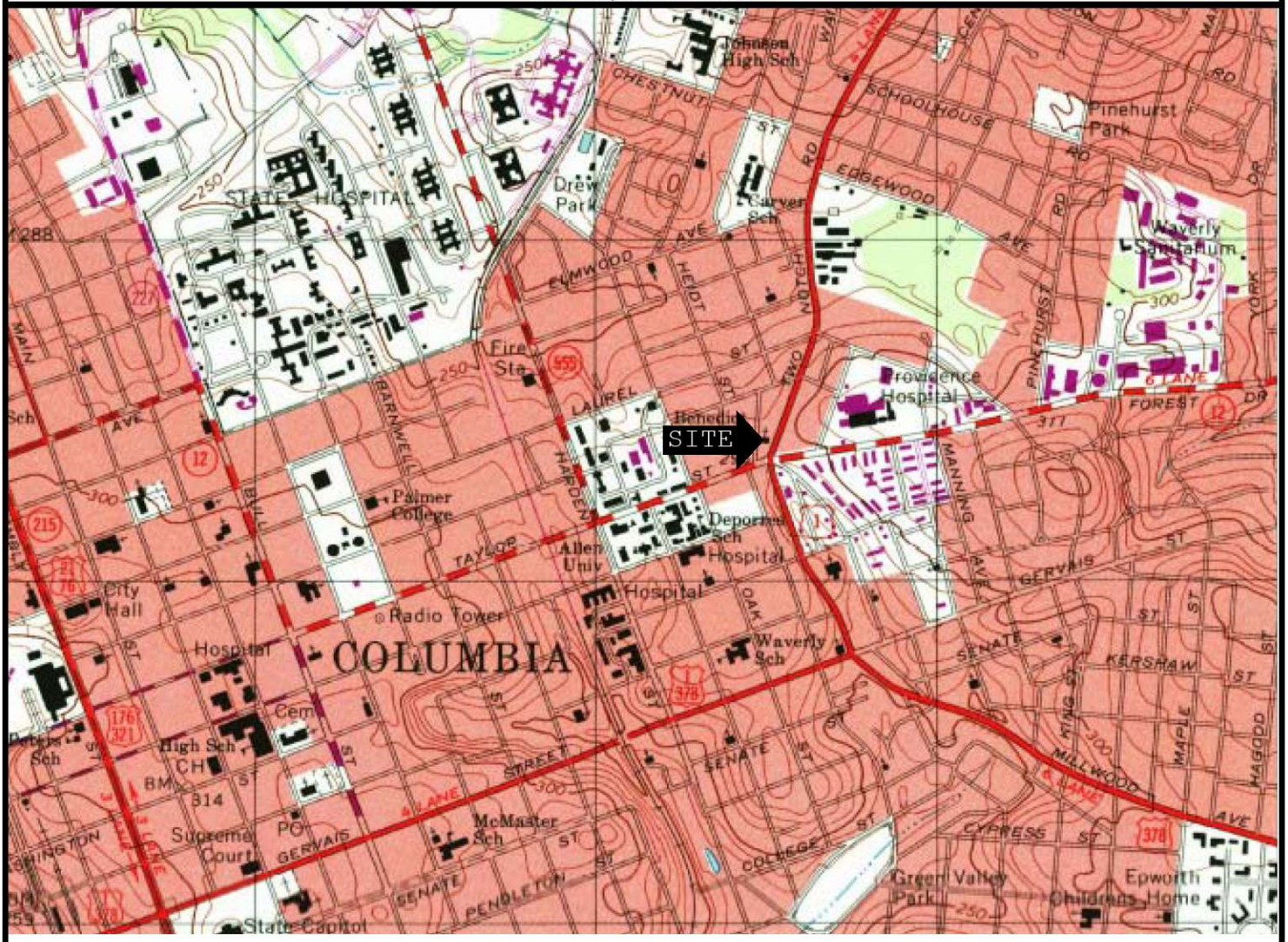
Initial>SSTL	325262.00
Subsequent>SSTL	79295.10
COC Reduction	75.62%

