Client: **Kleen Sites Geoservices, Inc.**
Description: **TW-2**
Date Sampled: **06/01/2021 1215**
Date Received: **06/03/2021**

Laboratory ID: **WF03019-006**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	06/09/2021 0253	CJL2		94840

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	**91-20-3**	**8260D**	**0.44**	**J**	**1.0**	**0.40**	**ug/L**	**1**
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	**108-88-3**	**8260D**	**1.1**		**1.0**	**0.40**	**ug/L**	**1**
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		106	70-130
Bromofluorobenzene		107	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Client: **Kleen Sites Geoservices, Inc.**
Description: **MW-11**
Date Sampled: **06/01/2021 1220**
Date Received: **06/03/2021**

Laboratory ID: **WF03019-007**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	06/09/2021 0318	CJL2		94840

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	**108-88-3**	**8260D**	**0.80**	**J**	**1.0**	**0.40**	**ug/L**	**1**
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		106	70-130
Bromofluorobenzene		106	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Kleen Sites Geoservices, Inc.**
Description: **MW-12**
Date Sampled: **06/01/2021 1230**
Date Received: **06/03/2021**

Laboratory ID: **WF03019-008**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	06/09/2021 0342	CJL2		94840

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		86	70-130
Toluene-d8		105	70-130
Bromofluorobenzene		108	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Client: **Kleen Sites Geoservices, Inc.**
Description: **MW-13**
Date Sampled: **06/01/2021 1240**
Date Received: **06/03/2021**

Laboratory ID: **WF03019-009**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	06/08/2021 2313	JDF		94828

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		103	70-130
Bromofluorobenzene		101	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Client: **Kleen Sites Geoservices, Inc.**
Description: **MW-6**
Date Sampled: **06/01/2021 1250**
Date Received: **06/03/2021**

Laboratory ID: **WF03019-010**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	06/08/2021 2335	JDF		94828

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		88	70-130
Toluene-d8		102	70-130
Bromofluorobenzene		97	70-130

LOQ = Limit of Quantitation	B = Detected in the method blank	E = Quantitation of compound exceeded the calibration range	DL = Detection Limit	Q = Surrogate failure
ND = Not detected at or above the DL	N = Recovery is out of criteria	P = The RPD between two GC columns exceeds 40%	J = Estimated result < LOQ and ≥ DL	L = LCS/LCSD failure
H = Out of holding time	W = Reported on wet weight basis			S = MS/MSD failure

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Client: **Kleen Sites Geoservices, Inc.**
Description: **MW-7**
Date Sampled: **06/01/2021 1300**
Date Received: **06/03/2021**

Laboratory ID: **WF03019-011**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	06/08/2021 2357	JDF		94828

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	**75-85-4**	**8260D**	**45**		**20**	**8.0**	**ug/L**	**1**
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	**1634-04-4**	**8260D**	**6.9**		**1.0**	**0.40**	**ug/L**	**1**
Naphthalene	**91-20-3**	**8260D**	**8.4**		**1.0**	**0.40**	**ug/L**	**1**
tert-butyl alcohol (TBA)	**75-65-0**	**8260D**	**84**		**20**	**0.40**	**ug/L**	**1**
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		102	70-130
Bromofluorobenzene		100	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

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Client: **Kleen Sites Geoservices, Inc.**
Description: **FIELD BLANK**
Date Sampled: **06/01/2021 1310**
Date Received: **06/03/2021**

Laboratory ID: **WF03019-012**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	06/08/2021 2102	JDF		94828

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		103	70-130
Bromofluorobenzene		95	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

Client: **Kleen Sites Geoservices, Inc.**
Description: **TRIP BLANK**
Date Sampled: **06/01/2021**
Date Received: **06/03/2021**

Laboratory ID: **WF03019-013**
Matrix: **Aqueous**

Volatile Organic Compounds by GC/MS

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	5030B	8260D	1	06/08/2021 2123	JDF		94828

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
tert-Amyl alcohol (TAA)	75-85-4	8260D	ND		20	8.0	ug/L	1
tert-Amyl methyl ether (TAME)	994-05-8	8260D	ND		10	0.42	ug/L	1
Benzene	71-43-2	8260D	ND		1.0	0.40	ug/L	1
tert-Butyl formate (TBF)	762-75-4	8260D	ND		5.0	2.0	ug/L	1
1,2-Dichloroethane	107-06-2	8260D	ND		1.0	0.40	ug/L	1
Diisopropyl ether (IPE)	108-20-3	8260D	ND		1.0	0.40	ug/L	1
3,3-Dimethyl-1-butanol	624-95-3	8260D	ND		20	8.0	ug/L	1
Ethanol	64-17-5	8260D	ND		100	52	ug/L	1
Ethylbenzene	100-41-4	8260D	ND		1.0	0.40	ug/L	1
Ethyl-tert-butyl ether (ETBE)	637-92-3	8260D	ND		1.0	0.40	ug/L	1
Methyl tertiary butyl ether (MTBE)	1634-04-4	8260D	ND		1.0	0.40	ug/L	1
Naphthalene	91-20-3	8260D	ND		1.0	0.40	ug/L	1
tert-butyl alcohol (TBA)	75-65-0	8260D	ND		20	0.40	ug/L	1
Toluene	108-88-3	8260D	ND		1.0	0.40	ug/L	1
Xylenes (total)	1330-20-7	8260D	ND		1.0	0.40	ug/L	1

Surrogate	Q	Run 1 % Recovery	Acceptance Limits
1,2-Dichloroethane-d4		90	70-130
Toluene-d8		103	70-130
Bromofluorobenzene		97	70-130

LOQ = Limit of Quantitation
ND = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL
Q = Surrogate failure
L = LCS/LCSD failure
S = MS/MSD failure

QC Summary

Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ94828-001
Batch: 94828
Analytical Method: 8260D

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	8.0	ug/L	06/08/2021 1940
tert-Amyl methyl ether (TAME)	ND		1	10	0.42	ug/L	06/08/2021 1940
Benzene	ND		1	1.0	0.40	ug/L	06/08/2021 1940
tert-Butyl formate (TBF)	ND		1	5.0	2.0	ug/L	06/08/2021 1940
1,2-Dichloroethane	ND		1	1.0	0.40	ug/L	06/08/2021 1940
Diisopropyl ether (IPE)	ND		1	1.0	0.40	ug/L	06/08/2021 1940
3,3-Dimethyl-1-butanol	ND		1	20	8.0	ug/L	06/08/2021 1940
Ethanol	ND		1	100	52	ug/L	06/08/2021 1940
Ethylbenzene	ND		1	1.0	0.40	ug/L	06/08/2021 1940
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.40	ug/L	06/08/2021 1940
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	06/08/2021 1940
Naphthalene	ND		1	1.0	0.40	ug/L	06/08/2021 1940
tert-butyl alcohol (TBA)	ND		1	20	0.40	ug/L	06/08/2021 1940
Toluene	ND		1	1.0	0.40	ug/L	06/08/2021 1940
Xylenes (total)	ND		1	1.0	0.40	ug/L	06/08/2021 1940

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		102	70-130
Bromofluorobenzene		96	70-130

LOQ = Limit of Quantitation
DL = Detection Limit

ND = Not detected at or above the DL
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ94828-002
Batch: 94828
Analytical Method: 8260D

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	920		1	92	70-130	06/08/2021 1834
tert-Amyl methyl ether (TAME)	50	48		1	95	70-130	06/08/2021 1834
Benzene	50	45		1	90	70-130	06/08/2021 1834
tert-Butyl formate (TBF)	250	250		1	99	70-130	06/08/2021 1834
1,2-Dichloroethane	50	44		1	89	70-130	06/08/2021 1834
Diisopropyl ether (IPE)	50	47		1	94	70-130	06/08/2021 1834
3,3-Dimethyl-1-butanol	1000	900		1	90	70-130	06/08/2021 1834
Ethanol	5000	4200		1	84	70-130	06/08/2021 1834
Ethylbenzene	50	49		1	99	70-130	06/08/2021 1834
Ethyl-tert-butyl ether (ETBE)	50	47		1	95	70-130	06/08/2021 1834
Methyl tertiary butyl ether (MTBE)	50	47		1	93	70-130	06/08/2021 1834
Naphthalene	50	46		1	93	70-130	06/08/2021 1834
tert-butyl alcohol (TBA)	1000	900		1	90	70-130	06/08/2021 1834
Toluene	50	51		1	101	70-130	06/08/2021 1834
Xylenes (total)	100	100		1	102	70-130	06/08/2021 1834

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		96	70-130
Bromofluorobenzene		98	70-130

LOQ = Limit of Quantitation
DL = Detection Limit

ND = Not detected at or above the DL
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: WQ94828-003
Batch: 94828
Analytical Method: 8260D

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	940		1	94	3.1	70-130	20	06/08/2021 1857
tert-Amyl methyl ether (TAME)	50	49		1	98	2.7	70-130	20	06/08/2021 1857
Benzene	50	46		1	91	2.1	70-130	20	06/08/2021 1857
tert-Butyl formate (TBF)	250	250		1	99	0.26	70-130	20	06/08/2021 1857
1,2-Dichloroethane	50	46		1	91	2.9	70-130	20	06/08/2021 1857
Diisopropyl ether (IPE)	50	48		1	97	3.5	70-130	20	06/08/2021 1857
3,3-Dimethyl-1-butanol	1000	950		1	95	4.9	70-130	20	06/08/2021 1857
Ethanol	5000	4600		1	92	9.0	70-130	20	06/08/2021 1857
Ethylbenzene	50	50		1	100	1.6	70-130	20	06/08/2021 1857
Ethyl-tert-butyl ether (ETBE)	50	49		1	97	2.6	70-130	20	06/08/2021 1857
Methyl tertiary butyl ether (MTBE)	50	47		1	95	1.7	70-130	20	06/08/2021 1857
Naphthalene	50	47		1	93	0.50	70-130	20	06/08/2021 1857
tert-butyl alcohol (TBA)	1000	920		1	92	2.9	70-130	20	06/08/2021 1857
Toluene	50	51		1	101	0.20	70-130	20	06/08/2021 1857
Xylenes (total)	100	100		1	103	1.4	70-130	20	06/08/2021 1857

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		87	70-130
Toluene-d8		97	70-130
Bromofluorobenzene		99	70-130

LOQ = Limit of Quantitation
DL = Detection Limit
ND = Not detected at or above the DL
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - MB

Sample ID: WQ94840-001
Batch: 94840
Analytical Method: 8260D

Matrix: Aqueous
Prep Method: 5030B

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
tert-Amyl alcohol (TAA)	ND		1	20	8.0	ug/L	06/08/2021 2139
tert-Amyl methyl ether (TAME)	ND		1	10	0.42	ug/L	06/08/2021 2139
Benzene	ND		1	1.0	0.40	ug/L	06/08/2021 2139
tert-Butyl formate (TBF)	ND		1	5.0	2.0	ug/L	06/08/2021 2139
1,2-Dichloroethane	ND		1	1.0	0.40	ug/L	06/08/2021 2139
Diisopropyl ether (IPE)	ND		1	1.0	0.40	ug/L	06/08/2021 2139
3,3-Dimethyl-1-butanol	ND		1	20	8.0	ug/L	06/08/2021 2139
Ethanol	ND		1	100	52	ug/L	06/08/2021 2139
Ethylbenzene	ND		1	1.0	0.40	ug/L	06/08/2021 2139
Ethyl-tert-butyl ether (ETBE)	ND		1	1.0	0.40	ug/L	06/08/2021 2139
Methyl tertiary butyl ether (MTBE)	ND		1	1.0	0.40	ug/L	06/08/2021 2139
Naphthalene	ND		1	1.0	0.40	ug/L	06/08/2021 2139
tert-butyl alcohol (TBA)	ND		1	20	0.40	ug/L	06/08/2021 2139
Toluene	ND		1	1.0	0.40	ug/L	06/08/2021 2139
Xylenes (total)	ND		1	1.0	0.40	ug/L	06/08/2021 2139

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		85	70-130
Toluene-d8		106	70-130
Bromofluorobenzene		108	70-130

LOQ = Limit of Quantitation
DL = Detection Limit

ND = Not detected at or above the DL
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCS

Sample ID: WQ94840-002
Batch: 94840
Analytical Method: 8260D

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	%Rec Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	970		1	97	70-130	06/08/2021 1951
tert-Amyl methyl ether (TAME)	50	42		1	84	70-130	06/08/2021 1951
Benzene	50	50		1	100	70-130	06/08/2021 1951
tert-Butyl formate (TBF)	250	240		1	97	70-130	06/08/2021 1951
1,2-Dichloroethane	50	44		1	88	70-130	06/08/2021 1951
Diisopropyl ether (IPE)	50	50		1	101	70-130	06/08/2021 1951
3,3-Dimethyl-1-butanol	1000	1100		1	107	70-130	06/08/2021 1951
Ethanol	5000	4700		1	93	70-130	06/08/2021 1951
Ethylbenzene	50	50		1	100	70-130	06/08/2021 1951
Ethyl-tert-butyl ether (ETBE)	50	44		1	89	70-130	06/08/2021 1951
Methyl tertiary butyl ether (MTBE)	50	42		1	83	70-130	06/08/2021 1951
Naphthalene	50	54		1	107	70-130	06/08/2021 1951
tert-butyl alcohol (TBA)	1000	890		1	89	70-130	06/08/2021 1951
Toluene	50	51		1	103	70-130	06/08/2021 1951
Xylenes (total)	100	100		1	101	70-130	06/08/2021 1951

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		89	70-130
Toluene-d8		105	70-130
Bromofluorobenzene		101	70-130

LOQ = Limit of Quantitation
DL = Detection Limit

ND = Not detected at or above the DL
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Volatile Organic Compounds by GC/MS - LCSD

Sample ID: WQ94840-003
Batch: 94840
Analytical Method: 8260D

Matrix: Aqueous
Prep Method: 5030B

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	%Rec Limit	% RPD Limit	Analysis Date
tert-Amyl alcohol (TAA)	1000	1000		1	101	4.0	70-130	20	06/08/2021 2027
tert-Amyl methyl ether (TAME)	50	46		1	92	8.9	70-130	20	06/08/2021 2027
Benzene	50	51		1	101	1.7	70-130	20	06/08/2021 2027
tert-Butyl formate (TBF)	250	270		1	107	9.9	70-130	20	06/08/2021 2027
1,2-Dichloroethane	50	45		1	91	2.6	70-130	20	06/08/2021 2027
Diisopropyl ether (IPE)	50	52		1	104	3.5	70-130	20	06/08/2021 2027
3,3-Dimethyl-1-butanol	1000	1100		1	110	3.2	70-130	20	06/08/2021 2027
Ethanol	5000	5100		1	102	8.5	70-130	20	06/08/2021 2027
Ethylbenzene	50	51		1	101	0.65	70-130	20	06/08/2021 2027
Ethyl-tert-butyl ether (ETBE)	50	48		1	96	7.6	70-130	20	06/08/2021 2027
Methyl tertiary butyl ether (MTBE)	50	45		1	90	7.1	70-130	20	06/08/2021 2027
Naphthalene	50	55		1	109	2.1	70-130	20	06/08/2021 2027
tert-butyl alcohol (TBA)	1000	950		1	95	6.5	70-130	20	06/08/2021 2027
Toluene	50	52		1	103	0.57	70-130	20	06/08/2021 2027
Xylenes (total)	100	100		1	102	0.67	70-130	20	06/08/2021 2027

Surrogate	Q	% Rec	Acceptance Limit
1,2-Dichloroethane-d4		92	70-130
Toluene-d8		105	70-130
Bromofluorobenzene		101	70-130

LOQ = Limit of Quantitation
DL = Detection Limit

ND = Not detected at or above the DL
J = Estimated result < LOQ and ≥ DL
* = RSD is out of criteria

N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody
and
Miscellaneous Documents

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Telephone No. 803-791-9700 Fax No. 803-791-9111
www.pacelabs.com

Number 121694

Client: Kleen Sites Geoservices	Report to Contact: Bill Dunnagan	Telephone No. / Email: (803) 479-9291 / bill@kleensites.com	Quote No.
Address: 2047 Industrial Blvd.	Sampler's Signature: x [signature]	Analysis (Attach list if more space is needed)	Page 1 of 2
City: Lexington; State: SC; Zip Code: 29072	Printed Name: Bill Dunnagan		WF03019
Project Name: Hwy 501 Amoco			LJO
Project No.: 21533	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Collection Date(s)	Collection Time (Military)	Gallons Collected	Matrix: Aqueous	Matrix: Soil	Matrix: Air	No of Containers by Preservative Type: Unpreserved	HCl	HNO3	H2SO4	NaOH	NaOH/ZnAc	Other Preservative	BTEX / NAPH / MTBE	1,2-DCA / OXYGENATES	Remarks / Cooler I.D.
RW-1	6/1/21	1115	6	✓						3				✓	✓	
RW-1 DUP	6/1/21	1120	6	✓						3				✓	✓	
TW-1	6/1/21	1140	6	✓						3				✓	✓	
MW-2	6/1/21	1145	6	✓						3				✓	✓	
MW-8	6/1/21	1155	6	✓						3				✓	✓	
TW-2	6/1/21	1215	6	✓						3				✓	✓	
MW-11	6/1/21	1220	6	✓						3				✓	✓	
MW-12	6/1/21	1230	6	✓						3				✓	✓	
MW-13	6/1/21	1240	6	✓						3				✓	✓	
MW-16	6/1/21	1250	6	✓						3				✓	✓	

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☑ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☑ Disposal by Lab

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by [signature]	6/2/21	1112	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by [signature]	6/2/21	1112

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) Yes No Ice Pack
Receipt Temp. 2-8 °C
Temp Blank ☑ Y ☐ N

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: ME003N2-01

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www.pacelabs.com

Number 121693

Client: Kleen Sites Geoservices	Report to Contact: Bill Dunnagan	Telephone No. / E-mail: (803) 479-9291 / bille kleensites.com	Quote No.
Address: 2047 Industrial Blvd	Sampler's Signature: X [signature]	Analysis (Attach list if more space is needed)	Page 2 of 2
City: Lexington; State: SC; Zip Code: 29072	Printed Name: Bill Dunnagan		WF03019
Project Name: Hwy 501 Amoco			LJO
Project No.: 21533	P.O. No.		

Sample ID / Description (Containers for each sample may be combined on one line.)	Collection Date(s)	Collection Time (Military)	Grab / Composite	Matrix: Aqueous	Matrix: Soil	Matrix: Non-Aqueous	No of Containers by Preservative Type: Unpres	HCl	HNO3	NaOH	NaOH	2000 NI	Fine Filtered	BTEX/NAPH/MTBE	1,2-DCA/OXYGENATES	Remarks / Cooler I.D.
MW-7	6/1/21	1300	6	✓						3				✓	✓	
Field Blank	6/1/21	1310	6	✓						3				✓	✓	
Trip Blank	6/1/21		6	✓						1				✓	✓	

Turn Around Time Required (Prior lab approval required for expedited TAT.): ☑ Standard ☐ Rush (Specify)

Sample Disposal: ☐ Return to Client ☑ Disposal by Lab

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison ☐ Unknown

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished by [signature]	6/2/21	1112	1. Received by		
2. Relinquished by			2. Received by		
3. Relinquished by			3. Received by		
4. Relinquished by			4. Laboratory received by [signature]	6/2/21	1112

Note: All samples are retained for four weeks from receipt unless other arrangements are made.

LAB USE ONLY
Received on Ice (Circle) (Yes) No Ice Pack — Receipt Temp. 2.8 °C — Temp Blank ☑ Y ☐ N

DISTRIBUTION: WHITE & YELLOW-Return to laboratory with Sample(s); PINK-Field/Client Copy

Document Number: ME003N2-01

Pace Analytical

Samples Receipt Checklist (SRC) (ME0018C-15)
Issuing Authority: Pace ENV - WCOL

Revised:9/29/2020
Page 1 of 1

Sample Receipt Checklist (SRC)

Client: KLEEN SITES Cooler Inspected by/date: JSH / 06/03/2021 Lot #: WP03019

Means of receipt: ☑ Pace ☐ Client ☐ UPS ☐ FedEx ☐ Other:

☐ Yes	☑ No		1. Were custody seals present on the cooler?
☐ Yes	☐ No	☑ NA	2. If custody seals were present, were they intact and unbroken?

pH Strip ID: NA Chlorine Strip ID: NA Tested by: NA

Original temperature upon receipt / Derived (Corrected) temperature upon receipt %Solid Snap-Cup ID: NA

2.8 / 2.8 °C NA / NA °C NA / NA °C NA / NA °C

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☐ Yes	☐ No	☑ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?
☑ Yes	☐ No		13. Was adequate sample volume available?
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☑ Yes	☐ No	☐ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼" or 6mm in diameter) in any of the VOA vials?
☐ Yes	☐ No	☑ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_3/TKN/cyanide/phenol/625.1/608.3 (< 0.5mg/L) samples free of residual chlorine?
☐ Yes	☐ No	☑ NA	20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc...) correctly transcribed from the COC into the comment section in LIMS?
☐ Yes	☑ No		21. Was the quote number listed on the container label? If yes, Quote #

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) NA were received incorrectly preserved and were adjusted accordingly in sample receiving with NA mL of circle one: H2SO4, HNO3, HCl, NaOH using SR # NA. Time of preservation NA. If more than one preservative is needed, please note in the comments below.

Sample(s) RW-1(2), RW-1 DUP(2) were received with bubbles >6 mm in diameter.

Samples(s) NA were received with TRC > 0.5 mg/L (If #19 is *no*) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: NA.

SR barcode labels applied by: JSH Date: 06/03/2021

Comments:

APPENDIX C

DISPOSAL MANIFEST

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of

3. Emergency Response Phone

4. Waste Tracking Number

5. Generator's Name and Mailing Address
DANNY TODD
1121 SIMONTON DRIVE, WATKINSVILLE, GA 30677
Generator's Phone: (803) 236-8643

Generator's Site Address (if different than mailing address)
FORMER 501 AMOCO
1432 HWY 501
MYRTLE BEACH, SC

6. Transporter 1 Company Name
VERCO
U.S. EPA ID Number

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
REGULATORY SOLUTIONS
40 PASCON COURT, GASTON, SC 29053
Facility's Phone: (803) 926-0089
U.S. EPA ID Number

	9. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	NON-HAZARDOUS WASTE WELL PURGE WATER			10	GAL	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Bill Dunnagan
Signature: [signature] SIGNED AS A CONSULTANT ON BEHALF OF FORMER 501 AMOCO
Month 06 Day 04 Year 21

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Elvin Diaz Fagard
Signature: [signature]
Month 6 Day 4 Year 21

Transporter 2 Printed/Typed Name
Signature
Month Day Year

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: Jason Chiorazzi
Signature: [signature]
Month 6 Day 4 Year 21

GENERATOR | INT'L | TRANSPORTER | DESIGNATED FACILITY

6-NHM-C-SO-1158

2-DESIGNATED FACILITY TO GENERATOR

Contractor Checklist

For each report submitted to the UST Management Division, the contractor will be required to verify that all data elements for the required scope of work have been provided. For items not required for the scope of work, the N/A box should be checked. For items required and not completed or provided, the No box should be checked and a thorough description of the reason must be provided.

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

Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk Evaluation)			✓
29	Have the exposure pathways been analyzed? (Tier 2 Risk Evaluation)			✓
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 Risk Evaluation)			✓
31	Have recommendations for further action been provided and explained?	✓		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)			✓
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)	✓		
34	Has the current and historical laboratory data been provided in tabular format?	✓		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			✓
36	Have the Site conceptual model tables been included? (Tier 1 Risk Evaluation)			✓
37	Has the topographic map been provided with all required elements? (Figure 1)	✓		
38	Has the site base map been provided with all required elements? (Figure 2)	✓		
39	Have the CoC site maps been provided? (Figure 3 & Figure 4)	✓		
40	Has the site potentiometric map been provided? (Figure 5)	✓		
41	Have the geologic cross-sections been provided? (Figure 6)			✓
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			✓
43	Has the site survey been provided and include all necessary elements? (Appendix A)	✓		
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements? (Appendix B)	✓		
45	Is the laboratory performing the analyses properly certified?	✓		
46	Has the tax map been included with all necessary elements? (Appendix C)			✓
47	Have the soil boring/field screening logs been provided? (Appendix D)			✓
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)			✓
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)			✓
50	Have the disposal manifests been provided? (Appendix G)	✓		
51	Has a copy of the local zoning regulations been provided? (Appendix H)			✓
52	Has all fate and transport modeling been provided? (Appendix I)			✓
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			✓
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided?	✓		

Explanation for missing and incomplete information?

dhec
Healthy People. Healthy Communities.



DANNY TODD
HUCKS PLAZA
1121 SIMONTON DRIVE
WATKINSVILLE GA 30677

JUN 30 2021

Re: **Site Specific Work Plan Request for Well Installation & Aggressive Fluid Vapor Recovery**
501 Amoco, 1432 Hwy. 501, Myrtle Beach, SC
UST Permit #05156
Release #1 reported December 31, 1991
Monitoring Report received June 16, 2021
Horry County

Dear Danny Todd :

The Underground Storage Tank Management Division (UST Division) of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the referenced report submitted by your contractor. The report documents petroleum chemicals in the soil and groundwater above Risk-Based Screening Levels.

To determine what risk the referenced release may pose to human health and the environment, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations, implementation of recovery well installation followed by Aggressive Fluid and Vapor Recovery (AFVR) is necessary. This work must be conducted in accordance with the most recent revision of the UST Quality Assurance Program Plan (QAPP), your contractor's Annual Contractor Quality Assurance Plan, and in compliance with all applicable regulations. A copy of the UST QAPP is available at scdhec.gov/environment/land-waste/underground-storage-tanks/release-assessment-clean/quality-assurance.

Three recovery wells should be installed according to the attached site map. The wells should be screened from the 3-13 feet. After these wells are installed and developed, one 96-hour AFVR event should be conducted on all the RW-1 through RW-5 and MW-3.

Your contractor must complete and submit the Site Specific Work Plan and Cost Proposal within 30 days from the date of this letter. Every component may not be necessary to complete the above scope of work. The State Underground Petroleum Environmental Response Bank Account allowable cost for each component is included on the Assessment Component Cost Agreement Form. **Please note that approval from DHEC must be issued before work begins**.

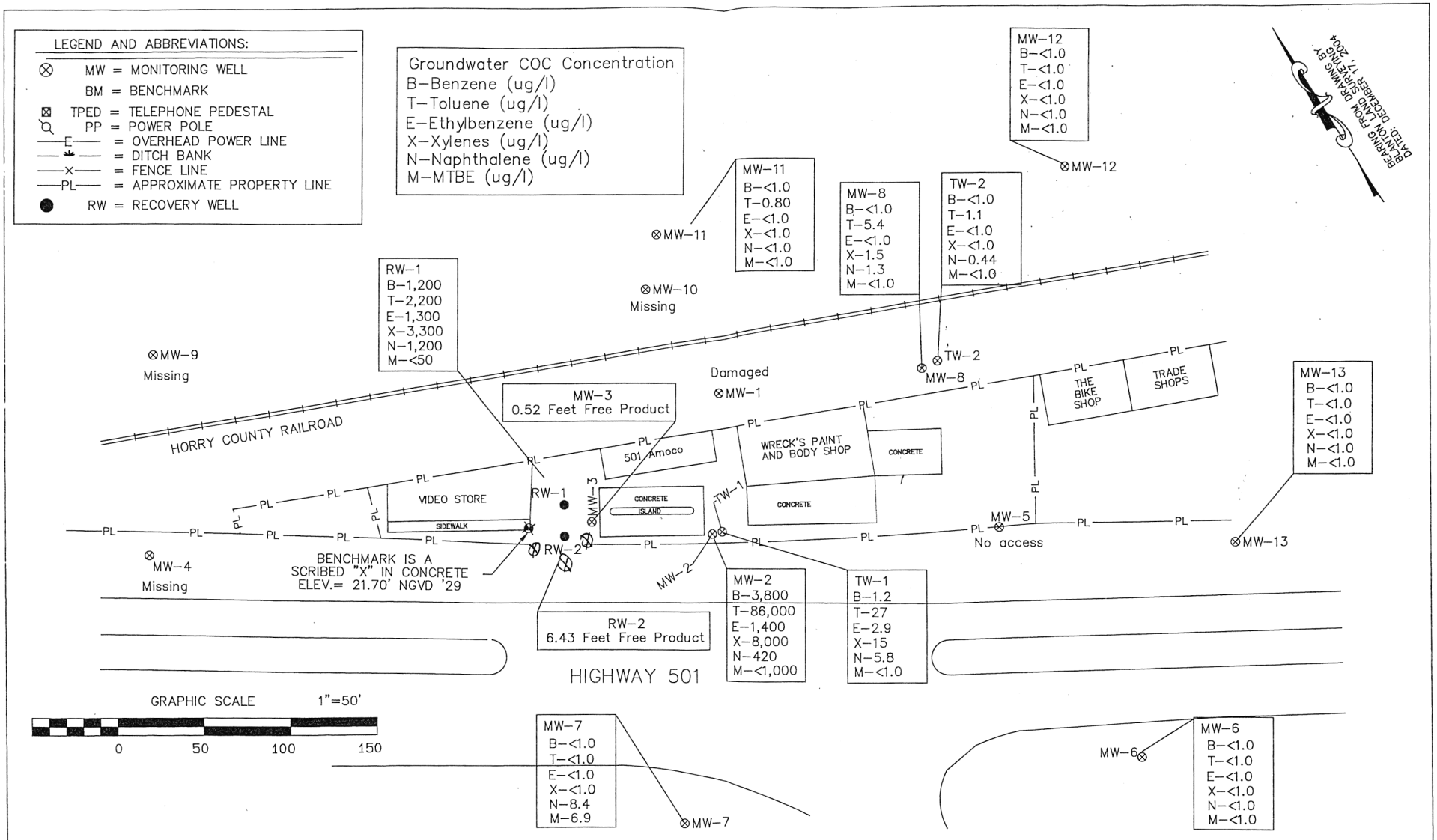
On all correspondence regarding this site, please reference UST Permit number referenced above. Should you have any questions regarding this correspondence, please feel free to contact me by phone at (803) 898-7705, by fax at (803) 898-0673, or by e-mail at wykeljm@dhec.sc.gov.

Sincerely,

Matt Wykel, Hydrogeologist
Corrective Action & Field Support Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Site Map with proposed well locations

cc: Kleen Sites Geoservices, Inc., 2047 Industrial Blvd., Lexington, SC 29445 (W/enc.)
Technical file (w/ enc)



FORMER 501 AMOCO 1432 Hwy 501 Myrtle Beach, South Carolina	FIGURE 7 GROUNDWATER CONTAMINANT OF CONCERN CONCENTRATION MAP	KLEEN SITES GEOSERVICES, INC. 2047 Industrial Blvd. Lexington, South Carolina

KLEEN SITES GEOSERVICES, INC.
ENVIRONMENTAL SERVICES

August 6, 2021

RECEIVED
AUG 09 2021
8-9-21
UST DIVISION

Mr. Matt Wykel, Hydrogeologist
South Carolina Department of Health and Environmental Control
Bureau of Land & Waste Management
UST Management Division
2600 Bull Street
Columbia, South Carolina 29201

UST
72
DOCKETING

Re: Submittal of Site-Specific Work Plan and Cost Agreement
Former 501 Amoco
1432 Hwy. 501
Myrtle Beach, Horry County, SC
UST Permit # 05156

Dear Mr. Wykel:

I have enclosed one copy of a Site-Specific Work Plan and Cost Proposal for the installation of three recovery wells and the performance of one 96-hour Aggressive Fluid Vapor Recovery event at the former 501 Amoco site located in Myrtle Beach, South Carolina. Please contact me at (803) 479-9291 or by email at bill@kleensites.com if you have any questions concerning the enclosed Work Plan or if you need any additional information.

Sincerely,

Kleen Sites Geoservices, Inc.

Bill Dunnagan, P.G.
Principal Geologist

Enclosure

2047 Industrial Blvd., Lexington, SC 29072
(803) 996-0637 (803) 996-0638 (Fax)
www.kleensites.com

D H E C
PROMOTE PROTECT PROSPER

Site-Specific Work Plan for Approved ACQAP
Underground Storage Tank Management Division

To: Matt Wykel (SCDHEC Project Manager)
From: Bill Dunnagan (Contractor Project Manager)
Contractor: Kleen Sites Geoservices, Inc. UST Contractor Certification Number: 8

Facility Name: Former 501 Amoco UST Permit #: 05156
Facility Address: 1432 Hwy 501, Myrtle Beach, SC 29566
Responsible Party: Mr. Danny Todd Phone: (803) 236-8643
RP Address: 1121 Simonton Drive, Watkinsville, GA 30677
Property Owner (if different): same
Property Owner Address: same
Current Use of Property: Used Automobile Sales

Scope of Work (Please check all that apply)

☐ IGWA ☐ Tier II ☐ Groundwater Sampling ☐ GAC
☐ Tier I ☑ Monitoring Well Installation ☑ Other 96-hour AFVR Event

Analyses (Please check all that apply)

Groundwater/Surface Water:

☐ BTEXNMDCA (8260B) ☐ Lead ☐ BOD ☐ Methane
☐ Oxygenates (8260B) ☐ 8 RCRA Metals ☐ Nitrate ☐ Ethanol
☐ EDB (8011) ☐ TPH ☐ Sulfate ☐ Dissolved Iron
☐ PAH (8270D) ☐ pH ☐ Other

Soil:

☐ BTEXN ☐ 8 RCRA Metals ☐ TPH-DRO (3550B/8015B) ☐ Grain Size
☐ PAH ☐ Oil & Grease (9071) ☐ TPH-GRO (5030B/8015B) ☐ TOC

Air:

☐ BTEXN

Sample Collection (Estimate the number of samples of each matrix that are expected to be collected.)

_____ Soil _____ Water Supply Wells _____ Air _____ Field Blank
_____ Monitoring Wells _____ Surface Water _____ Duplicate _____ Trip Blank

Field Screening Methodology

Estimate number and total completed depth for each point, and include their proposed locations on the attached map.

# of shallow points proposed: _____ Estimated Footage: _____ feet per point
# of deep points proposed: _____ Estimated Footage: _____ feet per point
Field Screening Methodology: Field screening is not required for this scope of work.

Permanent Monitoring Wells

Estimate number and total completed depth for each well, and include their proposed locations on the attached map.

# of shallow wells: _____ Estimated Footage: _____ feet per point
# of deep wells: _____ Estimated Footage: _____ feet per point
# of recovery wells: 3 Estimated Footage: 13 feet per point
Monitoring Well development method (consistent with SOP): _____
Comments, if warranted:
Three 4-inch diameter free phase product recovery wells will be installed in the areas shown on the attached figure. Each well will be 13 feet in total depth and screened from 3 - 13 feet.

UST Permit #: 05156 Facility Name: Former 501 Amoco

Implementation Schedule (Number of calendar days from approval)
Field Work Start-Up: 30 Field Work Completion: 6
Report Submittal: 90 # of Copies Provided to Property Owners: 1

Aquifer Characterization
Pump Test: ☐ Slug Test: ☐ (Check one and provide explanation below for choice)
Aquifer characterization is not required for this scope of work.

Investigation Derived Waste Disposal
Soil: 1 (well install) Tons Purge Water: 75 (well install / development) Gallons
Drilling Fluids: _____ Gallons Free-Phase Product: _____ Gallons

Additional Details For This Scope of Work
For example, list wells to be sampled, wells to be abandoned/repaired, well pads/bolts/caps to replace, details of AFVR event, etc.
Three 4-inch diameter free phase product recovery wells will be installed in the areas shown on the attached figure. Each well will be 13 feet in total depth and screened from 3 - 13 feet. Following well installation and development, one 96-hour AFVR event will be performed on recovery wells RW-1, RW-2, RW-3, RW-4, RW-5 and MW-3.

Compliance With Annual Contractor Quality Assurance Plan (ACQAP)
____ Laboratory as indicated in ACQAP? (Yes/No) If no, indicate laboratory information below.
Name of Laboratory: _____
SCDHEC Certification Number: _____
Name of Laboratory Director: _____

Yes Well Driller as indicated in ACQAO? (Yes/No) If no, indicate driller information below.
Name of Well Driller: Jason Chiorazzi
SCLLR Certification Number: 1790B

____ Other variations from ACQAP. Please describe below.

Attachments
1. Attach a copy of the relevant portion of the USGS topographic map showing the site location.
2. Prepare a site base map. This map must be accurately scaled, but does not need to be surveyed. The map must include the following:
   - North Arrow
   - Location of property lines
   - Location of buildings
   - Previous soil sampling locations
   - Previous monitoring well locations
   - Proposed soil boring locations
   - Proposed monitoring well locations
   - Legend with facility name and address, UST permit number, and bar scale
   - Streets or highways (indicate names and numbers)
   - Location of all present and former ASTs and USTs
   - Location of all potential receptors
3. Assessment Component Cost Agreement, SCDHEC Form D-3664

Healthy People. Healthy Communities.

ASSESSMENT COMPONENT COST AGREEMENT
SOUTH CAROLINA
Department of Health and Environmental Control
Underground Storage Tank Management Division
State Underground Petroleum Environmental Response Bank Account
January 1, 2020

Facility Name: Former 501 Amoco

UST Permit #: 05156 **Cost Agreement #:** _____

ITEM	QUANTITY	UNIT	UNIT PRICE		TOTAL
A. **Plan Preparation**					
1. Site-specific Work Plan	1	each	$160.05		$160.05
2. Tax Map		each	$74.69		$0.00
3. Tier II or Comp. Plan /QAPP Appendix B		each	$250.00		$0.00
B. **Receptor Survey ***		each	$587.92		$0.00
C. **Survey (500 ft x 500 ft)**					
1. Comprehensive Survey		each	$1,109.68		$0.00
Subsurface Geophysical Survey					
2. < 10 meters below grade		each	$1,387.10		$0.00
3. > 10 meters below grade		each	$2,464.77		$0.00
4. Geophysical UST or Drum Survey		each	$970.97		$0.00
D. **Mob/Demob**					
1. Equipment (I)	1	each	$1,088.34		$1,088.34
2. Personnel (I,P,Q)	3	each	$451.34		$1,354.02
3. Adverse Terrain Vehicle		each	$533.50		$0.00
E.. **Soil Borings (hand auger)***		foot	$5.34		$0.00
F. **Soil Borings (requiring equipment, push technology, etc) or Field Screening (including water ssample, soil sample, soil gas sample, etc.)***					
1. Standard		per foot	$16.01		$0.00
2. Fractured Rock		per foot	$21.55		$0.00
G. **Soil Leachability Model**		each	$64.02		$0.00
H. **Abandonment (per foot)***					
1. 2" diameter or less		per foot	$3.31		$0.00
2. Greater than 2" to 6" diameter		per foot	$4.80		$0.00
3. Dug/Bored well (up to 6 feet diameter)		per foot	$16.00		$0.00
I. **Well Installation (per foot)***					
1. Water Table (hand augered)		per foot	$11.31		$0.00
2. Water Table (drill rig) 2" Diameter		per foot	$40.55		$0.00
3. Telescoping		per foot	$53.35		$0.00
4. Rock Drilling		per foot	$61.89		$0.00
5. 2" Rock Coring		per foot	$32.97		$0.00
6. Rock Multi-sampling ports/screens		per foot	$35.64		$0.00
7. Recovery Well (4" diameter)	39	per foot	$48.02		$1,872.78
8. Pushed Pre-packed screen (1.25" dia)		per foot	$16.01		$0.00
9. Rotosonic (2" diameter)		per foot	$46.95		$0.00

10. Re-develop Existing Well		per foot	$11.74		$0.00
J. **Groundwater Sample Collection / Gauge Depth to Water or Product ***					
1. Groundwater Purge		per well	$64.02		$0.00
2. Air or Vapors		sample	$12.80		$0.00
3. Water Supply Sample or Duplicate		sample	$23.47		$0.00
4. Groundwater No Purge or Duplicate or Grab		sample	$29.88		$0.00
5. Gauge Well only		sample	$7.47		$0.00
6. Sample Below Product		sample	$12.80		$0.00
7. Passive Diffusion Bag		sample	$27.74		$0.00
8. Field Blank		sample	$26.25		$0.00
9. Groundwater (low flow purge)		sample	$97.10		$0.00
10. Equipment Blank		sample	$26.25		$0.00
K. Laboratory Analyses-Groundwater					
1. BTEXNM+Oxyg's+1,2 DCA+Eth(8260B)		per sample	$130.17		$0.00
2. Lead, Filtered		per sample	$14.72		$0.00
3. Rush EPA Method 8260B		per sample	$163.89		$0.00
4. Trimethal, Butyl, and Isopropyl Benzenes		per sample	$29.88		$0.00
5. PAH's		per sample	$64.66		$0.00
6. Lead		per sample	$17.07		$0.00
7. EDB by EPA 8011		per sample	$48.23		$0.00
8. EDB by EPA Method 8011 Rush		per sample	$72.77		$0.00
9. 8 RCRA Metals		per sample	$67.65		$0.00
10. TPH (9070)		per sample	$43.75		$0.00
11. PH		per sample	$5.55		$0.00
12. BOD		per sample	$21.34		$0.00
13. Ethanol		per sample	$15.79		$0.00
K. Analyses-Drinking Water					
14. BTEXNM+1,2 DCA (524.2)		per sample	$132.36		$0.00
15. 7-OXYGENATES & ETHANOL (8260B)		per sample	$97.90		$0.00
16. EDB (504.1)		per sample	$84.83		$0.00
17. RCRA METALS (200.8)		per sample	$106.70		$0.00
K. **Analyses-Soil**					
18. BTEX + Naphth.		per sample	$68.29		$0.00
19. PAH's		per sample	$68.33		$0.00
20. 8 RCRA Metals		per sample	$60.18		$0.00
21. TPH-DRO (3550C/8015C)		per sample	$42.68		$0.00
22. TPH- GRO (5035B/8015C)		per sample	$38.37		$0.00
23. Grain size/hydrometer		per sample	$110.97		$0.00
24. Total Organic Carbon		per sample	$32.65		$0.00
K. **Analyses-Air**					
25. BTEX + Naphthalene		per sample	$230.47		$0.00
K. **Analyses-Free Phase Product**					
26. Hydrocarbon Fuel Identification		per sample	$380.92		$0.00
L. **Aquifer Characterization***					
1. Pumping Test		per hour	$24.54		$0.00
2. Slug Test		per test	$203.80		$0.00