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

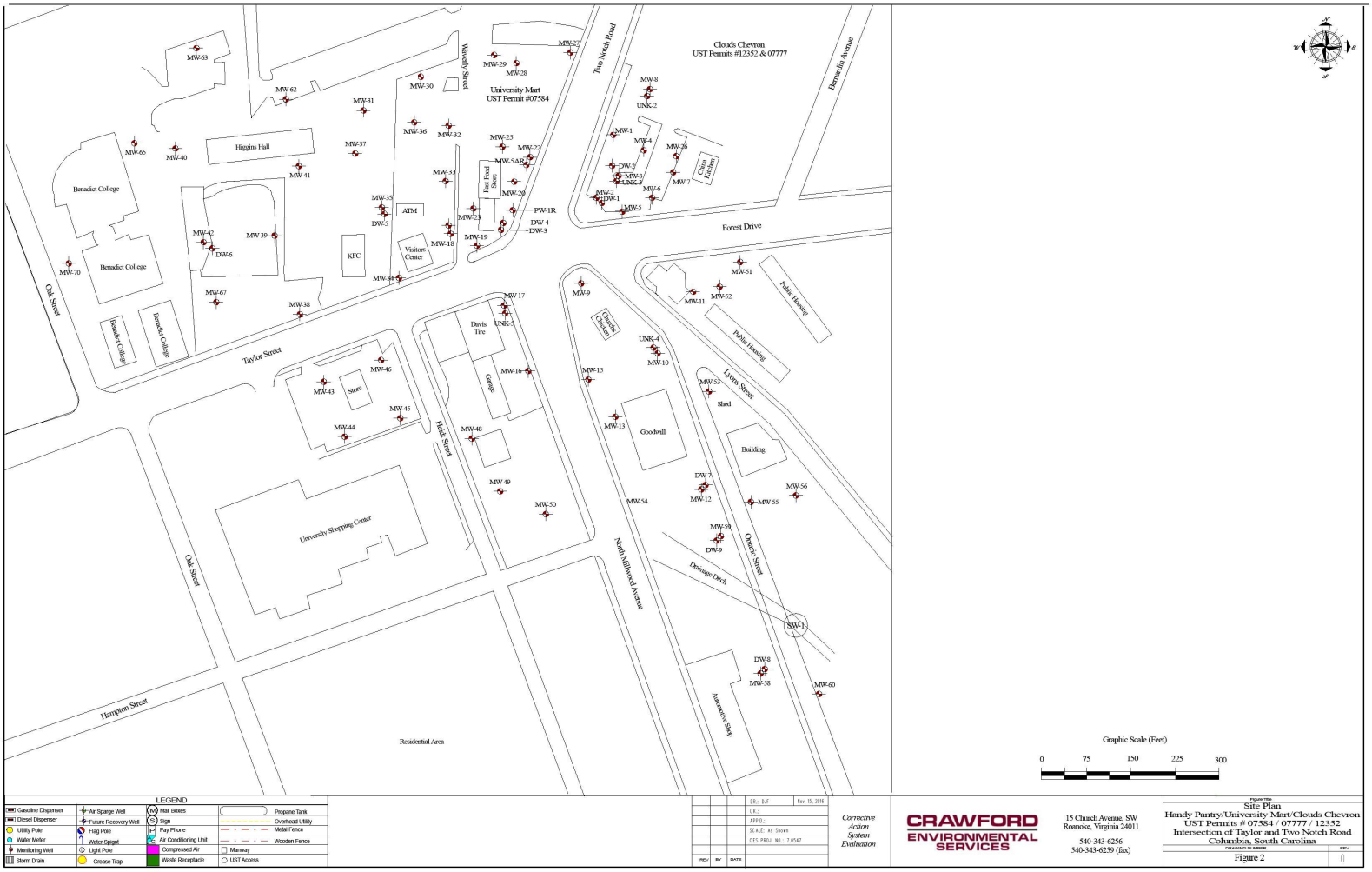
Source: U.S.G.S. Topographic Map of the Columbia North Quadrangle, Virginia, 7.5 Minute Series (1977, revised 1988)
Scale: 1:24,000 Contour Interval: 20 Feet
Vertical Datum: National Geodetic Vertical Datum 1929
Horizontal Datum: North American Datum1927

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
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



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
Roanoke, Virginia 24011
540-343-6256
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: ___

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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-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

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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-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

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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-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: _____

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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-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 _____

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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-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: _____

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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-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: _____

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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-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 _____

17

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 _____

19 DUP 5

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: _____

23

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: ___

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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

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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 _____

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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: 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: _____

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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					

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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)

Pg 1 of 7

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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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***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]	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)

Pg 2 of 7

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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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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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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

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 = 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

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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Access Analytical - Chain of Custody Record

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)

Pg 6 of 7

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Access Analytical - Chain of Custody Record

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~~							

*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)

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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
- S Spike Recovery outside limits due to 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 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