3. Fractured Rock		per test	$106.70		$0.00
M. **Free Product Recovery Rate Test***		each	$40.55		$0.00
N. **Fate/Transport Modeling**					
1. Mathematical Model		each	$106.70		$0.00
2. Computer Model		each	$106.70		$0.00
O. **Risk Evaluation**					
1. Tier I Risk Evaluation		each	$320.10		$0.00
2. Tier II Risk Evaluation		each	$106.70		$0.00
P. **Subsequent Survey***	1	each	$260.00		$260.00
Q. **Disposal (gallons or tons)***					
1. Wastewater	75	gallon	$0.60		$45.00
2. Free Product		gallon	$0.53		$0.00
3. Soil Treatment/Disposal	1	ton	$64.02		$64.02
4. Drilling fluids		gallon	$0.45		$0.00
R. **Miscellaneous (attach receipts)**					
		each	$0.00		$0.00
		each	$0.00		$0.00
		each	$0.00		$0.00
T. **Tier I Assessment (Use DHEC 3665 form)**					
1. Southeast Region		standard	$11,026.00		$0.00
2. All Other Counties		standard	$12,093.00		$0.00
U. IGWA (Use DHEC 3666 form)					
1. Southeast Region		standard	$3,803.00		$0.00
2. All Other Counties		standard	$4,123.00		$0.00
22. **Corrective Action (Use DHEC 3667 form)**		PFP Bid			$0.00
W. **Aggressive Fluid & Vapor Recovery (AFVR)**					
1. 8-hour Event*		per event	$1,467.13		$0.00
2. 24-hour Event*		per event	$4,081.28		$0.00
3. 48-hour Event*		per event	$6,706.10		$0.00
4. 96-hour Event*	1	per event	$13,409.52		$13,409.52
5. Off-gas Treatment 8 hour		per event	$130.71		$0.00
6. Off-gas Treatment 24 hour		per event	$257.68		$0.00
7. Off-gas Treatment 48 hour		per event	$348.91		$0.00
8. Off-gas Treatment 96 hour	1	per event	$832.26		$832.26
9. Off-gas Treatment 8 hour (w/chlorinated compounds)		per event	$430.00		$0.00
10. Off-gas Treatment 24 hour (w/chlorinated compounds)		per event	$500.00		$0.00
11. Off-gas Treatment 48 hour (w/chlorinated compounds)		per event	$1,000.00		$0.00
12. Off-gas Treatment 96 hour (w/chlorinated compounds)		per event	$2,000.00		$0.00
13. AFVR Effluent Disposal(w/chlorinated compounds)		gallon	$0.50		$0.00
14. AFVR Site Reconnaissance	1	each	$216.87		$216.87
15. Additional Hook-ups	3	each	$27.48		$82.44
16. AFVR Effluent Disposal	10000	gallon	$0.47		$4,700.00
17. AFVR Mobilization/Demobilization	1	each	$417.73		$417.73
X. **Granulated Activated Carbon (GAC) filter system installation & service:**					
1. New GAC System Installation*		each	$2,027.30		$0.00
2. Refurbished GAC Sys. Install*		each	$960.30		$0.00

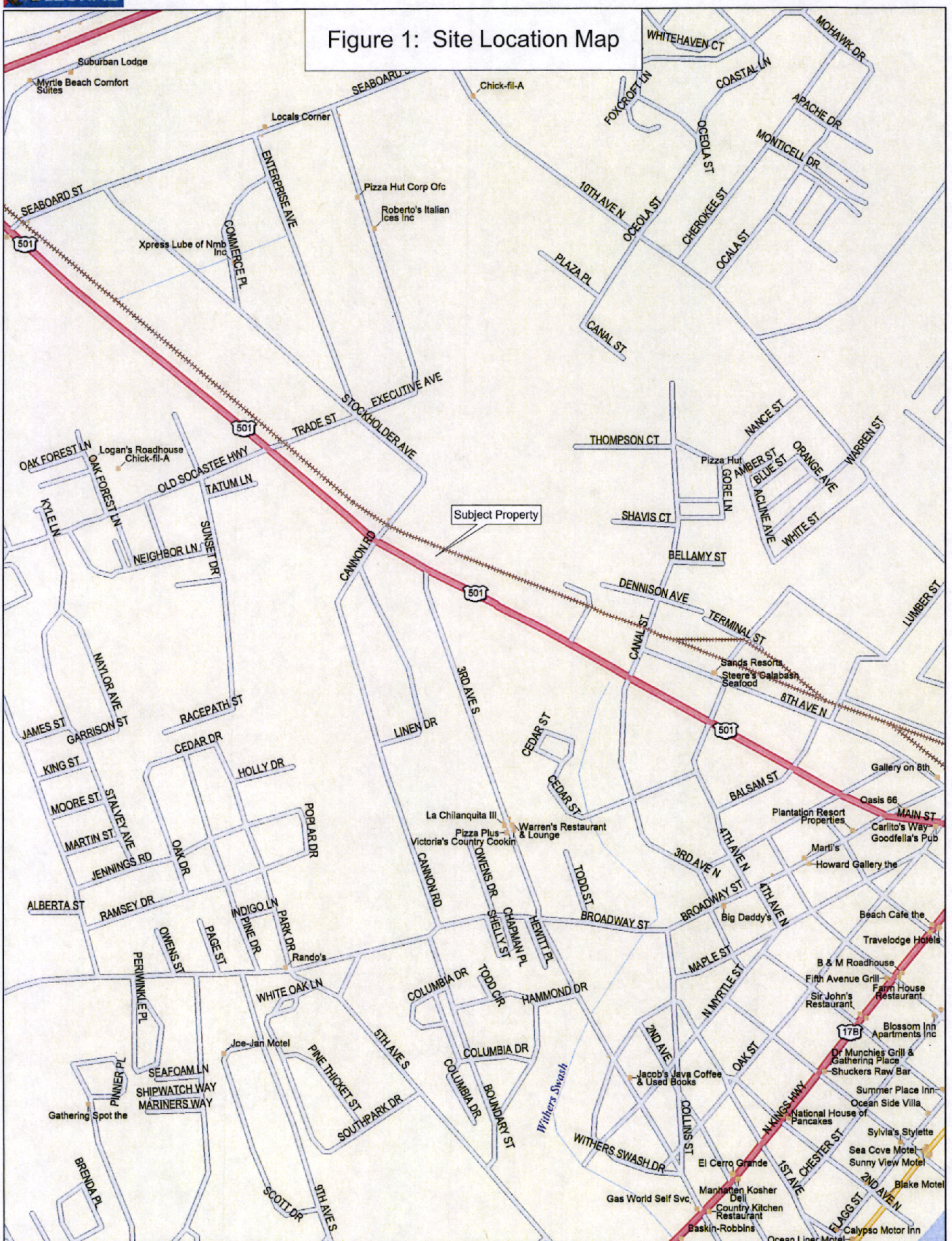
3. Filter replacement/removal*		each	$373.45		$0.00
4. GAC System removal, cleaning, & refurbishment*		each	$293.43		$0.00
5. GAC System housing*		each	$266.75		$0.00
6. In-line particulate filter		each	$160.05		$0.00
7. Additional piping & fittings		foot	$1.60		$0.00
Y. **Well Repair**					
1. Additional Copies of the Report Delivered		each	$53.35		$0.00
2. Repair 2x2 MW pad*		each	$53.35		$0.00
3. Repair 4x4 MW pad*		each	$93.90		$0.00
4. Replace well vault*		each	$125.91		$0.00
5. Replace well cover bolts		each	$2.77		$0.00
6. Replace locking well cap & lock		each	$16.00		$0.00
7. Replace/Repair stick-up*		each	$142.98		$0.00
8. Convert Flush-mount to Stick-up*		each	$160.05		$0.00
9. Convert Stick-up to Flush-mount*		each	$138.71		$0.00
10. Replace missing/illegible well ID plate		each	$12.80		$0.00
S. Report Prep & Project Management	12%	percent	$24,503.03		$2,940.36
TOTAL					$27,443.39

DHEC D-4074 (1-2020) *The appropriate mobilization cost can be added to complete these tasks, as necessary

DeLORME

Street Atlas USA® 2006

Figure 1: Site Location Map



Data use subject to license.
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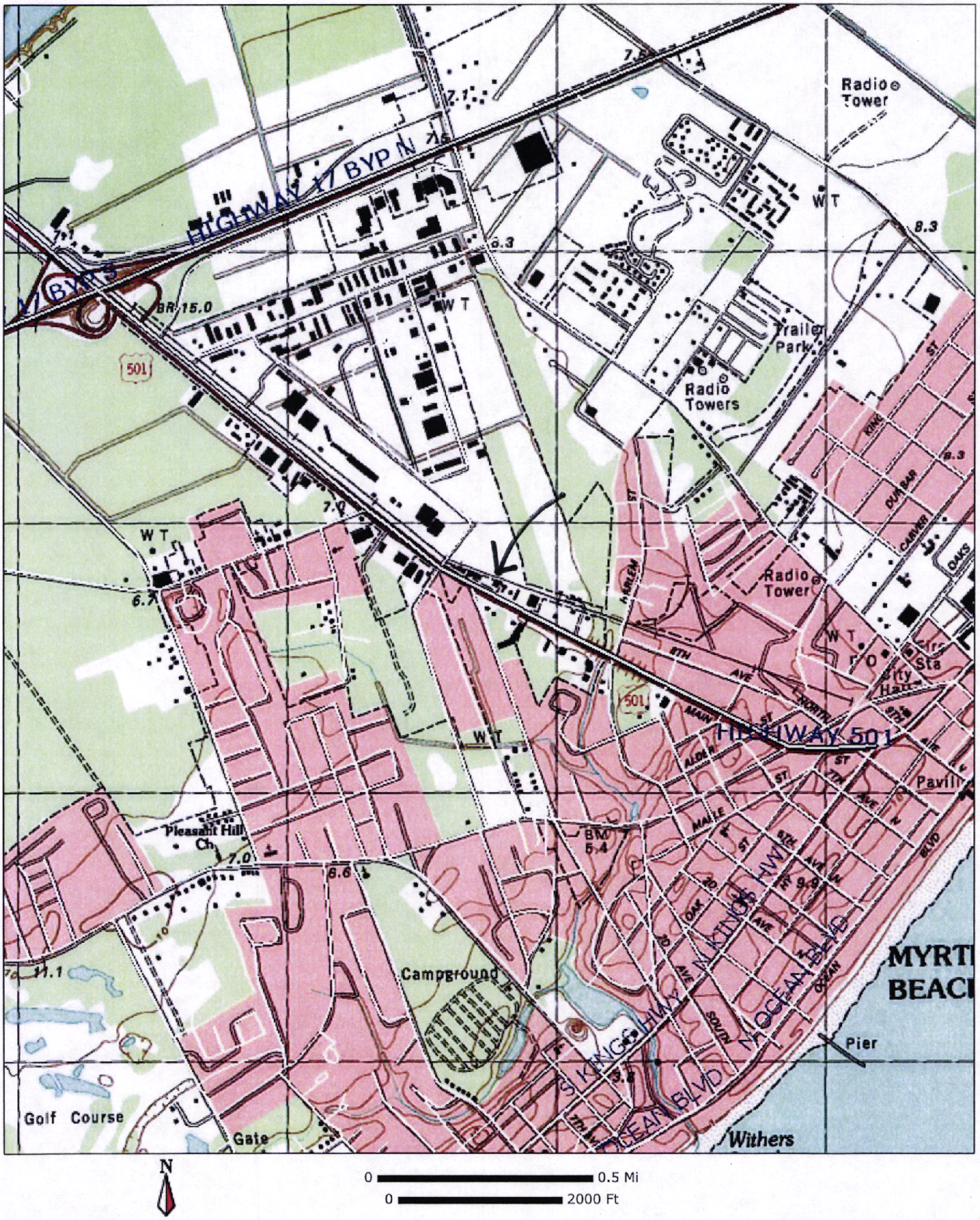
www.delorme.com

TN
MN (8.6°W)

Scale 1 : 12,800

1" = 1,066.7 ft

Data Zoom 14-0



HIGHWAY 17 BYP N
17 BYP S
BR 15.0
501
Radio Tower
W T
Trailer Park
Radio Towers
Radio Tower
W T
HIGHWAY 501
Pleasant Hill Ch
Campground
Golf Course
Gate
Pier
Withers
MYRT
BEAC
N
0 0.5 Mi
0 2000 Ft

LEGEND AND ABBREVIATIONS:

⊗ MW = MONITORING WELL

BM = BENCHMARK

—E— = OVERHEAD POWER LINE

— ⚘ — = DITCH BANK

—x— = FENCE LINE

—PL— = APPROXIMATE PROPERTY LINE

● RW = RECOVERY WELL

○ = PROPOSED RECOVERY WELLS

BEARING FROM LAND SURVEYING BY BLANTON DECEMBER 17, 2004 DATED:

⊗MW-12

⊗MW-11

⊗MW-10

⊗MW-9

HORRY COUNTY RAILROAD

TW-2

⊗⊗MW-8

⊗MW-1

PL

THE BIKE SHOP

TRADE SHOPS

501 Amoco

WRECK'S PAINT AND BODY SHOP

CONCRETE

VIDEO STORE

RW-1

MW-3

CONCRETE ISLAND

SIDEWALK

RW-2

TW-1

CONCRETE

MW-5

Missing

⊗MW-4

BENCHMARK IS A SCRIBED "X" IN CONCRETE ELEV.= 21.70' NGVD '29

PROPOSED RECOVERY WELLS

MW-2

⊗MW-13

HIGHWAY 501

GRAPHIC SCALE 1"=50'

0 50 100 150

⊗MW-6

⊗MW-7

FORMER 501 AMOCO 1432 Hwy 501 Myrtle Beach, South Carolina	FIGURE 3 PROPOSED RECOVERY WELL LOCATIONS	KLEEN SITES GEOSERVICES, INC. 2047 Industrial Blvd. Lexington, South Carolina

dhec
Healthy People. Healthy Communities.

SEP 09 2021

UST 13 Hucks DOCKETING

DANNY TODD
HUCKS PLAZA
1121 SIMONTON DR
WATKINSVILLE GA 30677

Re: **Aggressive Fluid and Vapor Recovery (AFVR) and Well Installation Notice to Proceed**
501 Amoco, 1432 Hwy. 501, Myrtle Beach, SC
UST Permit #05156; CA #64332; UMW-28609
Release reported December 31, 1991
Monitoring Report received June 16, 2021
Horry County

Dear Mr. Danny Todd:

The Underground Storage Tank (UST) Management Division of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the above referenced report which documents free-phase product (FPP) or Chemicals of Concern (COC) in the subsurface as a result of the above referenced release.

In accordance with Section 280.64 of the South Carolina Underground Storage Tank Control Regulations, a recovery well installation and an Aggressive Fluid and Vapor Recovery (AFVR) event may proceed immediately upon receipt of this letter as outlined in this directive and the current revision of the UST Quality Assurance Program Plan (QAPP). One 96-hour event as described in the SSWP should be performed. The stingers shall be lowered at six inch intervals starting at the water table interface to a target depth of 11.5 feet in the wells. **Please be aware that the AFVR Procedures have been updated.** Please advance to the target depth within the first eight (8) hours of the event. Thereafter, the stinger should be adjusted to achieve the highest vapor recovery while maintaining dewatering of the smear zone. Off-gas treatment will be necessary. A copy of the current revision of the DHEC QAPP for the Underground Storage Tank Division is available at https://scdhec.gov/environment/land-waste/underground-storage-tanks/release-assessment-clean/quality-assurance.

As soon as the beginning date of the event has been scheduled, please contact me at wykeljm@dhec.sc.gov.

The AFVR Report should be submitted within 90 days from the date of this correspondence. Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Any site rehabilitation activity associated with the UST release must be performed by a DHEC-certified site rehabilitation contractor as required by R.61-98.

Your contractor can submit an invoice for direct payment from the State Underground Petroleum Environmental Response Bank (SUPERB) Account for pre-approved costs. By law, the SUPERB Account cannot compensate any costs that are not pre-approved. If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

Please note that Sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that no costs will be allowed unless prior approval is obtained from the UST Management Division. If for any reason additional tasks will be completed, these additional tasks and the associated cost must be preapproved by DHEC for the cost to be paid. DHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, DHEC reserves the right to question and/or reject costs if deemed unreasonable and the right to audit project records at any time during the project or after completion of work.

DHEC grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. The transport and disposal must be conducted in accordance with the QAPP. If the CoC concentrations based on laboratory analysis are below RBSLs, please contact the project manager for approval to dispose of soil and/or groundwater on site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

On all correspondence concerning this site, please reference UST Permit #05156. If there are any questions concerning this project, feel free to contact me by telephone at (803) 898-7705, by fax at (803) 898-0673, or by e-mail at wykeljm@dhec.sc.gov.

Sincerely,

Matt Wykel, Hydrogeologist
Corrective Action & Field Support
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: Approved Cost Agreement

cc: Kleen Sites Geoservices, Inc., 2047 Industrial Blvd., Lexington, SC 29072 (w/enc.)
Technical file (w/enc.)

Healthy People. Healthy Communities.

Monitoring Well Approval

Approval is granted to: Kleen Sites Geoservices, Inc.
On behalf of: Huck's Plaza
Facility: 501 Amoco, 1432 Hwy. 501, Myrtle Beach, SC
UST Permit: #05156
County: Horry

This approval is for the installation of three Recovery wells. The Recovery wells are to be installed in the approved locations. All wells are to be installed following the South Carolina Well Standards, R.61-71, and the applicable guidance documents.

Please note that R.61-71 requires the following:

1. All wells shall be drilled, constructed, and abandoned by a South Carolina certified well driller per R.61-71.D.1.
2. All monitoring wells shall be labeled as required by R.61-71.H.2.c.
3. A Water Well Record Form or other form provided or approved by the UST Division shall be completed and submitted to the UST Division within 30 days after well completion or abandonment unless another schedule has been approved by the UST Division. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f
4. All analytical data and water levels obtained from each monitoring well shall be submitted to the UST Division within 30 days of receipt of laboratory results unless another schedule has been approved by the UST Division as required by R.61-71.H.1.d.
5. If any of the information provided to the UST Division changes, notification to Matt Wykel, the project manager (phone: (803) 898-7705 or email: wykeljm@dhec.sc.gov) shall be provided a minimum of twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.
6. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c. All other wells shall be properly developed per R.61-71.H.2.d.
7. UST Division approval is required prior to abandonment of all monitoring wells as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 South Carolina Code of Laws and R.61-71 of the South Carolina Well Standards and Regulations, dated May 27, 2016. A copy of this approval should be on the site during well installation.

Date of Issuance: August 31, 2021 **Approval #: UMW-28609**

Matt Wykel, Hydrogeologist
Corrective Action & Field Support Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

Approved Cost Agreement 64332

Facility: 05156 501 AMOCO
WYKELJM
PO Number:

Task / Description Categories	Item Description	Qty / Pct	Unit Price	Amount
A PLAN PREPARATION				
	1 SITE SPECIFIC WORK PLAN	1.0000	$160.050	160.05
D MOB/DEMOB				
	1 EQUIPMENT	1.0000	$1,088.340	1,088.34
	2 PERSONNEL	3.0000	$451.340	1,354.02
I WELL INSTALLATION				
	7 RECOVERY WELL (4" DIAMETER)	39.0000	$48.020	1,872.78
P SUBSEQUENT SURVEY				
	P SUBSEQUENT SURVEY	1.0000	$260.000	260.00
Q DISPOSAL				
	1 WASTEWATER	75.0000	$0.600	45.00
	3 SOIL TREATMENT DISPOSAL	1.0000	$64.020	64.02
S REPORT PROJECT MANAGEMENT				
	S REPORT PREP & PROJ. MANAGEMENT	0.1200	$26,853.030	3,222.36
W AFVR				
	14 AFVR SITE RECONNAISSANCE	1.0000	$216.870	216.87
	15 ADDITIONAL HOOK UPS	3.0000	$27.480	82.44
	16 AFVR EFFLUENT DISPOSAL	15,000.0000	$0.470	7,050.00
	17 AFVR MOB - DEMOB	1.0000	$417.730	417.73
	4 96 HOUR EVENT	1.0000	$13,409.520	13,409.52
	8 OFF GAS TREATMENT 96 HOUR	1.0000	$832.260	832.26
		Total Amount		30,075.39

Vac2 - Stephanie

KLEEN SITES GEOSERVICES, INC.

ENVIRONMENTAL SERVICES

RECEIVED
DEC 06 2021
UST DIVISION

December 2, 2021

Mr. Matt Wykel, Hydrogeologist
South Carolina Department of Health and Environmental Control
Bureau of Land & Waste Management
UST Management Division
2600 Bull Street
Columbia, South Carolina 29201

UST 74 yeels DOCKET

Re: Submittal of Recovery well Installation &
Aggressive Fluid Vapor Recovery (AFVR) Report
Former 501 Amoco
1432 Hwy. 501
Myrtle Beach, Horry County, SC
UST Permit # 05156, CA # 64332

Dear Mr. Wykel:

I have enclosed one hard copy and one electronic copy of the Recovery Well Installation & Aggressive Fluid Vapor Recovery (AFVR) Report for conducting site remediation activities at the former 501 Amoco site located in Myrtle Beach, South Carolina. Please contact me at (803) 479-9291 or by email at bill@kleensites.com if you have any questions concerning the enclosed report or if you need any additional information.

Sincerely,

Kleen Sites Geoservices, Inc.

Bill Dunnagan, P.G.
Principal Geologist

Enclosure

2047 Industrial Blvd., Lexington, SC 29072
(803) 996-0637 (803) 996-0638 (Fax)
www.kleensites.com

Recovery Well Installation & Aggressive Fluid Vapor Recovery Report

Former 501 Amoco
1432 Highway 501
Myrtle Beach, South Carolina
SCDHEC SITE # 05156

December 2, 2021

Prepared For:

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

Prepared By:

Kleen Sites Geoservices, Inc.
UST Site Rehabilitation Contractor #8
2047 Industrial Blvd.
Lexington, South Carolina 29072
(803) 996-0637

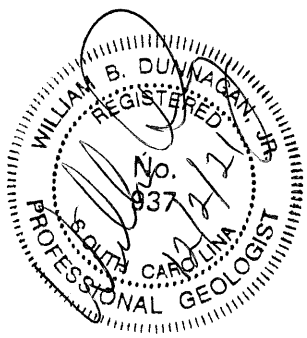
Signature Page

This document entitled "Recovery Well Installation & Aggressive Fluid Vapor Recovery Report" has been prepared for the South Carolina Department of Health and Environmental Control to describe the installation of three (3) free phase product recovery wells and the performance of one (1) 96-hour aggressive fluid vapor recovery (AFVR) event performed at the former 501 Amoco site located in Myrtle Beach, South Carolina. Site activities were conducted under the direct supervision of William B. Dunnagan, Jr. in accordance with accepted quality control practices.

KLEEN SITES GEOSERVICES, INC.

William B. Dunnagan, Jr., P.G.
South Carolina Registration # 937
Project Geologist

Seal



Recovery Well Installation & Aggressive Fluid Vapor Recovery Report

Former 501 Amoco
Myrtle Beach, South Carolina

TABLE OF CONTENTS

Section		Page
1.0	Introduction	1
	1.1 Site History	1
	1.2 Assessment Information	1
2.0	Regional & Site Specific Geology	6
3.0	Site Activities	7
	3.1 Introduction	7
	3.2 Recovery Well Installation	7
	3.3 November 2021 AFVR Event	7
	3.4 Waste Disposal	9
4.0	Recommendations	10
5.0	Appendices	13

A) Soil Boring Logs & Well Construction Summaries
B) Well Development Logs
C) Vacuum Pump & Oxidizing Unit Specifications
D) AFVR Field Data Sheets
E) Waste Disposal Manifests

SECTION 1.0

INTRODUCTION

1.1 Site History

The former 501 Amoco site (aka Huck's Plaza) is located at 1432 Highway 501 in Myrtle Beach, South Carolina (see Figures 1 & 2). The site is currently a used car lot, Amigo Auto Sales. Three underground storage tanks (USTs) were installed onsite in December 1985 and used for the storage of various petroleum products. These tanks varied from 4,000 to 6,000 gallons in size. All onsite USTs were permanently abandoned in place in October 1999.

A release of petroleum products was reported from the onsite UST system in December 1991. The site was qualified to receive financial assistance during the assessment and remediation of onsite soil and groundwater contamination from the State Underground Petroleum Environmental Response Bank (SUPERB) Fund. Numerous phases of site assessment have resulted in the onsite groundwater monitor well network as shown in Figure 3. Site activities included a Tier I Assessment performed by personnel from Southeastern Environmental, Inc. (SEI) in June of 2001 and a Tier II Assessment in April of 2004.

The presence of measurable free phase product within onsite wells has resulted in ongoing corrective action measures. Site activities implemented during the current scope of work include the installation of three free phase product recovery wells and the performance of one 96-hour aggressive fluid vapor recovery (AFVR) event. Activities implemented during the scope of work described herein were conducted by personnel from Kleen Sites Geoservices, Inc. (KSG) and Versatile Environmental Resource Company (VERCO).

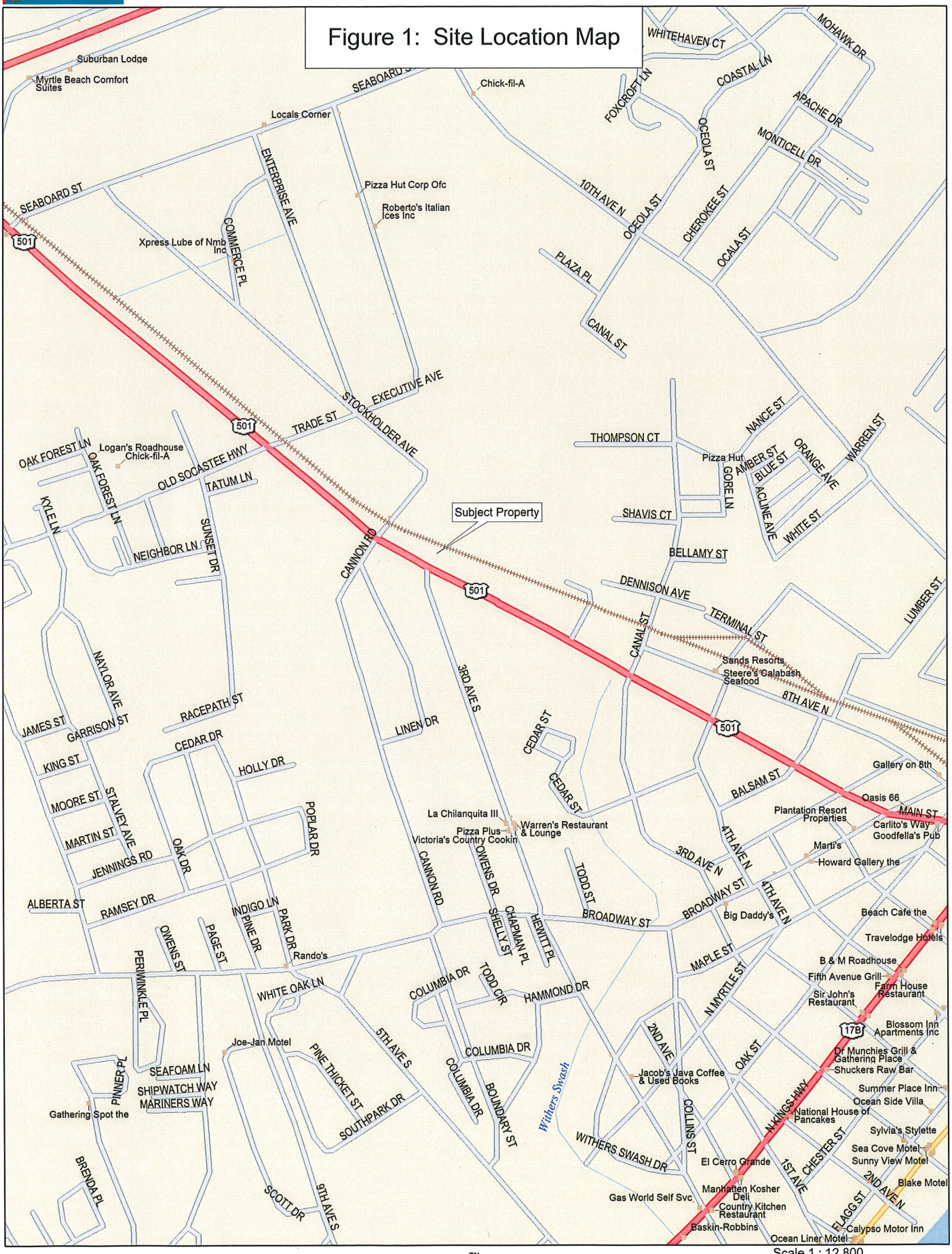
1.2 Assessment Information

Information concerning the well installation and AFVR event is as follows:

Facility Information

Facility Name	Former 501 Amoco (aka Huck's Plaza, Liam Motors, Amigo Auto Sales)
UST Permit #	05156
Address:	1432 Highway 501, Myrtle Beach, SC

Figure 1: Site Location Map



Data use subject to license.

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www.delorme.com

TN

MN (8.6°W)

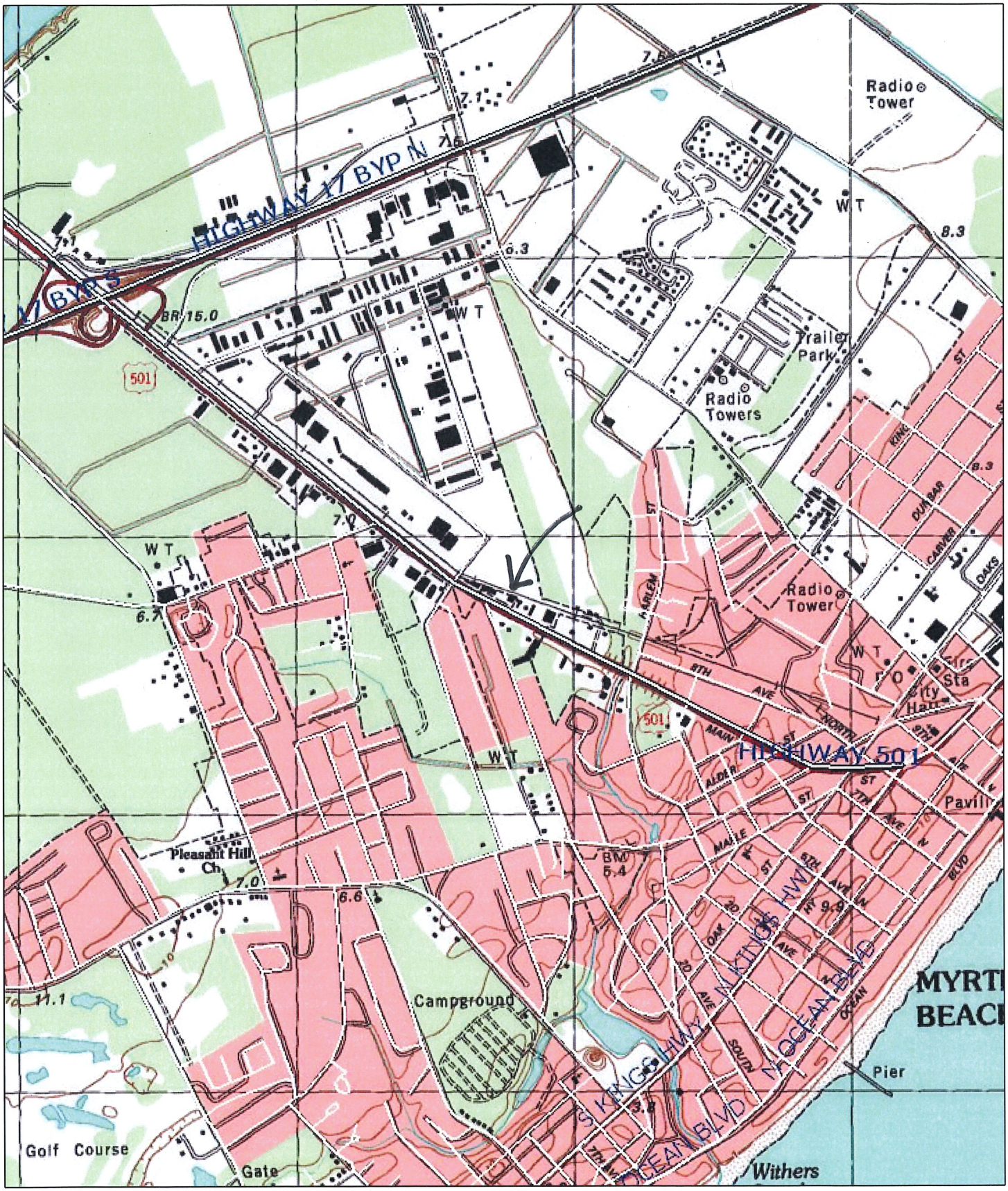
Scale 1 : 12,800

0 200 400 600 800 1000 ft

0 100 200 300 400 500 m

1" = 1,066.7 ft

Data Zoom 14-0



HIGHWAY 17 BYP N
17 BYP S
Radio Tower
Trailer Park
Radio Towers
Radio Tower
W T
BR 15.0
501
HIGHWAY 501
Pleasant Hill Ch
Campground
Golf Course
Gate
Pier
Withers
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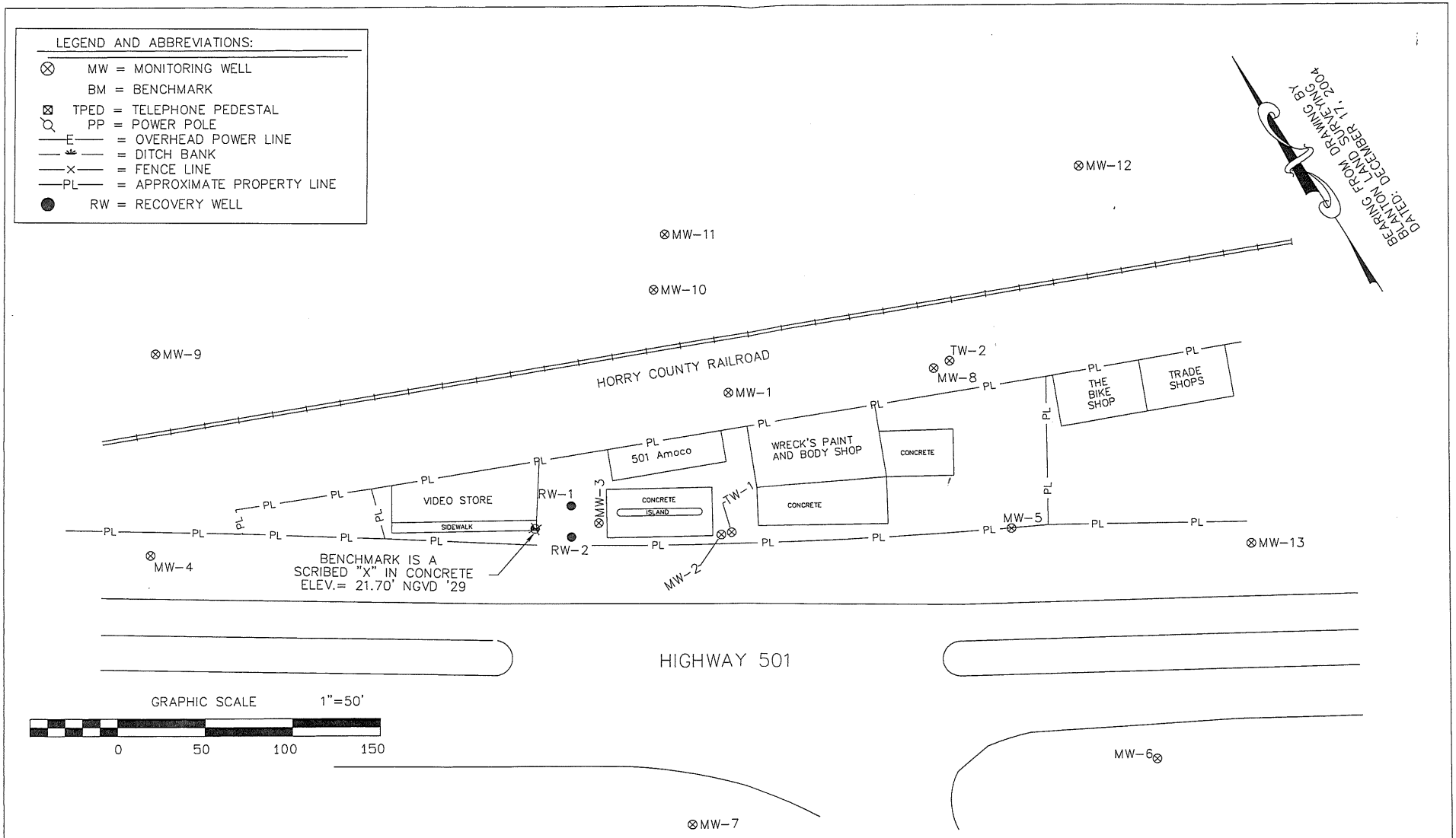


FORMER 501 AMOCO 1432 Hwy 501 Myrtle Beach, South Carolina	FIGURE 3 SITE LAYOUT MAP	KLEEN SITES GEOSERVICES, INC. 2047 Industrial Blvd. Lexington, South Carolina

Responsible Party

Owner	Mr. Danny Todd
Address:	1121 Simonton Drive, Watkinsville, GA 30677
Phone #	(803) 236-8643

SCDHEC Certified Rehabilitation Contractor

Contractor	Kleen Sites Geoservices, Inc.
Address	2047 Industrial Blvd., Lexington, SC 29072
Phone #	(803) 996-0637
Certification #	8

Drilling & AFVR Contractor

Contractor	Versatile Environmental Resource Company, Inc.
Address	2047 Industrial Blvd., Lexington, SC 29072
Phone #	(803) 429-5001
Contact #	Jason Chiorazzi (Driller's Certification #1790)

SECTION 2.0

REGIONAL & SITE SPECIFIC GEOLOGY

The subject facility is located in the Waccamaw River Sub-basin of South Carolina's Lower Coastal Plain. Lower Coastal Plan sediments consist of consolidated and unconsolidated sediments of marine and alluvial origin.

Groundwater contamination beneath the site is believed to be restricted to the uppermost water-bearing horizon. In general, this horizon would consist of a mixture of unconsolidated sand, silt and clay. Potable wells would typically extend deep into lower aquifers to provide a dependable water source.

Previous assessment activities performed by personnel from SEI and VERCO revealed the presence of medium to fine-grained, sand and clayey sand in subsurface soils. A confining clay horizon was not encountered during the soil boring process. A shallow water table is present beneath the site with the first occurrence of groundwater at less than 10 feet below ground surface.

SECTION 3.0

SITE ACTIVITIES

3.1 Introduction

Three free phase product recovery wells were installed and one 96-hour AFVR event was conducted to continue groundwater remediation efforts at the subject property. Field activities implemented during the current phase of activity at the former 501 Amoco site are described in detail within this section.

3.2 Recovery Well Installation

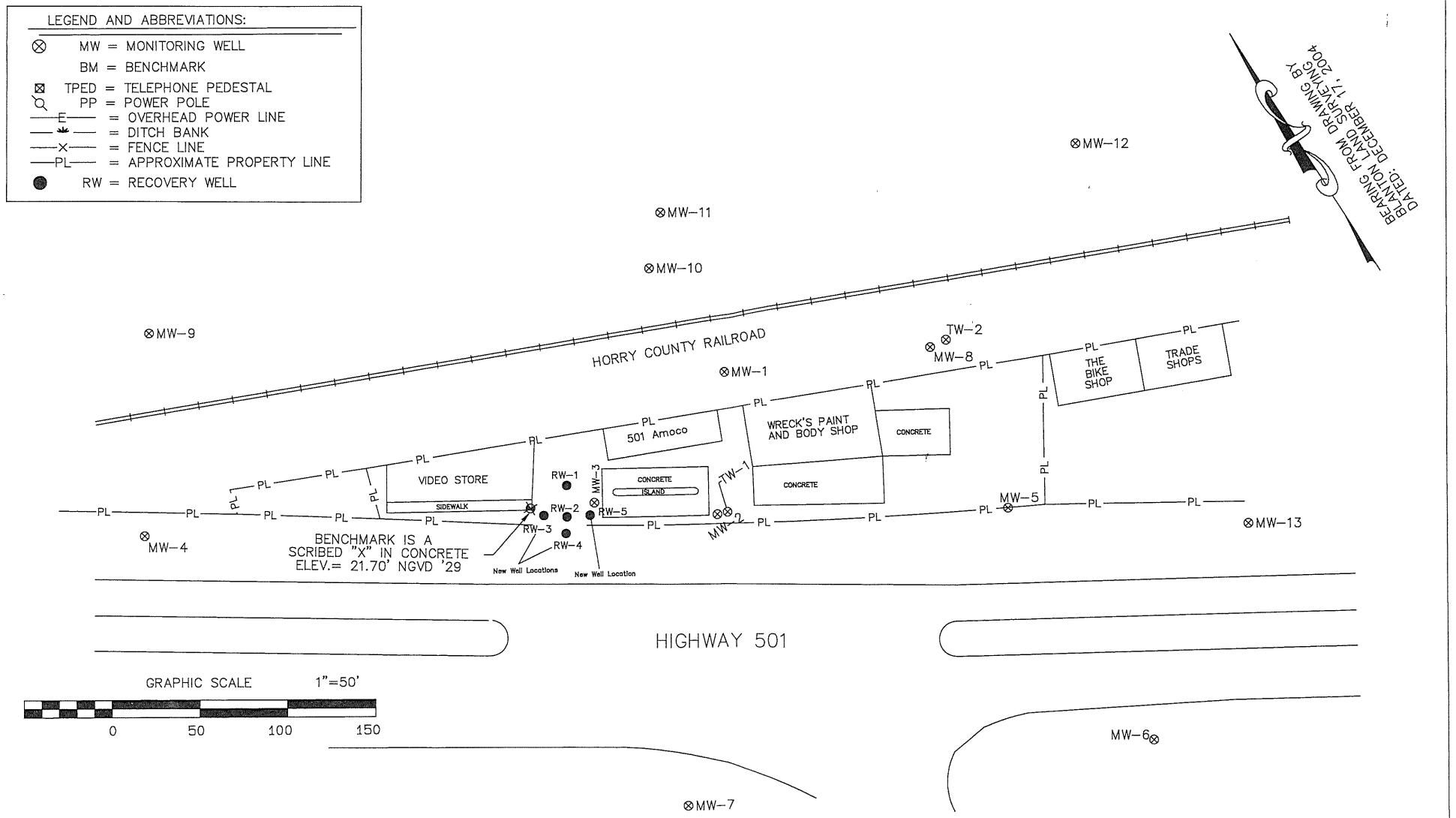
Three (3) permanent recovery wells (i.e. RW-3, RW-4 and RW-5) were installed during the current scope of work at the locations shown in Figure 4. Each well was installed by a South Carolina licensed well driller from VERCO using a track-mounted GeoProbe® rig. Well installation activities occurred on November 15, 2021. Each recovery well was constructed of 4-inch diameter PVC well screen and casing. The wells were 13 feet in total depth with a screened interval of 3 – 13 feet. Details of the newly installed recovery wells are provided in Table 1.

Drill cutting samples were collected at two foot intervals at each recovery well location from surface until the water table was encountered. Each sample was screened with a portable VOC monitor. Soil Boring Lithology Logs and Well Construction Summaries for each well installed during the current field event are presented in Appendix A.

TABLE 1
RECOVERY WELL DATA
November 2021 Field Event

Well ID #	Total Well Depth (feet)	Screened Interval (feet bgs)	Static Water Level†	Free Product Thickness	Top of Casing Elevation‡	Ground Water Elevation‡
RW-3	13.00	3 – 13	8.20	none	21.13	12.93
RW-4	13.00	3 – 13	7.95	none	21.15	13.20
RW-5	13.00	3 – 13	8.17	0.06	21.28	*13.15

Notes: † = Depth below top of casing, in feet
‡ = Elevation (based on onsite benchmark, feet)
* = Adjusted for the presence of free phase product



FORMER 501 AMOCO 1432 Hwy 501 Myrtle Beach, South Carolina	FIGURE 4 SITE LAYOUT MAP WITH NEW RECOVERY WELL LOCATIONS	KLEEN SITES GEOSERVICES, INC. 2047 Industrial Blvd. Lexington, South Carolina

3.3 Recovery Well Development

Each newly installed well was developed in an effort to remove sediment and fluids introduced to the well during the drilling process. A surge block was used to manually agitate any sediment inside the well casing. A submersible well pump was then used to pump the water / sediment mixture out of the well. The following parameters were monitored during the well development process: conductivity, pH, temperature and turbidity. The process of surging and pumping was continued in an effort to minimize the amount sediment present in the purge water. Well Development Logs are provided in Appendix B.