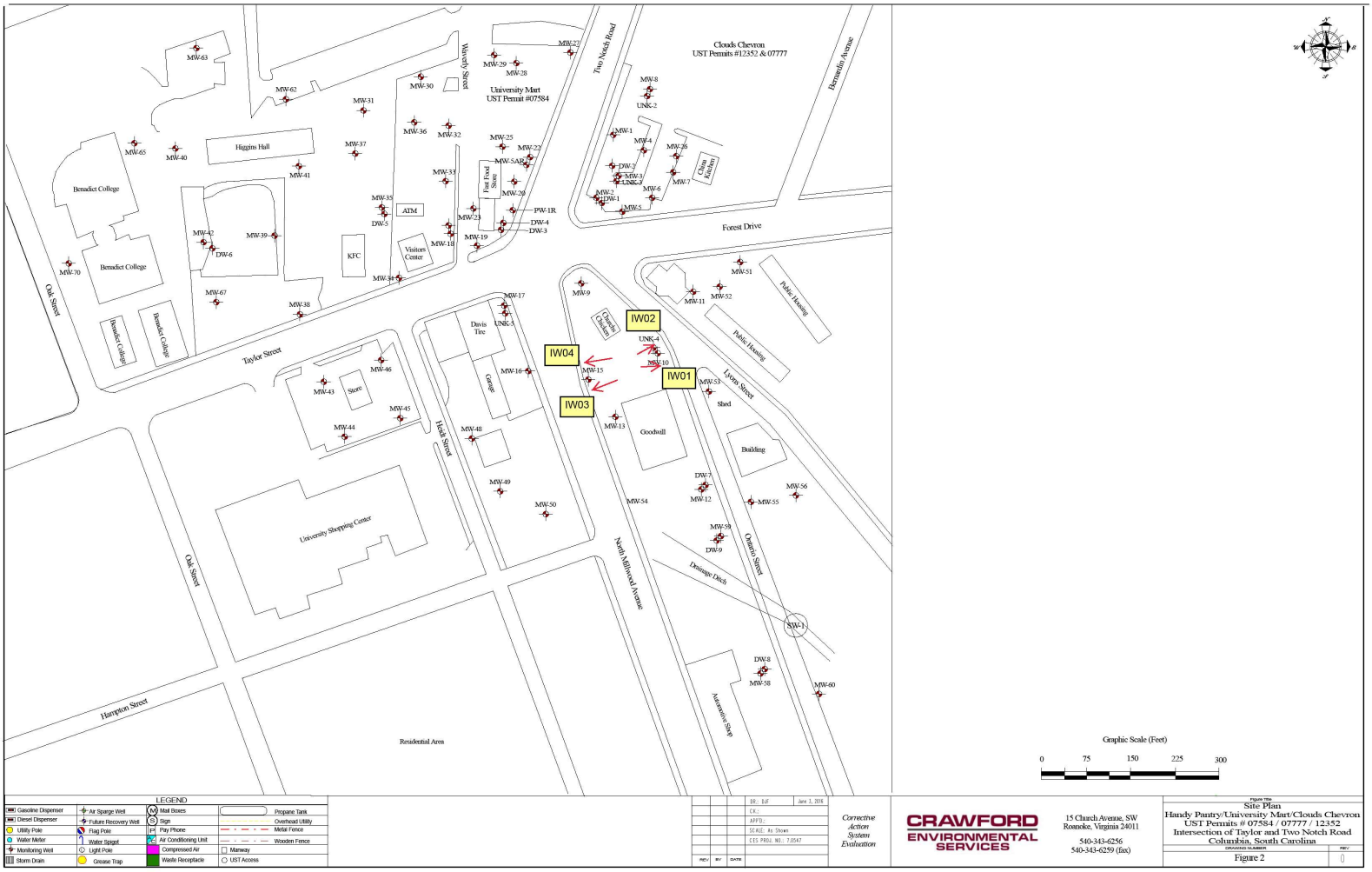
Should you have any comments or questions please feel free to contact me at 540.798.5068. Thank you.

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:

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

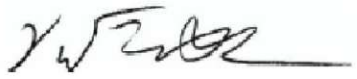
PREPARED FOR:
South Carolina Department of Health & Environmental Control
Ms. Kimberly Kuhn
South Carolina Department of Health and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

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:

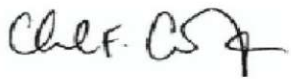


B. Thomas Houghton, P.G.
Senior Project Geologist/Technical Reviewer
Registered South Carolina P.G. No. 2343

30 August 2017
Date Reviewed



Approved By:



Charles F. Crawford
President/Chief Executive Officer, Technical Reviewer

31 August 2017
Date Reviewed

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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 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

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-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

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-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