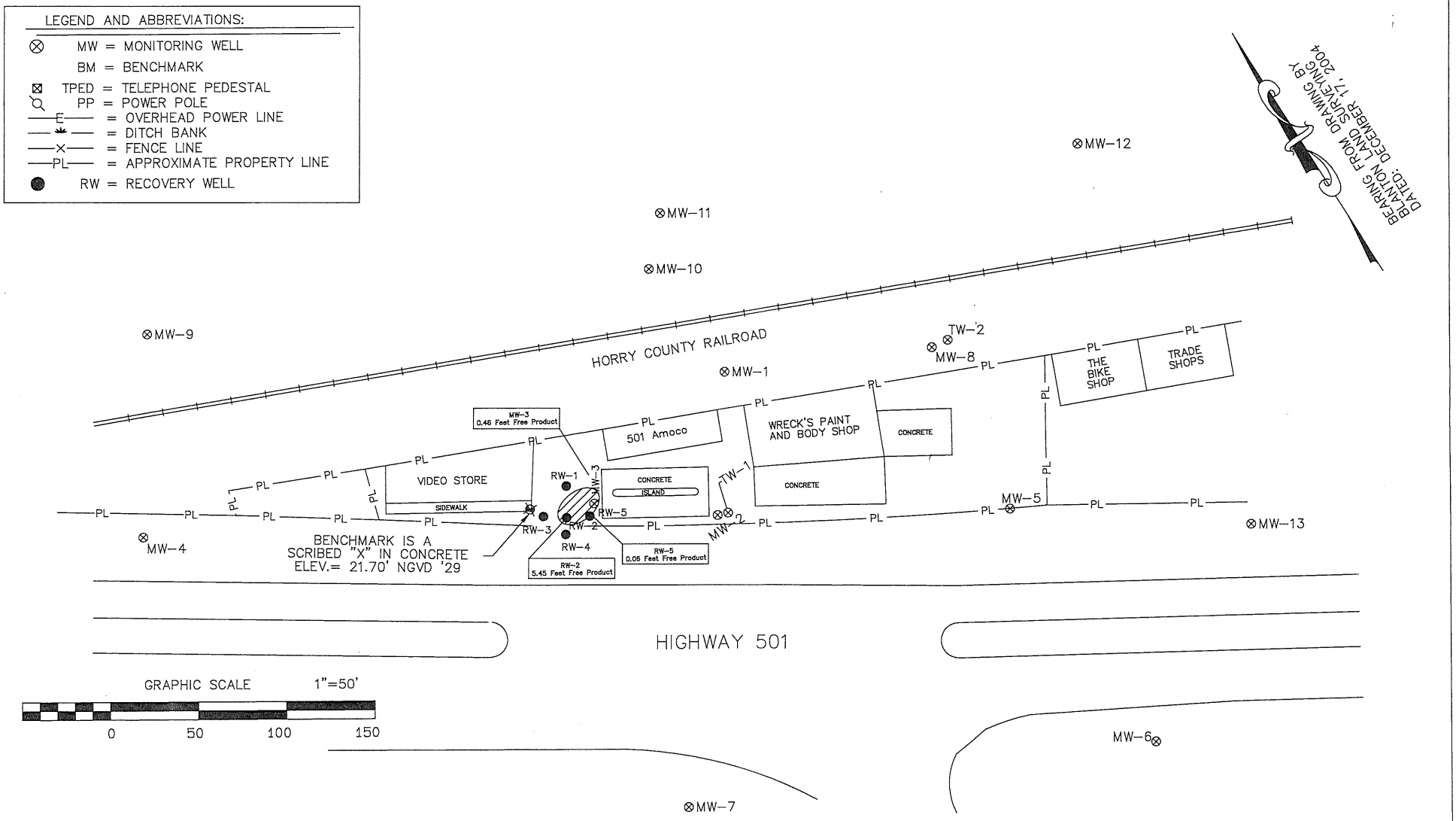
3.4 March 2019 AFVR Event

An AFVR event was conducted on Wells RW-2 and MW-3 for a total of 24 hours starting on November 15, 2021. The extraction wells were then changed to include RW-1, RW-3, RW-4 and RW-5 for the remainder of the 96-hour event (November 16-19, 2021). Site conditions ranged from sunny to cloudy with an ambient air temperature of 45 - 65° F. Prior to the beginning of the AFVR event, free phase product was detected in Wells RW-2, RW-5 and MW-3 at thicknesses of 5.45, 0.06 and 0.46 feet, respectively (see Figure 5). Free phase product was not detected in any of the extraction wells immediately following the event.

A trailer-mounted mobile multi-phase extraction (MMPE) unit equipped with a Zephyr C-VLR high efficiency claw vacuum pump and a FALCO 300 catalytic oxidizer manufactured by Falmouth Products was used during the AFVR event. The MMPE unit was operated by personnel from VERCO. The Zephyr C-VLR vacuum pump is capable of producing a flow rate of 353 cubic feet per minute at 24 inches of mercury. Pump specifications for the Zephyr C-VLR vacuum pump and FALCO 300 catalytic oxidizer unit are provided in Appendix A.

Calculated total petroleum hydrocarbons removed from Wells RW-1, RW-2, RW-3, RW-4, RW-5 and MW-3 in the vapor phase were 2,979.4 pounds or approximately 483.5 equivalent gallons. Rate of removal for the hydrocarbons was calculated to be 31.0 pounds per hour. These calculations are based on VERCO field notes of off-gas velocity, vacuum, temperature, humidity and hydrocarbon concentrations. Concentrations of off-gas produced during the event were recorded at levels ranging from 1,919 to 15,000 parts per million by volume (ppm). Well head vacuum readings ranged from 15.0 - 21.0 inches of mercury. Complete compilations of field measurements and data calculations are presented in Appendix B.

Differential pressures and static water levels were measured on observation wells RW-1 (1st 24 hours), MW-2 and MW-8. Observation well measurements are provided in Appendix B.



FORMER 501 AMOCO 1432 Hwy 501 Myrtle Beach, South Carolina	FIGURE 5 FREE PHASE PRODUCT MAP (PRIOR TO AFVR EVENT)	KLEEN SITES GEOSERVICES, INC. 2047 Industrial Blvd. Lexington, South Carolina

3.5 Waste Disposal

Four thousand nine hundred seventy (4,970) gallons of liquid were removed from Wells RW-1, RW-2, RW-3, RW-4, RW-5 and MW-3 during the November 2021 AFVR event. The liquid was transported by HERR, Inc. their facility located in Whiteville, North Carolina for disposal. Disposal manifests for the AFVR event and contaminated soil generated during well installation are provided in Appendix C of this report.

SECTION 4.0

RECOMMENDATIONS

It is recommended that additional comprehensive groundwater sampling events be conducted at the former 501 Amoco site to confirm that the current monitor well network continues to adequately define the vertical and lateral extent of the groundwater contamination plume. It appears that a significant amount of free phase product remains trapped within near-surface soils beneath the subject property. Therefore, additional AFVR events are also recommended to continue the site remediation effort.

SECTION 5.0

APPENDICES

APPENDIX A – SOIL BORING LOGS & WELL CONSTRUCTION SUMMARIES

APPENDIX B – WELL DEVELOPMENT LOGS

APPENDIX C – VACUUM PUMP & OXIDIZER SPECIFICATIONS

APPENDIX D – AFVR FIELD LOG SHEETS

APPENDIX E –WASTE DISPOSAL MANIFEST

APPENDIX A

SOIL BORING LOGS
&
WELL CONSTRUCTION SUMMARIES

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Hucks Plaza (last) (first)
Address: 1121 Simonton Dr
City: Watkinsville State: GA Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Horry
Name: 501 Amoco
Street Address: 1432 Hwy 501
City: Myrtle Beach Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 05156 **PUBLIC SYSTEM NUMBER:** RW-3

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
See Geologist's Log	13	13
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UST#05156, UMW-28609

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 13 ft. Date Started: 11/15/21 Date Completed: 11/15/21

10. CASING: ☑ Threaded ☐ Welded
Diam.: 4"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
4 in. to 3 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 4"
Slot/Gauge: 0.010 Length: 10'
Set Between: 3 ft. and 13 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 2 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) 2047 Industrial Blvd, Lexington, SC 29072
Level: A B ✓ C D (circle one)
Telephone No.: 8034295001 Fax No.:

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: _____ Well Driller Date: 11/30/21

If D Level Driller, provide supervising driller's name:

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

KLEEN SITES GEOSERVICES, INC.
2047 Industrial Blvd.
Lexington, South Carolina

FIELD BOREHOLE LOG

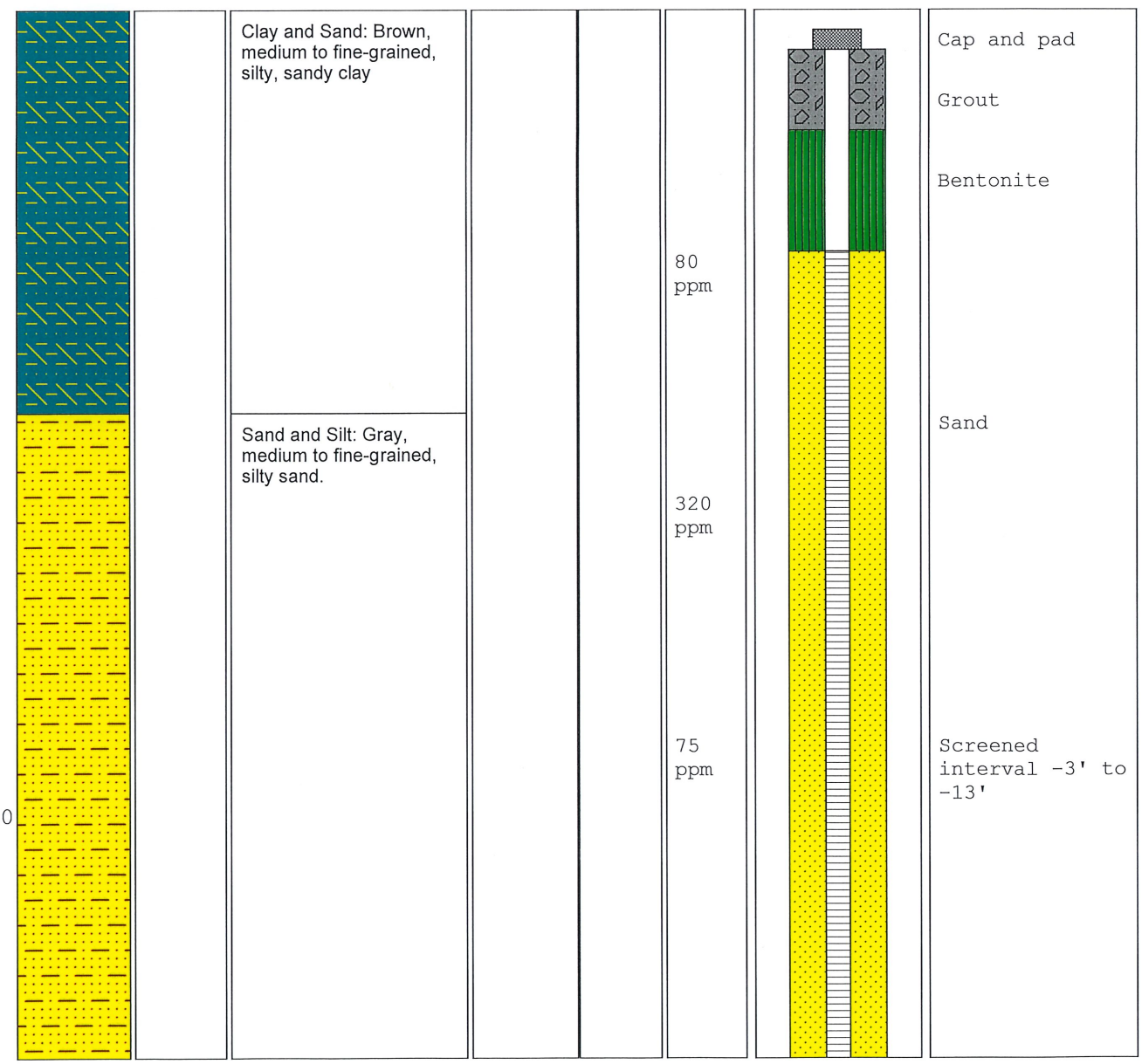
BOREHOLE NO.: **RW-3**
TOTAL DEPTH: **13"**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	**Former 501 Amoco**	DRILLING CO.:	**VERCO**
SITE LOCATION:	**Myrtle Beach**	DRILLER:	**Jason Chiorazzi**
JOB NO.:	**21714**	RIG TYPE:	**Track-mounted rig**
LOGGED BY:	**Ted Faller**	METHOD OF DRILLING:	**Hollow-stem Auger**
PROJECT MANAGER:	**Bill Dunnagan**	SAMPLING METHODS:	**Soil Cuttings**
DATES DRILLED:	**11/15/21**	HAMMER WT./DROP	**Hydraulic**

NOTES: UST ID# 05156

▽ Water level during drilling
▼ Water level in completed well

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	SAMP.	Blows / ft.	OVA ppm	BORING COMPLETION	WELL DESCRIPTION
0			Clay and Sand: Brown, medium to fine-grained, silty, sandy clay			80 ppm		Cap and pad Grout Bentonite
-5			Sand and Silt: Gray, medium to fine-grained, silty sand.			320 ppm		Sand
▼						75 ppm		Screened interval -3' to -13'
-10								



Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Hucks Plaza (last) (first)
Address: 1121 Simonton Dr
City: Watkinsville State: GA Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Horry
Name: 501 Amoco
Street Address: 1432 Hwy 501
City: Myrtle Beach Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 05156 **PUBLIC SYSTEM NUMBER:** RW-4

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
See Geologist's Log	13	13
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UST#05156, UMW-28609

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 13 ft. Date Started: 11/15/21 Date Completed: 11/15/21

10. CASING: ☑ Threaded ☐ Welded
Diam.: 4"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
4 in. to 3 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 4"
Slot/Gauge: 0.010 Length: 10'
Set Between: 3 ft. and 13 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 2 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi CERT. NO.: 1790
Address: (Print) 2047 Industrial Blvd, Lexington, SC 29072
Level: A B ✓ C D (circle one)
Telephone No.: 8034295001 Fax No.:

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: _____ (Well Driller) Date: 11/30/21

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

KLEEN SITES GEOSERVICES, INC.
2047 Industrial Blvd.
Lexington, South Carolina

FIELD BOREHOLE LOG

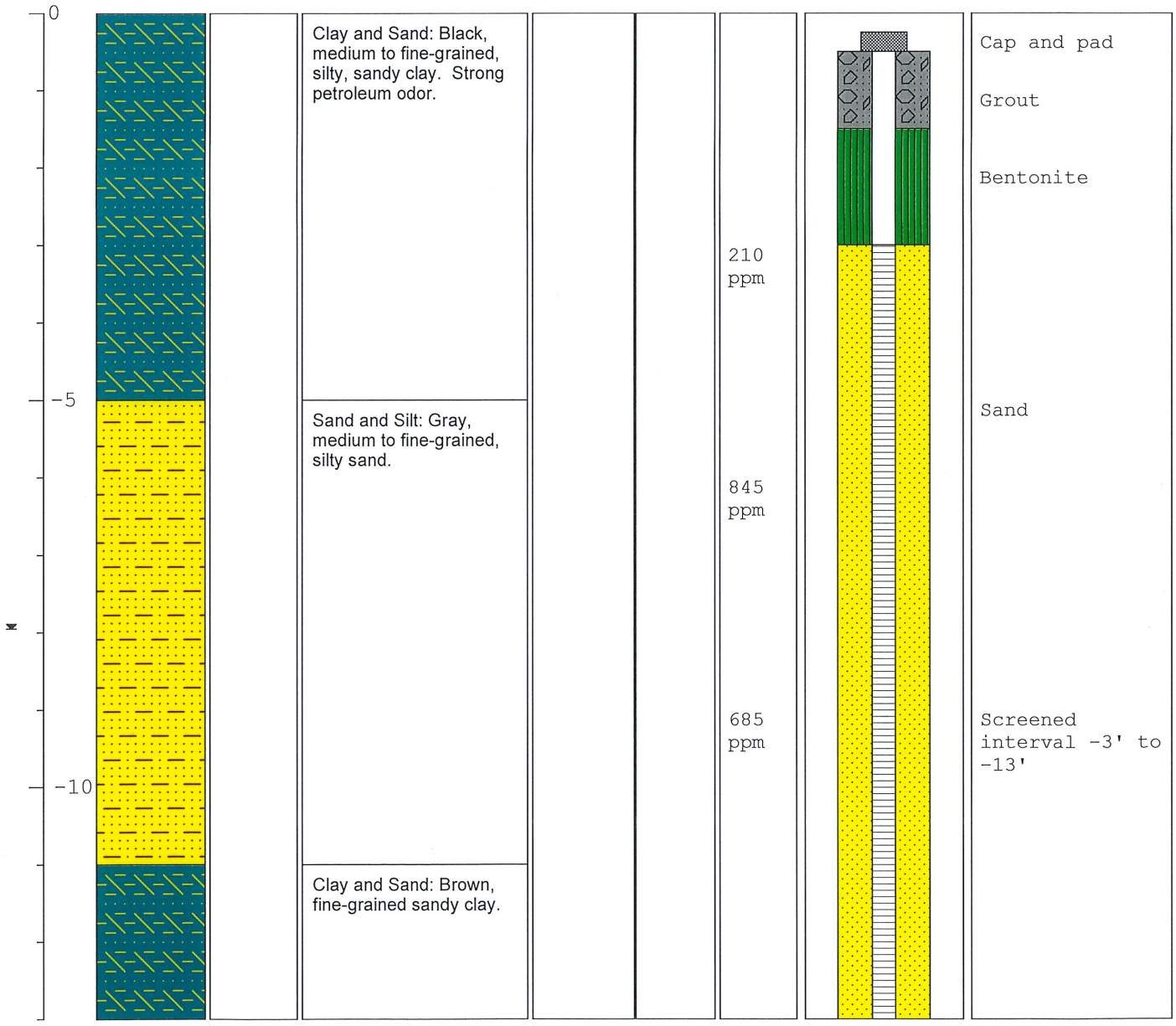
BOREHOLE NO.: **RW-4**
TOTAL DEPTH: **13"**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	**Former 501 Amoco**	DRILLING CO.:	**VERCO**
SITE LOCATION:	**Myrtle Beach**	DRILLER:	**Jason Chiorazzi**
JOB NO.:	**21714**	RIG TYPE:	**Track-mounted rig**
LOGGED BY:	**Ted Faller**	METHOD OF DRILLING:	**Hollow-stem Auger**
PROJECT MANAGER:	**Bill Dunnagan**	SAMPLING METHODS:	**Soil Cuttings**
DATES DRILLED:	**11/15/21**	HAMMER WT./DROP	**Hydraulic**

NOTES: UST ID# 05156

▽ Water level during drilling
▼ Water level in completed well

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	SAMP.	Blows / ft.	OVA ppm	BORING COMPLETION	WELL DESCRIPTION
0			Clay and Sand: Black, medium to fine-grained, silty, sandy clay. Strong petroleum odor.			210 ppm	Cap and pad Grout Bentonite	
-5			Sand and Silt: Gray, medium to fine-grained, silty sand.			845 ppm		Sand
-10			Clay and Sand: Brown, fine-grained sandy clay.			685 ppm		Screened interval -3' to -13'



Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Hucks Plaza (last) (first)
Address: 1121 Simonton Dr
City: Watkinsville State: GA Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** Horry
Name: 501 Amoco
Street Address: 1432 Hwy 501
City: Myrtle Beach Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**
05156 RW-5

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
See Geologist's Log	13	13
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UST#05156, UMW-28609

8. USE: ☐ Residential ☐ Public Supply ☐ Process ☐ Irrigation ☐ Air Conditioning ☐ Emergency ☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 11/15/21
13 ft. Date Completed: 11/15/21

10. CASING: ☑ Threaded ☐ Welded
Diam.: 4"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
4 in. to 3 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 4"
Slot/Gauge: 0.010 Length: 10'
Set Between: 3 ft. and 13 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 2 ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi **CERT. NO.:** 1790
Address: (Print) 2047 Industrial Blvd, Lexington, SC 29072
Level: A B C D (circle one)
Telephone No.: 8034295001 Fax No.:

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: 11/30/21
Well Driller

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017) COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

KLEEN SITES GEOSERVICES, INC.
2047 Industrial Blvd.
Lexington, South Carolina

FIELD BOREHOLE LOG

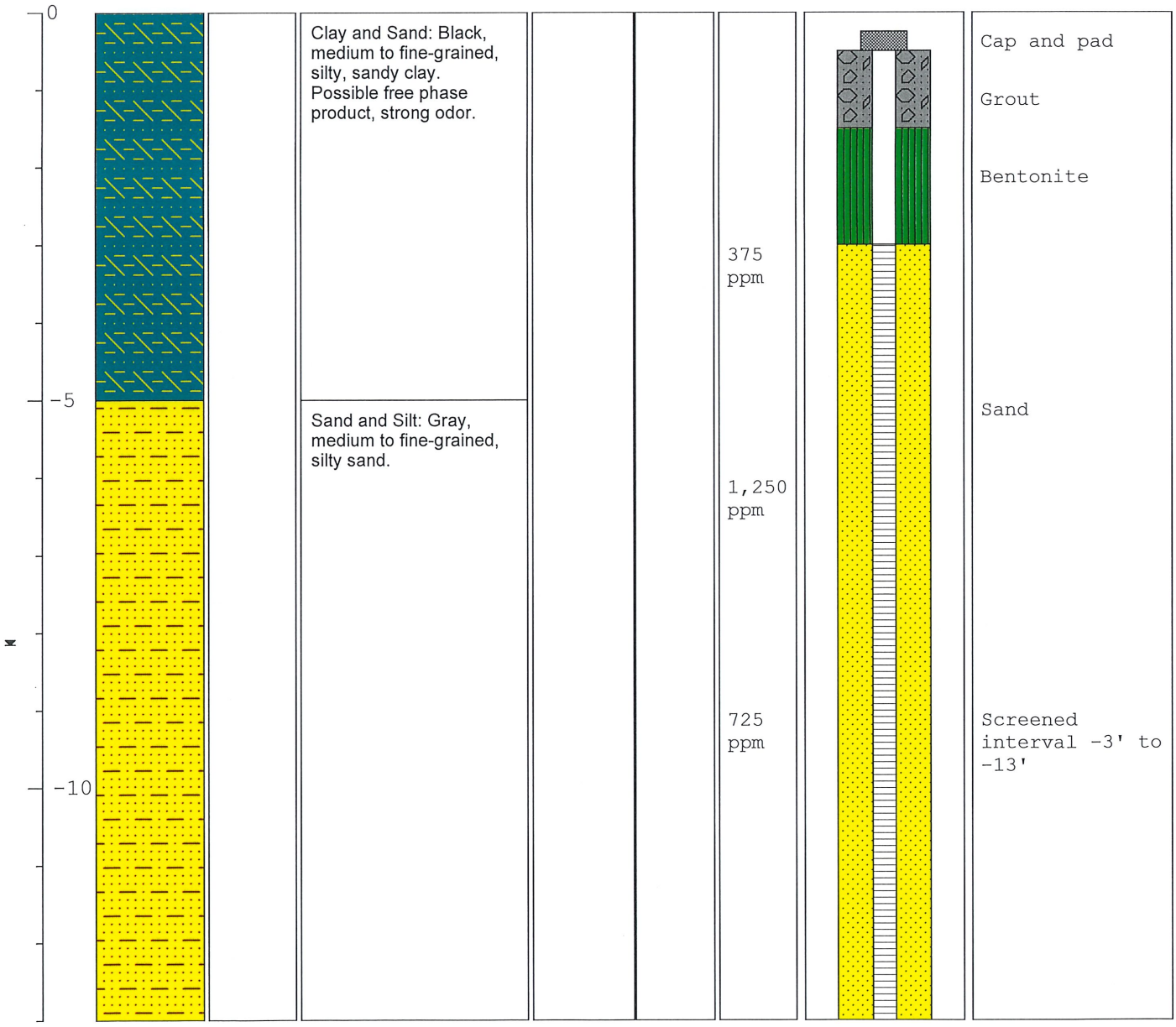
BOREHOLE NO.: **RW-5**
TOTAL DEPTH: **13"**

PROJECT INFORMATION		DRILLING INFORMATION	
PROJECT:	**Former 501 Amoco**	DRILLING CO.:	**VERCO**
SITE LOCATION:	**Myrtle Beach**	DRILLER:	**Jason Chiorazzi**
JOB NO.:	**21714**	RIG TYPE:	**Track-mounted rig**
LOGGED BY:	**Ted Faller**	METHOD OF DRILLING:	**Hollow-stem Auger**
PROJECT MANAGER:	**Bill Dunnagan**	SAMPLING METHODS:	**Soil Cuttings**
DATES DRILLED:	**11/15/21**	HAMMER WT./DROP	**Hydraulic**

NOTES: UST ID# 05156

▽ Water level during drilling
▼ Water level in completed well

DEPTH	SOIL SYMBOLS	USCS	SOIL DESCRIPTION	SAMP.	Blows / ft.	OVA ppm	BORING COMPLETION	WELL DESCRIPTION
0			Clay and Sand: Black, medium to fine-grained, silty, sandy clay. Possible free phase product, strong odor.			375 ppm	Cap and pad Grout Bentonite	
-5			Sand and Silt: Gray, medium to fine-grained, silty sand.			1,250 ppm		Sand
-10						725 ppm		Screened interval -3' to -13'



APPENDIX B

WELL DEVELOPMENT LOGS

D H E C
PROMOTE PROTECT PROSPER

Well Development Data Verfication Form
Underground Storage Tank Management Division

Facility Name: Former 501 Amoco
Site ID#: 05156
Date: 11/15/21
Field Personnel: Jason Chiorazzi, Ted Faller
Drilling Company: VERCO
Driller's Name: Jason Chiorazzi
Driller's Certification Number: 1790B
Weather Conditions: Sunny, 50°F

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. HI 98127	serial no. HI 98311	serial no. HI 98127	serial no. 9787848
pH=4.0	standard 1413		NTU=0.0
pH=7.0 7.2			NTU=1.0
pH=10.0			NTU=10.0 10.1

Drilling Method

Hollow Stem Augers ☑ Solid Flight Augers ○ Direct Push ○
Air Rotary ○ Mud Rotary ○ Sonic ○

Monitoring Well ID# RW-3 Well Casing Diameter 4 inches Borehole Diameter 8 inches
Depth to Ground Water (DGW) 8.20 ft. Screen Length/Slot Size 10 ft./ 0.01 in.
Total Well Depth (TWD) 13.00 ft. Screen Interval 3 ft. to 13 ft.
Length of water column (LWC=TWD-DGW) 4.80 ft. Type of Drilling Fluids used: NONE
Total Gallons of Water Removed: 12 gals. Drilling Fluids recovered N/A gals.

Time (military)	1200	1205	1210	1215	1220	1225	1230
pH (s.u.)*	6.85	6.98	7.05	7.18	7.25	7.10	7.16
Specific Conductivity (mmhos/cm)*	855	710	480	499	482	485	489
Water Temperature (C)*	18.6	19.4	19.1	19.6	19.7	19.4	19.8
Turbidity (NTU) *	71,000	895	320	127	69	42	65
Physical Characteristics (color/odor)	Silty/odor	Hazy/odor	Hazy/odor	Hazy/odor	Clear/odor	Clear/odor	Clear/odor
Water Level Measurement (ft) from TOC	9.5	10.2	10.8	11.5	12.5	Dry	Dry
Total Well Depth (ft) from TOC	13	13	13	13	13	13	13
Cumulative Gallons Removed	2 gals	4 gals	6 gals	8 gals	10 gals	11 gals	12 gals

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Well is not very productive

Driller Signature: [signature] Date: 11/16/21

D H E C
PROMOTE PROTECT PROSPER

Well Development Data Verfication Form
Underground Storage Tank Management Division

Facility Name: Former 501 Amoco Site ID#: 05156

Date: 11/15/21 Field Personnel: Ted Faller

Drilling Company: VERCO Driller's Name: Jason Chisolazzi

Driller's Certification Number: 17903 Weather Conditions: Sunny 50°F

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.	HI 98127	serial no.	HI 98311	serial no. HI 98127	serial no.	Q787848
pH=4.0		standard	1413		NTU=0.0	
pH=7.0	7.2				NTU=1.0	
pH=10.0					NTU=10.0	10.1

Drilling Method

Hollow Stem Augers ✓ Solid Flight Augers ○ Direct Push ○

Air Rotary ○ Mud Rotary ○ Sonic ○

Monitoring Well ID# RW-4 Well Casing Diameter 4 inches Borehole Diameter 8 inches

Depth to Ground Water (DGW) 7.95 ft. Screen Length/Slot Size 10 ft./ 0.01 in.

Total Well Depth (TWD) 13.00 ft. Screen Interval 3 ft. to 13 ft.

Length of water column (LWC=TWD-DGW) 5.05 ft. Type of Drilling Fluids used: NONE

Total Gallons of Water Removed: 12 gals. Drilling Fluids recovered N/A gals.

Time (military)	1240	1245	1250	1255	1300	1305	1310
pH (s.u.)*	6.60	6.91	7.29	7.37	7.21	7.09	7.15
Specific Conductivity (mmhos/cm)*	440	495	479	474	481	476	479
Water Temperature (C)*	18.3	18.8	19.7	20.1	19.9	19.7	19.9
Turbidity (NTU) *	71,000	71,000	565	321	117	135	101
Physical Characteristics (color/odor)	Silty/odor	Silty/odor	Hazy/odor	Hazy/odor	Hazy/odor	Cloudy/odor	Cloudy/odor
Water Level Measurement (ft) from TOC	8.9	9.5	10.7	11.5	12.5	Dry	Dry
Total Well Depth (ft) from TOC	13	13	13	13	13	13	13
Cumulative Gallons Removed	2 gals	2 gals	2 gals	2 gals	2 gals	1 gals	1 gals

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Well is not very productive

Driller Signature: J Ch Date: 11/16/21

D H E C
PROMOTE PROTECT PROSPER

Well Development Data Verfication Form
Underground Storage Tank Management Division

Facility Name: Former 501 Amoco
Site ID#: 05156
Date: 11/15/21
Field Personnel: Ted. Faller
Drilling Company: Vereo
Driller's Name: Jason Chiarizzi
Driller's Certification Number: 1790 B
Weather Conditions:

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. HI 98127	serial no. HI 98311	serial no. HI 98127	serial no. Q787848
pH=4.0	standard 1413		NTU=0.0
pH=7.0 7.2			NTU=1.0
pH=10.0			NTU=10.0 10.1

Drilling Method

Hollow Stem Augers ✓ Solid Flight Augers ○ Direct Push ○
Air Rotary ○ Mud Rotary ○ Sonic ○

Monitoring Well ID# RW-5 Well Casing Diameter 4 inches Borehole Diameter 8 inches
Depth to Ground Water (DGW) 8.17 ft. Screen Length/Slot Size 10 ft./ 0.01 in.
Total Well Depth (TWD) 13.00 ft. Screen Interval 3 ft. to 13 ft.
Length of water column (LWC=TWD-DGW) 4.83 ft. Type of Drilling Fluids used: None
Total Gallons of Water Removed: 11 gals. Drilling Fluids recovered N/A gals.

Time (military)	1330	1335	1340	1345	1350	1355	1400
pH (s.u.)*	6.75	6.98	7.28	7.11	7.26	7.29	7.24
Specific Conductivity (mmhos/cm)*	621	519	474	479	483	479	485
Water Temperature (C)*	19.2	19.7	20.5	20.1	20.3	20.0	19.8
Turbidity (NTU) *	71,000	791	547	210	147	159	165
Physical Characteristics (color/odor)	Silty/odor	Silty/odor	Hazy/odor	Hazy/odor	Clear/odor	Clear/odor	Clear/odor
Water Level Measurement (ft) from TOC	8.9	9.8	11.0	11.9	12.7	dry	dry
Total Well Depth (ft) from TOC	13	13	13	13	13	13	13
Cumulative Gallons Removed	2 gals	4 gals	6 gals	8 gals	9 gals	10 gals	11 gals

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process: Well is not very productive

Driller Signature: Jason Chiarizzi Date: 11/16/21

APPENDIX C

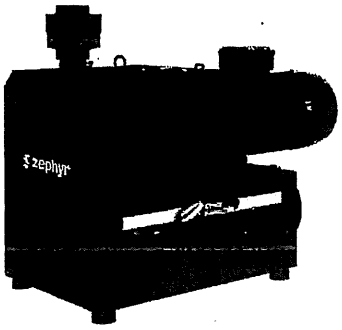
VACUUM PUMP & OXIDIZER UNIT SPECIFICATIONS

C-VLR

zephyr

Elmo Rietschle

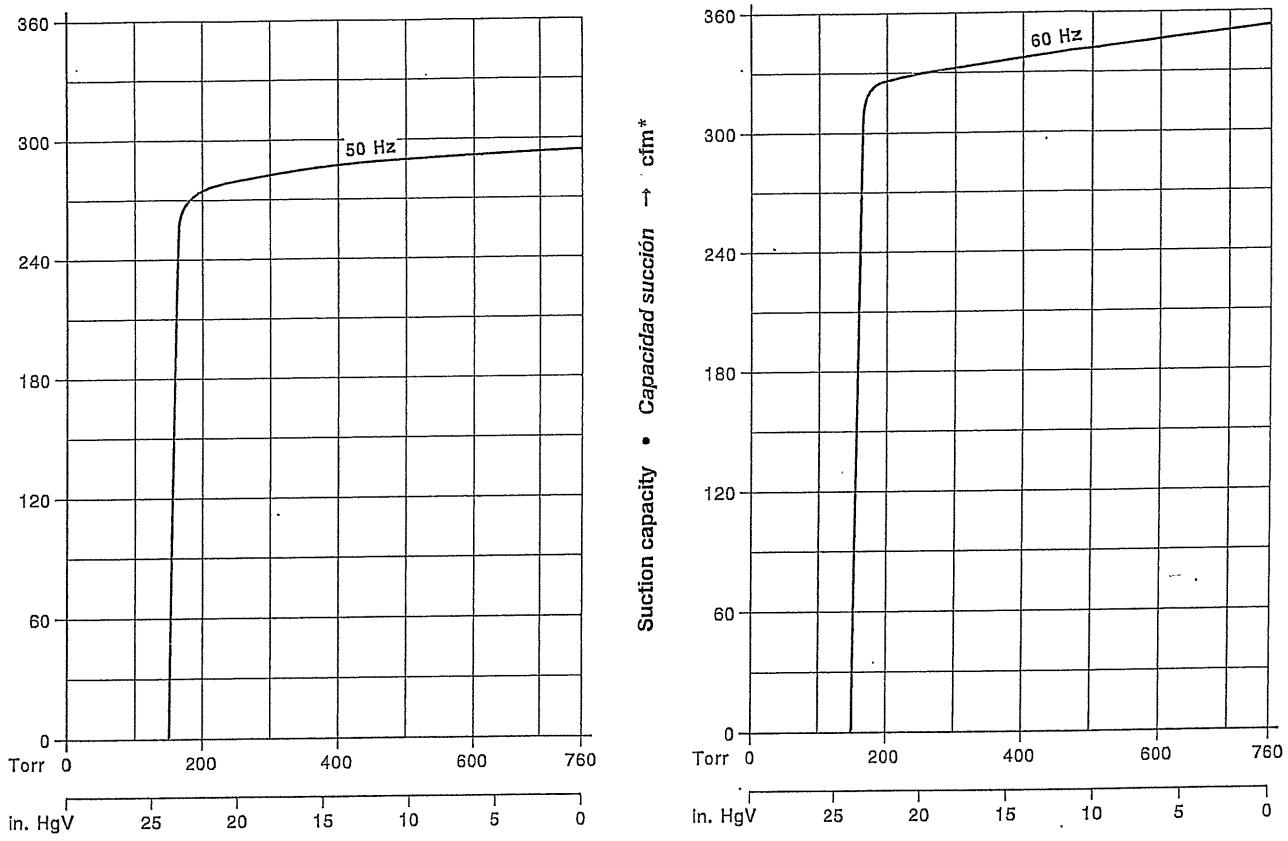
C-VLR 501



High efficiency, oil-free, contactless claw vacuum pump
Capacity ranging to 353 cfm.
Ultimate vacuum for continuous operation: 24 in. HgV
Low maintenance, integrated forced air cooling eliminates the need for water cooling.
Versatile design can be used in many applications.

Bomba de vacío de mordaza, altamente eficiente, libre de aceite y sin contacto
Capacidad de aspiración de 353 cfm.
Vacío absoluto para funcionamiento continuo: 24 in. HgV
Bajo nivel de mantenimiento, enfriamiento integrado por aire forzado y sin medios adicionales. Diseño versátil con numerosas posibilidades de uso.

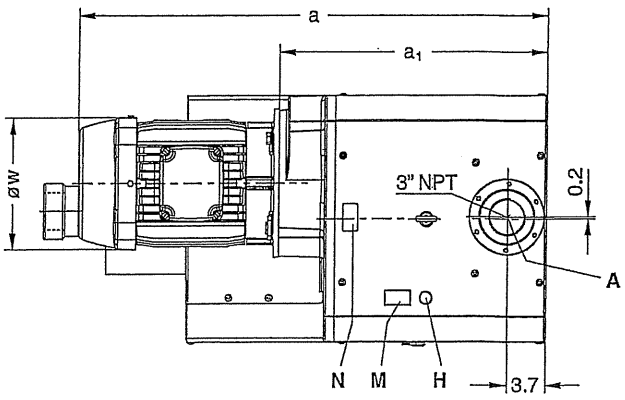
Selection diagram • *Diagrama de selección* **50 Hz** **60 Hz**

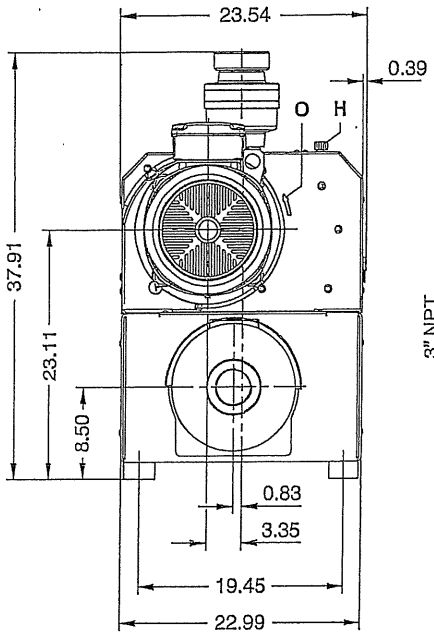


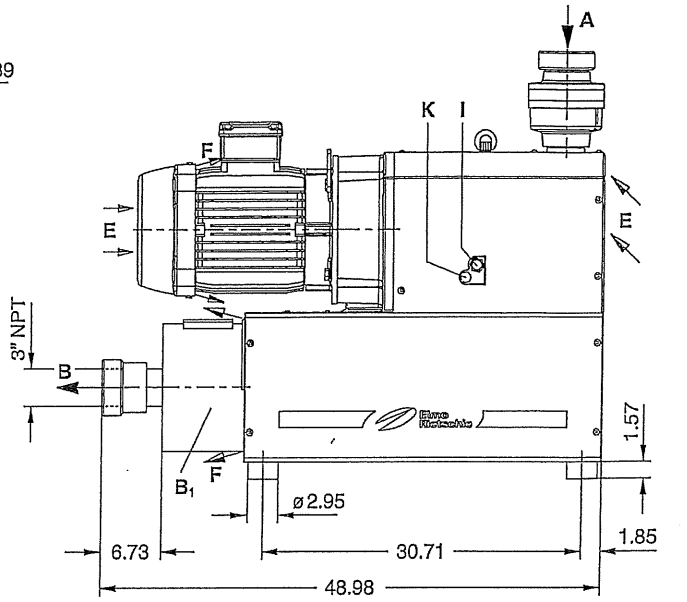
C-VLR			501
Suction capacity *Capacidad succión*	cfm	50 Hz	294
		60 Hz	353
Ultimate vacuum continuous operation *Vacío final permanente*			150 Torr - 24 in. HgV
Rated voltage *Tensión asignada*	3~	50 Hz	400 / 690 V ±10%
		60 Hz	208 - 230 / 460 V ±10%
Motor rating *Potencia requerida*	kw	50 Hz	11
	hp	60 Hz	15
Full load amperage *Amperaje a carga plena*	A	50 Hz	20.9 / 12.1
		60 Hz	37-35 / 17.5
Speed *Velocidad*	rpm	50 Hz	2950
		60 Hz	3550
Average noise level *Nivel promedio de ruido*	dB(A) EN ISO 3744	50 Hz	78
		60 Hz	81
Weight *Peso*	lbs	50 Hz	1125
		60 Hz	1062
Oil capacity (gear) *Capacidad de aceite (engranaje)*	qt		1.8

Dimensions • *Dimensiones* [inches]

A	Vacuum connection • *Conexión de vacío*
B	Exhaust • *Escape*
B_1	Exhaust silencer • *Silenciador de escape*
E	Cooling air entry • *Entrada de aire refrigerante*
F	Cooling air exit • *Salida de aire refrigerante*
H	Oil fill port • *Punto de alimentación del aceite*
I	Oil sight glass • *Mirilla de aceite*
K	Oil drain port • *Punto de drenaje del aceite*
M	Oil type plate • *Placa de aceite*
N	Data plate • *Placa de la unidad*
O	Direction of rotation arrow • *Dirección de rotación*







C-VLR		501
a	50 Hz	44.80
	60 Hz	44.56
a_1	50 Hz	25.59
	60 Hz	26.42
øw	50 Hz	12.24
	60 Hz	10.28

Accessories • *Accesorios*

C-VLR		501
Vacuum tight suction filter *Filtro de succión estanco al vacío*	ZVF	100 (51)
Motor starter *Reóstato de arranque del motor*	ZMS	#

cfm* Relates to pump inlet conditions • *se refiere a las condiciones de entrada de la bomba*

Curves, table contents (tolerance ±10%) refer to compressor at normal operating temperature. • *Las curvas, las tablas (tolerancia ±10%) se refieren a la bomba de vacío a una temperatura normal de operación.*

The motor dimensions as well as the full load amperage may vary due to different motor manufacturers. • *Las dimensiones de motor pueden variar para distintos fabricantes de motores.*

on request • *# on pedido*

Technical information is subject to change without noticel • *La información técnica está sujeta a cambios sin previo aviso!*

Gardner Denver

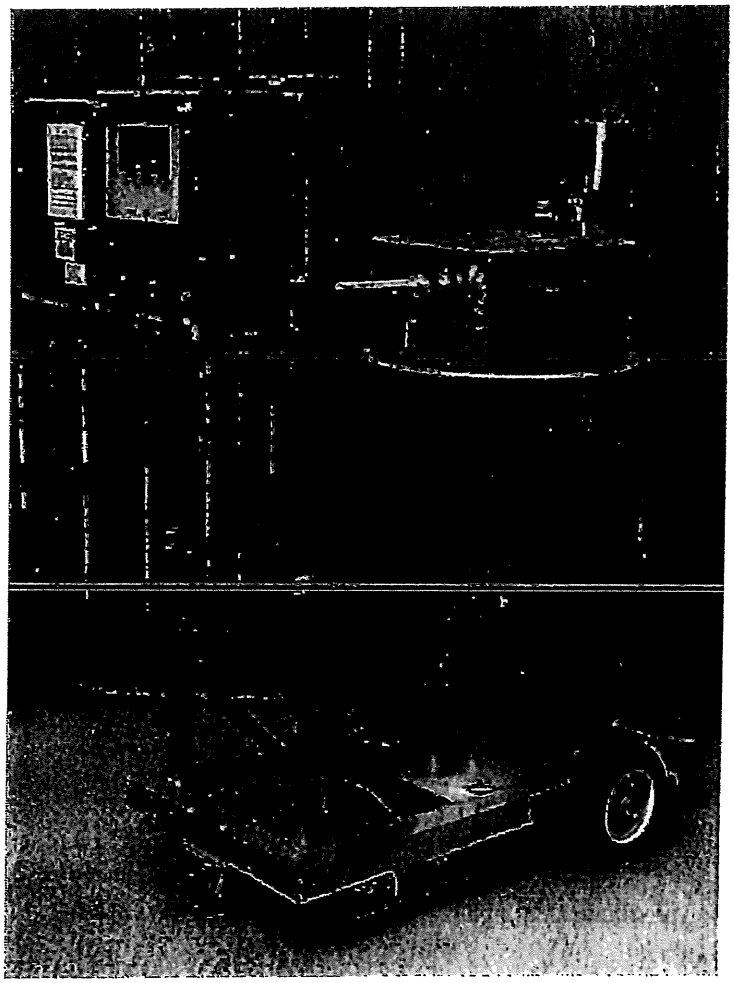
Gardner Denver, Inc.
1800 Gardner Expressway
Quincy, IL 62305 / USA
Phone (217) 222-5400
Fax (217) 221-8780

elmorietschle@gardnerdenver.com
www.elmorietschle.com

Edition: 3.8.2014 · D 886-2-US

Falmouth Products Catalytic Oxidizer
FALCO 300
With Vapor Control Valve (VCV)

Installation and Operations Manual



Manual 2003.300.01
Technical Assistance: 800-340-8125

$15

FALMOUTH PRODUCTS P.O. BOX 541 FALMOUTH, MA. 02541 PHONE 508 548 6686 FAX 508 548 8144

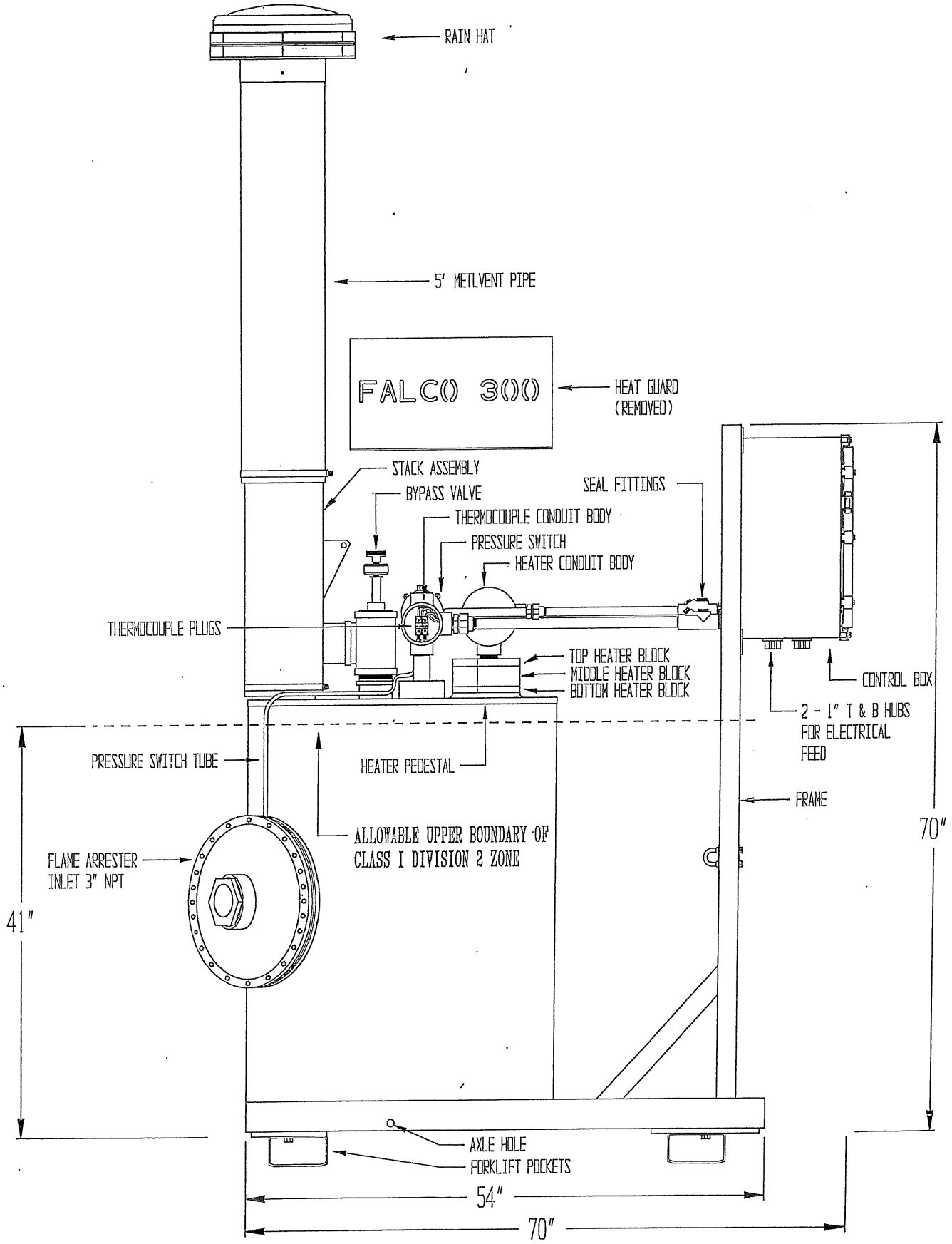


FIGURE 1
FALCO 300 MAJOR COMPONENTS - SIDE VIEW

LAST REVISON 10-13-97

APPENDIX D

AFVR FIELD DATA SHEETS

AFVR Field Data Sheets
11/15/21 - 11/19/21

TABLE 1 (Page 1)
AFVR MONITORING DATA
Site Name: Former 501 Amoco
Site Location: Myrtle Beach, SC
SCDHEC Site ID # 05156
November 2021 Event

Weather: 45 - 65 degrees F

Extraction Well	Date	Time (hh:mm)	Differential Time (hr)	Extraction Well Head Vacuum (in. Hg)		MMPE Unit Exhaust					
						Relative Humidity	Temp (°F)	Concentration (PPM)	Offgas Velocity Ft/Min	Water Vapor (%)	Flow Rate (DSCFM)
				MW-3	RW-2			In			
MW-3, RW-2	11/15/2021	10:00	0.00	20	19						
		10:30	0.50	20	19	8.3	163.0	15,000	140	0.02	116.28
		11:00	0.50	20	19	8.7	165.0	15,000	140	0.02	115.91
		11:30	0.50	20	19	9.1	168.0	15,000	140	0.02	115.35
		12:00	0.50	20	19	9.0	172.0	15,000	140	0.03	113.45
		12:30	0.50	20	19	9.1	173.0	15,000	140	0.03	113.27
		13:00	0.50	20	19	8.7	176.0	15,000	140	0.03	112.74
		13:30	0.50	20	19	8.6	176.0	15,000	140	0.03	112.74
		14:00	0.50	20	19	8.4	176.0	11,674	140	0.03	112.74
		14:30	0.50	20	19	8.7	176.0	9,781	140	0.03	112.74
		15:00	0.50	20	19	8.6	176.0	8,612	140	0.03	112.74
		15:30	0.50	20	19	8.9	178.0	8,133	140	0.03	112.39
		16:00	0.50	20	19	9.1	178.0	7,421	140	0.03	112.39
		16:30	0.50	20	19	8.8	180.0	6,917	140	0.03	112.04
		17:00	0.50	20	19	8.9	180.0	6,249	140	0.03	112.04
		17:30	0.50	20	19	8.7	182.0	5,776	140	0.03	111.69
		18:00	0.50	20	19	9.0	182.0	5,518	140	0.03	111.69
		19:00	1.00	20	19	9.2	180.0	5,193	140	0.03	112.04
		20:00	1.00	20	19	9.0	183.0	4,758	140	0.03	111.51
		21:00	1.00	20	19	8.8	182.0	4,962	140	0.03	111.69
		22:00	1.00	20	19	8.7	186.0	4,312	140	0.03	110.99
		23:00	1.00	20	19	8.6	188.0	4,115	140	0.03	110.65
	11/16/2021	0:00	1.00	20	19	8.1	190.0	4,157	140	0.03	110.31
		8:00	8.00	20	19	7.9	191.0	4,294	140	0.03	110.14
		9:00	1.00	20	19	7.7	193.0	3,913	140	0.03	109.80

Well Gauging Data:			Before AFVR Event			After AFVR Event			
Well No.	Diameter (in)	Total Depth (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	
MW-3	2	13	8.22	8.68	0.46	none	10.75	0.00	
RW-2	4	13	7.05	12.50	5.45	none	11.97	0.00	

AFVR Information		Well ID	Stinger Depth
Client	KSG	MW-3	8.5 - 11.5
Equipment Operator:	JG	RW-2	7.5 - 11.5
Blower Discharge I.D.	4 inches		

Notes: Pipe ID - The inside diameter of the blower discharge piping (from MMPE unit)

Velocity - The rate at which air flows is measured at the blower discharge piping

Temperature - The temperature of the air stream exiting the blower discharge piping

Relative humidity - The & relative humidity of the air stream exiting the blower discharge piping

Water Vapor in % - Pounds of water per pound of dry air (derived from a Psychrometric chart of temp. vs relative humidity)

Flow rate = (1 - water vapor)(velocity)(528°R/Temp + 460)

TABLE 1 (Page 2)
AFVR MONITORING DATA
Site Name: Former 501 Amoco
Site Location: Myrtle Beach, SC
SCDHEC Site ID # 05156
November 2021 Event

Start Weather: 45 - 65 degrees F

Extraction Well	Date	Time (hh:mm)	Differential Time (hr)	Extraction Well Head Vacuum (in. Hg)	MMPE Unit Exhaust					
					Relative Humidity	Temp (°F)	Concentration (PPM)	Offgas Velocity Ft/Min	Water Vapor (%)	Flow Rate (DSCFM)
				RW-3 RW-4 RW-5 RW-1			In			
RW-3, RW-4, RW-5	11/16/2021	10:00	1.00	21 16 18	7.6	191.0	3,658	140	0.03	110.14
		12:00	2.00	21 16 18	7.4	194.0	2,911	140	0.03	109.64
		14:00	2.00	21 16 18	7.1	196.0	3,126	140	0.03	109.30
		16:00	2.00	21 16 18	6.9	199.0	3,088	140	0.03	108.80
		18:00	2.00	21 16 18	7.3	200.0	3,024	140	0.04	107.52
		20:00	2.00	21 16 18	7.3	201.0	2,962	140	0.04	107.36
		22:00	2.00	21 16 18	7.6	203.0	2,944	140	0.04	107.03
	11/17/2021	0:00	2.00	21 16 18	7.1	200.0	2,892	140	0.04	107.52
		8:00	8.00	21 16 18	6.9	199.0	2,914	140	0.04	107.68
RW-3, RW-4, RW-5		10:00	2.00	21 16 18 15	6.8	198.0	2,973	140	0.04	107.85
RW-1		12:00	2.00	21 16 18 15	7.2	193.0	2,852	140	0.03	109.80
		14:00	2.00	21 16 18 15	6.9	194.0	2,671	140	0.03	109.64
		16:00	2.00	21 16 18 15	6.6	196.0	2,638	140	0.03	109.30
		18:00	2.00	21 16 18 15	6.8	196.0	2,597	140	0.03	109.30
		20:00	2.00	21 16 18 15	6.9	198.0	2,566	140	0.03	108.97
		22:00	2.00	21 16 18 15	7.1	199.0	2,487	140	0.03	108.80
	11/18/2021	0:00	2.00	21 16 18 15	7.2	200.0	2,536	140	0.04	107.52
		8:00	8.00	21 16 18 15	6.0	201.0	2,448	140	0.03	108.48
		10:00	2.00	21 16 18 15	6.2	203.0	2,377	140	0.03	108.15
		12:00	2.00	21 16 18 15	6.3	202.0	2,218	140	0.03	108.31
		14:00	2.00	21 16 18 15	6.4	199.0	2,272	140	0.03	108.80
		16:00	2.00	21 16 18 15	6.3	197.0	2,264	140	0.03	109.14
		18:00	2.00	21 16 18 15	6.3	196.0	2,196	140	0.03	109.30
		20:00	2.00	21 16 18 15	7.1	199.0	2,132	140	0.03	108.80
		22:00	2.00	21 16 18 15	7.2	201.0	2,155	140	0.03	108.48

Well Gauging Data:			Before AFVR Event					
Well No.	Diameter (in)	Total Depth (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)
RW-3	4	13	none	9.89	0.00	none	11.38	0.00
RW-4	4	13	none	9.93	0.00	none	11.69	0.00
RW-5	4	13	9.91	9.97	0.06	none	11.49	0.00
RW-1	4	13	none	7.62	0.00	none	7.95	0.00

AFVR Information		Well ID	Stinger Depth
Client	KSG	RW-3	10 - 11.5
Equipment Operator:	JG	RW-4	10 - 11.5
Blower Discharge I.D.	4 inches	RW-5	10 - 11.5
		RW-1	8 - 11.5

Notes: Pipe ID - The inside diameter of the blower discharge piping (from MMPE unit)

Velocity - The rate at which air flows is measured at the blower discharge piping

Temperature - The temperature of the air stream exiting the blower discharge piping

Relative humidity - The & relative humidity of the air stream exiting the blower discharge piping

Water Vapor in % - Pounds of water per pound of dry air (derived from a Psychrometric chart of temp. vs relative humidity)

Flow rate = (1 - water vapor)(velocity)(528°R/Temp + 460)

TABLE 1 (Page 3)
AFVR MONITORING DATA
Site Name: Former 501 Amoco
Site Location: Myrtle Beach, SC
SCDHEC Site ID # 05156
November 2021 Event

Weather: 45 - 65 degrees F

Extraction Well	Date	Time (hh:mm)	Differential Time (hr)	Extraction Well Head Vacuum (in. Hg)	MMPE Unit Exhaust					
					Relative Humidity	Temp (°F)	Concentration (PPM)	Offgas Velocity Ft/Min	Water Vapor (%)	Flow Rate (DSCFM)
				RW-3 RW-4 RW-5 RW-1			In			
RW-3, RW-4, RW-5	11/19/2021	0:00	2.00	21 16 18 15	6.7	204.0	1,942	140	0.03	107.99
RW-1		8:00	8.00	21 16 18 15	6.1	200.0	1,986	140	0.03	108.64
		10:00	2.00	21 16 18 15	6.4	198.0	1,919	140	0.03	108.97

Well Gauging Data:			Before AFVR Event			After AFVR Event		
Well No.	Diameter (in)	Total Depth (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)
RW-3	4	13	none	9.89	0.00	none	11.38	0.00
RW-4	4	13	none	9.93	0.00	none	11.69	0.00
RW-5	4	13	9.91	9.97	0.06	none	11.49	0.00
RW-1	4	13	none	7.62	0.00	none	7.95	0.00

AFVR Information		Well ID	Stinger Depth
Client	KSG	RW-3	10 - 11.5
Equipment Operator:	JG	RW-4	10 - 11.5
Blower Discharge I.D.	4 inches	RW-5	10 - 11.5
		RW-1	8 - 11.5

Notes: Pipe ID - The inside diameter of the blower discharge piping (from MMPE unit)
Velocity - The rate at which air flows is measured at the blower discharge piping
Temperature - The temperature of the air stream exiting the blower discharge piping
Relative humidity - The & relative humidity of the air stream exiting the blower discharge piping
Water Vapor in % - Pounds of water per pound of dry air (derived from a Psychrometric chart of temp. vs relative humidity)
Flow rate = (1 - water vapor)(velocity)(528°R/Temp + 460)

TABLE 2 (Page 1)
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC SITE ID NUMBER 05156
November 2021 EVENT

11/15/21, 11/16/21, 11/17/21, 11/18/21, 11/19/21

Weather: 45 - 65 degrees F

DIFFERENTIAL PRESSURE DATA

		Well Designation:		
		RW-1	**MW-2**	**MW-8**
Nearest Extraction Well:		RW-2	RW-2	RW-2
Approximate Distance:		10 feet	85 feet	210 feet
Time	**Elapsed Time**	**Differential Pressure Readings (inches of water)**		
11/15/2021, 10:00	0.0	0.0	0.0	0.0
10:30	0.5	0.0	0.0	0.0
11:00	1.0	0.0	0.0	0.0
11:30	1.5	0.0	0.0	0.0
12:00	2.0	0.0	0.0	0.0
12:30	2.5	0.0	0.0	0.0
13:00	3.0	0.0	0.0	0.0
13:30	3.5	0.0	0.0	0.0
14:00	4.0	0.0	0.0	0.0
14:30	4.5	0.0	0.0	0.0
15:00	5.0	0.0	0.0	0.0
15:30	5.5	0.0	0.0	0.0
16:00	6.0	0.0	0.0	0.0
16:30	6.5	0.0	0.0	0.0
17:00	7.0	0.0	0.0	0.0
17:30	7.5	0.0	0.0	0.0
18:00	8.0	0.0	0.0	0.0
19:00	9.0	0.0	0.0	0.0
20:00	10.0	0.0	0.0	0.0
21:00	11.0	0.0	0.0	0.0
22:00	12.0	0.0	0.0	0.0
23:00	13.0	0.0	0.0	0.0
11/16/2021, 0:00	14.0	0.0	0.0	0.0
8:00	22.0	0.0	0.0	0.0
9:00	23.0	0.0	0.0	0.0
Maximum Change:		**0.0**	**0.0**	**0.0**

GROUNDWATER DRAWDOWN DATA

		Well Designation:		
		RW-1	**MW-2**	**MW-8**
Nearest Extraction Well:		RW-2	RW-2	RW-2
Approximate Distance:		10 feet	85 feet	210 feet
Time	**Elapsed Time**	**Depth to Liquid (feet below of casing):**		
Prior to AFVR		7.51	9.79	8.89
11/17/2021, 10:00:00 AM	48 hours	7.62	9.86	8.92
11/19/2021, 10:00:00 AM	96 hours		9.98	9.03
Maximum Change:		**-0.11**	**-0.19**	**-0.14**

TABLE 2 (Page 2)
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC SITE ID NUMBER 05156
November 2021 EVENT

11/15/21, 11/16/21, 11/17/21, 11/18/21, 11/19/21

Weather: 45 - 65 degrees F

DIFFERENTIAL PRESSURE DATA

		Well Designation:		
		RW-1	**MW-2**	**MW-8**
Nearest Extraction Well:		RW-2	RW-2	RW-2
Approximate Distance:		10 feet	85 feet	210 feet
Time	**Elapsed Time**	**Differential Pressure Readings (inches of water)**		
11/16/2021, 10:00	24.0	0.0	0.0	0.0
12:00	26.0	0.0	0.0	0.0
14:00	28.0	0.0	0.0	0.0
16:00	30.0	0.0	0.0	0.0
18:00	32.0	0.0	0.0	0.0
20:00	34.0	0.0	0.0	0.0
22:00	36.0	0.0	0.0	0.0
11/17/2021, 0:00	38.0	0.0	0.0	0.0
8:00	46.0	0.0	0.0	0.0
10:00	48.0	0.0	0.0	0.0
12:00	50.0		0.0	0.0
14:00	52.0		0.0	0.0
16:00	54.0		0.0	0.0
18:00	56.0		0.0	0.0
20:00	58.0		0.0	0.0
22:00	60.0		0.0	0.0
11/18/2021, 0:00	62.0		0.0	0.0
8:00	70.0		0.0	0.0
10:00	72.0		0.0	0.0
12:00	74.0		0.0	0.0
14:00	76.0		0.0	0.0
16:00	78.0		0.0	0.0
18:00	80.0		0.0	0.0
20:00	82.0		0.0	0.0
22:00	84.0		0.0	0.0
Maximum Change:		**0.0**	**0.0**	**0.0**

GROUNDWATER DRAWDOWN DATA

		Well Designation:		
		RW-1	**MW-2**	**MW-8**
Nearest Extraction Well:		RW-2	RW-2	RW-2
Approximate Distance:		10 feet	85 feet	210 feet
Time	**Elapsed Time**	**Depth to Liquid (feet below of casing):**		
Prior to AFVR		7.51	9.79	8.89
11/17/2021, 10:00:00 AM	48 hours	7.62	9.86	8.92
11/19/2021, 10:00:00 AM	96 hours		9.98	9.03
Maximum Change:		**-0.11**	**-0.19**	**-0.14**

TABLE 2 (Page 3)
DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC SITE ID NUMBER 05156
November 2021 EVENT

11/15/21, 11/16/21, 11/17/21, 11/18/21, 11/19/21

Weather: 45 - 65 degrees F

DIFFERENTIAL PRESSURE DATA

		Well Designation:		
		RW-1	**MW-2**	**MW-8**
Nearest Extraction Well:		RW-2	RW-2	RW-2
Approximate Distance:		10 feet	85 feet	210 feet
Time	**Elapsed Time**	**Differential Pressure Readings (inches of water)**		
11/19/2021, 0:00	86.0		0.0	0.0
8:00	94.0		0.0	0.0
10:00	96.0		0.0	0.0
Maximum Change:		**0.0**	**0.0**	**0.0**

GROUNDWATER DRAWDOWN DATA

		Well Designation:		
		RW-1	**MW-2**	**MW-8**
Nearest Extraction Well:		RW-2	RW-2	RW-2
Approximate Distance:		10 feet	85 feet	210 feet
Time	**Elapsed Time**	**Depth to Liquid (feet below of casing):**		
Prior to AFVR		7.51	9.79	8.89
11/17/2021, 10:00:00 AM	48 hours	7.62	9.86	8.92
11/19/2021, 10:00:00 AM	96 hours		9.98	9.03
Maximum Change:		**-0.11**	**-0.19**	**-0.14**

TABLE 3 (Page 1)
OFF-GAS TREATMENT DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC SITE ID NUMBER 05156
NOVEMBER 2021 EVENT

Date: November 15-19, 2021

Weather: 45-65 degrees F

OFF-GAS TREATMENT DATA

		Pre-Carbon Hydrocarbon	Post-Carbon Hydrocarbon	Hydrocarbon
		Reading (ppm)	Reading (ppm)	Removal (%)
Time	**Elapsed Time**			
11/15/21, 10:00	0			
10:30	0.5	15000	2.4	100
11:00	1.0	15000	2.6	100
11:30	1.5	15000	2.3	100
12:00	2.0	15000	1.9	100
12:30	2.5	15000	2.2	100
13:00	3.0	15000	2.3	100
13:30	3.5	15000	2.0	100
14:00	4.0	11674	1.8	100
14:30	4.5	9781	1.9	100
15:00	5.0	8612	1.6	100
15:30	5.5	8133	1.7	100
16:00	6.0	7421	1.5	100
16:30	6.5	6917	1.2	100
17:00	7.0	6249	0.9	100
17:30	7.5	5776	0.9	100
18:00	8.0	5518	0.9	100
19:00	9.0	5193	1.1	100
20:00	10.0	4758	0.7	100
21:00	11.0	4962	0.7	100
22:00	12.0	4312	0.7	100
23:00	13.0	4115	0.9	100
11/16/21, 0:00	14.0	4157	0.6	100
8:00	22.0	4294	0.5	100
9:00	23.0	3913	0.6	100
10:00	24.0	3658	0.6	100
12:00	26.0	2911	0.6	100
14:00	28.0	3126	0.4	100
16:00	30.0	3088	0.5	100
18:00	32.0	3024	0.5	100
20:00	34.0	2962	0.4	100
22:00	36.0	2944	0.5	100
11/17/21, 0:00	38.0	2892	0.4	100
Average Removal:				**100**

TABLE 3 (Page 2)
OFF-GAS TREATMENT DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC SITE ID NUMBER 05156
NOVEMBER 2021 EVENT

Date: November 15-19, 2021

Weather: 45-65 degrees F

OFF-GAS TREATMENT DATA

Time	Elapsed Time	Pre-Carbon Hydrocarbon Reading (ppm)	Post-Carbon Hydrocarbon Reading (ppm)	Hydrocarbon Removal (%)
11/17/21, 8:00	46.0	2914	0.4	100
10:00	48.0	2973	0.4	100
12:00	50.0	2852	0.3	100
14:00	52.0	2671	0.4	100
16:00	54.0	2638	0.2	100
18:00	56.0	2597	0.2	100
20:00	58.0	2566	0.2	100
22:00	60.0	2487	0.2	100
11/18/21, 0:00	62.0	2536	0.3	100
8:00	70.0	2448	0.2	100
10:00	72.0	2377	0.2	100
12:00	74.0	2218	0.1	100
14:00	76.0	2272	0.2	100
16:00	78.0	2264	0.2	100
18:00	80.0	2196	0.1	100
20:00	82.0	2132	0.1	100
22:00	84.0	2155	0.1	100
11/19/21, 0:00	86.0	1942	0.2	100
8:00	94.0	1986	0.1	100
10:00	96.0	1919	0.1	100
Average Removal:				**100**

TABLE 4 (Page 1)
STINGER LEVEL
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC SITE ID NUMBER 05156
NOVEMBER 2021 EVENT

Date: November 15-19, 2021
Weather: 45 - 65 degrees F

STINGER LEVEL

Time	Elapsed Time	MW-3 / RW-2 Stinger Level (feet below top of casing)	RW-1 Stinger Level (feet below top of casing)	RW-3,4,5 Stinger Level (feet below top of casing)
11/15/21, 10:00	0	7.5	-	-
10:30	0.5	8.0	-	-
11:00	1.0	8.5	-	-
11:30	1.5	9.0	-	-
12:00	2.0	9.5	-	-
12:30	2.5	10.0	-	-
13:00	3.0	10.5	-	-
13:30	3.5	11.0	-	-
14:00	4.0	10.0	-	-
14:30	4.5	10.5	-	-
15:00	5.0	11.0	-	-
15:30	5.5	11.5	-	-
16:00	6.0	11.5	-	-
16:30	6.5	11.5	-	-
17:00	7.0	11.5	-	-
17:30	7.5	11.5	-	-
18:00	8.0	11.5	-	-
19:00	9.0	11.5	-	-
20:00	10.0	11.5	-	-
21:00	11.0	11.5	-	-
22:00	12.0	11.5	-	-
23:00	13.0	11.5	-	-
11/16/21, 0:00	14.0	11.5	-	-
8:00	22.0	11.5	-	-
9:00	23.0	11.5	-	-
10:00	24.0	11.5	8.0	10.0
12:00	26.0	-	8.5	10.5
14:00	28.0	-	9.0	11.0
16:00	30.0	-	9.5	11.5
18:00	32.0	-	10.0	11.5
20:00	34.0	-	10.5	11.5
22:00	36.0	-	11.0	11.5
11/17/21, 0:00	38.0	-	11.5	11.5
8:00	46.0	-	11.5	11.5
10:00	48.0	-	11.5	11.5
12:00	50.0	-	11.5	11.5

TABLE 4 (Page 2)
STINGER LEVEL
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC SITE ID NUMBER 05156
NOVEMBER 2021 EVENT

Date: November 15-19, 2021

Weather: 45-65 degrees F

STINGER LEVEL

		MW-3 / RW-2 Stinger Level	RW-1 Stinger Level	RW-3,4,5 Stinger Level
		(feet below top of casing)	(feet below top of casing)	(feet below top of casing)
Time	Elapsed Time			
11/17/21, 14:00	52.0	-	11.5	11.5
16:00	54.0	-	11.5	11.5
18:00	56.0	-	11.5	11.5
20:00	58.0	-	11.5	11.5
22:00	60.0	-	11.5	11.5
11/18/21, 0:00	62.0	-	11.5	11.5
8:00	70.0	-	11.0	11.0
10:00	72.0	-	11.0	11.0
12:00	74.0	-	11.0	11.0
14:00	76.0	-	11.0	11.0
16:00	78.0	-	11.0	11.0
18:00	80.0	-	11.0	11.0
20:00	82.0	-	11.5	11.5
10:00	84.0	-	11.5	11.5
11/19/21, 0:00	86.0	-	11.5	11.5
8:00	94.0	-	11.5	11.5
10:00	96.0	-	11.5	11.5

Emissions Calculations

Site Name: Former 501 Amoco
Location: Myrtle Beach, SC
UST ID # 05156
November 2021 Event (Page 1)
EMISSION CALCULATION

Elapsed Time (min)	Flow Rate (DSCFM)	Concentration 675	K (#C - gas)	PPMg (ppm)	Cg:m (mg/dsm^3)	Cg (lbs/dscf)	PMRg (lb/hr)	PMR (lb)
0								
30	116.28	15000	4	60000	319200	0.019927656	139.03127	69.515635
60	115.91	15000	4	60000	319200	0.019927656	138.58888	69.294438
90	115.35	15000	4	60000	319200	0.019927656	137.91931	68.959654
120	113.45	15000	4	60000	319200	0.019927656	135.64755	67.823777
150	113.27	15000	4	60000	319200	0.019927656	135.43234	67.716168
180	112.74	15000	4	60000	319200	0.019927656	134.79864	67.399318
210	112.74	15000	4	60000	319200	0.019927656	134.79864	67.399318
240	112.74	11674	4	46696	248422.72	0.01550903	104.90929	52.454643
270	112.74	9781	4	39124	208139.68	0.01299416	87.897697	43.948849
300	112.74	8612	4	34448	183263.36	0.011441132	77.39239	38.696195
330	112.39	8133	4	32532	173070.24	0.010804775	72.86092	36.43046
360	112.39	7421	4	29684	157918.88	0.009858876	66.482342	33.241171
390	112.04	6917	4	27668	147193.76	0.009189306	61.774194	30.887097
420	112.04	6249	4	24996	132978.72	0.008301861	55.808434	27.904217
450	111.69	5776	4	23104	122913.28	0.007673476	51.423033	25.711516
480	111.69	5518	4	22072	117423.04	0.00733072	49.12609	24.563045
540	112.04	5193	4	20772	110507.04	0.006898955	46.377532	46.377532
600	111.51	4758	4	19032	101250.24	0.006321052	42.291634	42.291634
660	111.69	4962	4	19848	105591.36	0.006592069	44.176089	44.176089
720	110.99	4312	4	17248	91759.36	0.005728537	38.148618	38.148618
780	110.65	4115	4	16460	87567.2	0.00546682	36.29422	36.29422
840	110.31	4157	4	16628	88460.96	0.005522618	36.551998	36.551998
1320	110.14	4294	4	17176	91376.32	0.005704624	37.698435	301.58748
1380	109.8	3913	4	15652	83268.64	0.005198461	34.247462	34.247462
					Total Emissions in pounds			1371.6205
					Equivalent Gallons (vapor)			222.66567

Site Name: Former 501 Amoco
Location: Myrtle Beach, SC
UST ID # 05156
November 2021 Event (Page 2)
EMISSION CALCULATION

Elapsed Time (min)	Flow Rate (DSCFM)	Concentration (ppm)	K (#C - gas)	PPMg (ppm)	Cg:m (mg/dsm^3)	Cg (lbs/dscf)	PMRg (lb/hr)	PMR (lb)
1440	110.14	3658	4	14632	77842.24	0.004859691	32.114782	32.114782
1560	109.64	2911	4	11644	61946.08	0.003867294	25.440605	50.881211
1680	109.3	3126	4	12504	66521.28	0.004152924	27.234872	54.469745
1800	108.8	3088	4	12352	65712.64	0.00410244	26.780729	53.561458
1920	107.52	3024	4	12096	64350.72	0.004017415	25.917151	51.834301
2040	107.36	2962	4	11848	63031.36	0.003935048	25.348004	50.696008
2160	107.03	2944	4	11776	62648.32	0.003911135	25.116524	50.233049
2280	107.52	2892	4	11568	61541.76	0.003842052	24.785846	49.571693
2760	107.68	2914	4	11656	62009.92	0.003871279	25.011561	200.09249
2880	107.85	2973	4	11892	63265.44	0.003949661	25.558259	51.116518
3000	109.8	2852	4	11408	60690.56	0.003788912	24.96135	49.9227
3120	109.64	2671	4	10684	56838.88	0.003548451	23.343132	46.686264
3240	109.3	2638	4	10552	56136.64	0.00350461	22.983235	45.96647
3360	109.3	2597	4	10388	55264.16	0.003450142	22.626028	45.252056
3480	108.97	2566	4	10264	54604.48	0.003408958	22.288447	44.576894
3600	108.8	2487	4	9948	52923.36	0.003304005	21.568547	43.137094
3720	107.52	2536	4	10144	53966.08	0.003369102	21.734753	43.469506
4200	108.48	2448	4	9792	52093.44	0.003252193	21.167877	169.34301
4320	108.15	2377	4	9508	50582.56	0.003157869	20.491413	40.982827
4440	108.31	2218	4	8872	47199.04	0.002946636	19.149009	38.298018
4560	108.8	2272	4	9088	48348.16	0.003018376	19.703956	39.407912
4680	109.14	2264	4	9056	48177.92	0.003007748	19.695934	39.391868
4800	109.3	2196	4	8784	46730.88	0.002917409	19.132367	38.264734
4920	108.8	2132	4	8528	45368.96	0.002832384	18.489804	36.979608
					Total Emissions in pounds			1366.2502
					Equivalent Gallons (vapor)			221.79387

Site Name: Former 501 Amoco
Location: Myrtle Beach, SC
UST ID # 05156
November 2021 Event (Page 3)
EMISSION CALCULATION

Elapsed Time (min)	Flow Rate (DSCFM)	Concentration (ppm)	K (#C - gas)	PPMg (ppm)	Cg:m (mg/dsm^3)	Cg (lbs/dscf)	PMRg (lb/hr)	PMR (lb)
5040	108.48	2155	4	8620	45858.4	0.00286294	18.634303	37.268607
5160	107.99	1942	4	7768	41325.76	0.002579967	16.716639	33.433279
5640	108.64	1986	4	7944	42262.08	0.002638422	17.198288	137.5863
5760	108.97	1919	4	7676	40836.32	0.002549411	16.668562	33.337124
al Emissions 1,371.6 + 1,366.2 + 241.6 = 2,979.4 pounds					Total Emissions in pounds			241.62531
Equivalent gallons 222.6 + 221.7 + 39.2 = 483.5 gallons (vapor)					Equivalent Gallons (vapor)			39.224888

Equations:

$PPMg = PPM\ (measured) \times K$ Mg = 128 mg/mg-mole (molecular weight of gasoline)

$Cg{:}m = PPMg \times (Mg/K_3)$ mass conc. of gasoline emission

$Cg = (Cg{:}m)(62.43 \times 10^{-9}\ lb\text{-}m^3/mg\text{-}ft^3)$ mass concentration of gasoline emission

$PMRg = (Cg)(Q_{std})(60\ min/hr)$ mass removal rate of gasoline emission

$PMR = PMRg\ \{(T2-T1)/60\}$ (mass removal rate of gasoline over time)

K = Number of carbons in calibration gas

$K_3 = 24.07\ dsm^3/1 \times 10^6$ mg-mole (mass to volume conversion factor)

APPENDIX E

WASTE DISPOSAL MANIFESTS

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number | 2. Page 1 of | 3. Emergency Response Phone | 4. Waste Tracking Number

GENERATOR

5. Generator's Name and Mailing Address: VERCO
2047 Industrial Blvd
Lexington, SC 29072
Generator's Phone:

Generator's Site Address (if different than mailing address): Former 501 Amoco
1432 Hwy 501
Myrtle Beach, SC

6. Transporter 1 Company Name: HERR, Inc. | U.S. EPA ID Number: NCR000139816

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address: HERR, Inc.
303 South Madtsby Street
Whiteville, NC 28472
Facility's Phone: | U.S. EPA ID Number

	9. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non-Hazardous, Non-Regulated PCW	1	TT	39 ½ inches	G	49.70
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

NORTH CAROLINA
PUBLIC WEIGHMASTER
LICENSE EXPIRES JUNE 30, 2022
RYAN COX 41409
UNLESS SIGNED

Gross = 68,740
Tare = 27,290
Net = 41,450

14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Generator's/Offeror's Printed/Typed Name: Bill Atkins | Signature | Month | Day | Year

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: Ray Damron | Signature: Ray Damron | Month: 11 | Day: 19 | Year: 21

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

17b. Alternate Facility (or Generator) | Manifest Reference Number: | 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: Scott Strickland | Signature | Month: 11 | Day: 19 | Year: 21

6-NHM-C-SO-1158

1-DESIGNATED FACILITY TO DESTINATION

WEIGHT TICKET

165938

DRIVER ON ☐
DRIVER OFF ☒

GROSS 68,740
TARE 27,290
NET 41,450 (4970 GALLONS)

SELLER
BUYER HERR

CUSTOMER NO. HERR

ADDRESS former 501 Amoco 1432 Hwy 501

CITY Myrtle Beach, SC

COMMODITY PCW

PRICE

DATE 11-19-21

REMARKS

SHIPPER HERR

WEIGHER

GROSS 68,740
TARE 27,290
NET 41,450 (4970 GALLONS)

NORTH CAROLINA
PUBLIC WEIGHMASTER
LICENSE EXPIRES JUNE 30, 2022
RYAN COX 41409
TL-9
UNLESS SIGNED

INBOUND
11:14 AM Nov/17/2021
ID:18172
19100 lb

OUTBOUND
11:30 AM Nov/17/2021
ID:18172
19100 lb G
17400 lb PT
1700 lb N

regulatory solutions, inc.

CUSTOMER NAME: Verco

GENERATOR: KS6 Myrtle Beach

TRUCK/CONTAINER #:

MANIFEST#: 33928

WEIGHER (INITIALS): PG

18172

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
			33928

GENERATOR

5. Generator's Name and Mailing Address
Verco 2047 Industrial BLVd
Lexington, SC. 29072
Generator's Phone: 803429 5001

Generator's Site Address (if different than mailing address)
1432 US-501 K.J.G.
Myrtle Beach, SC 29577

6. Transporter 1 Company Name
VerCO
U.S. EPA ID Number

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Regulatory Solutions
140 Pascola
Gaston, SC
Facility's Phone:
U.S. EPA ID Number

	9. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non Hazardous / Non Impacted Soil	3	D			
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

14. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Generator's/Offeror's Printed/Typed Name: James Hart Jr. Signature: [signature] Month: 11 Day: 17 Year: 21

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: Christopher Scott Jr. Signature: [signature] Month: 11 Day: 17 Year: 21
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: Preston Garner Signature: [signature] Month: 11 Day: 17 Year: 21

6-NHM-C-SO-1158

1-DESIGNATED FACILITY TO DESTINATION

Contractor Checklist

For each report submitted to the UST Management Division, the contractor will be required to verify that all data elements for the required scope of work have been provided. For items not required for the scope of work, the N/A box should be checked. For items required and not completed or provided, the No box should be checked and a thorough description of the reason must be provided.

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

Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk Evaluation)			✓
29	Have the exposure pathways been analyzed? (Tier 2 Risk Evaluation)			✓
30	Have the SSTLs for each compound and pathway been calculated? (Tier 2 Risk Evaluation)			✓
31	Have recommendations for further action been provided and explained?	✓		
32	Has the soil analytical data for the site been provided in tabular format? (Table 1)			✓
33	Has the potentiometric data for the site been provided in tabular format? (Table 2)	✓		
34	Has the current and historical laboratory data been provided in tabular format?			✓
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			✓
36	Have the Site conceptual model tables been included? (Tier 1 Risk Evaluation)			✓
37	Has the topographic map been provided with all required elements? (Figure 1)	✓		
38	Has the site base map been provided with all required elements? (Figure 2)	✓		
39	Have the CoC site maps been provided? (Figure 3 & Figure 4)			✓
40	Has the site potentiometric map been provided? (Figure 5)			✓
41	Have the geologic cross-sections been provided? (Figure 6)			✓
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			✓
43	Has the site survey been provided and include all necessary elements? (Appendix A)	✓		
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements? (Appendix B)			✓
45	Is the laboratory performing the analyses properly certified?			✓
46	Has the tax map been included with all necessary elements? (Appendix C)			✓
47	Have the soil boring/field screening logs been provided? (Appendix D)	✓		
48	Have the well completion logs and SCDHEC Form 1903 been provided? (Appendix E)	✓		
49	Have the aquifer evaluation forms, data, graphs, equations, etc. been provided? (Appendix F)			✓
50	Have the disposal manifests been provided? (Appendix G)	✓		
51	Has a copy of the local zoning regulations been provided? (Appendix H)			✓
52	Has all fate and transport modeling been provided? (Appendix I)			✓
53	Have copies of all access agreements obtained by the contractor been provided? (Appendix J)			✓
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided?	✓		

Explanation for missing and incomplete information?

dhec
Healthy People. Healthy Communities.

MAY 06 2024

UST 75 DOCKETING

TODD INVESTMENT PROPERTIES LLC
1121 SIMONTON DR
WATKINSVILLE GA 30677

Re: **Site Specific Work Plan Request for Groundwater Sampling**
501 Amoco, 1432 Highway 501, Myrtle Beach, SC
UST Permit #05156
Release reported December 31, 1991
RWI & AFVR Report received December 6, 2021
Horry County

Dear Mr. Todd:

The Underground Storage Tank Management Division (UST Division) of the South Carolina Department of Health and Environmental Control (DHEC) has reviewed the referenced report submitted by Kleen Sites Geoservices, Inc. The report documents petroleum chemicals in the soil and/or groundwater above Risk-Based Screening Levels.

Pursuant to S.C. Code Ann. Section 44-2-40(D), "The SUPERB Account and the SUPERB Financial Responsibility Fund shall provide combined coverage for site rehabilitation and third party claims, respectively, not to exceed one million dollars per occurrence". **According to UST Division records, approximately $350,171.78 has been expended from the SUPERB Account to date.**

To determine what risk the referenced release may pose to human health and the environment, and in accordance with Section 280.65 of the South Carolina Underground Storage Tank Control Regulations R.61-92, submittal of the Site Specific Work Plan (SSWP) for groundwater sampling may proceed. All work must be conducted in compliance with the current revision of the UST Quality Assurance Program Plan (QAPP), your contractor's Annual Contractor Quality Assurance Plan, and all applicable regulations. The QAPP is available at scdhec.gov/Environment/Land-Waste/Underground-Storage-Tanks/Release-Assessment-Clean/Quality-Assurance.

Groundwater samples should be collected from all monitoring wells associated with this release along with all water supply wells and surface waters within a 1,000 foot radius of the site. Samples should be analyzed for BTEX, Naphthalene, MTBE, 1,2-DCA, the 8 oxygenates, and EDB. All wells should be purged prior to sampling.

The SUPERB Application form should be completed and sent to this office to the attention of Denise Place for review. A copy of the SUPERB Application has been enclosed. Additionally, a copy of the Owner/Operator Contractor Selection Form has been enclosed in the event that the contractor selection should be updated. **The SUPERB Application and Owner/Operator Contractor Selection Form (if necessary) should be submitted within 30 days from the date of this letter.**

Your contractor must also complete the SSWP and submit it within 30 days from the date of this letter. Every component may not be necessary to complete the above scope of work. The State Underground Petroleum Environmental Response Bank (SUPERB) Account allowable cost for each component is included on the Assessment Component Cost Agreement Form. **Please note that approval from DHEC must be issued before work begins.**

If the plan cannot be submitted by the required due date, an extension must be requested by submitting a written request, either via postal mail or email, to my attention prior to the due date. The Department will issue a Notice of Alleged Violation if the report/plan is not submitted by the required due date.

On all correspondence concerning this site, please reference UST Permit number above. Should you have any questions, please contact me by phone at (803) 898-2946, by fax at (803) 898-0673, or by email at kelletrd@dhec.sc.gov.

Sincerely,

Ryan Kellett

Ryan Kellett, Hydrogeologist
Corrective Action & Field Support Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management

enc: SUPERB Application
Owner/Operator Contractor Selection Form

cc: Kleen Sites Geoservices, Inc., 2047 Industrial Blvd., Lexington, SC 29072 (w/o enc)
Technical file (w/o enc)

Owner/Operator Contractor Selection Form
Underground Storage Tank (UST) Management Division

1. CONTRACTOR OF CHOICE

As the current or former UST Owner/Operator and the designated party responsible for the confirmed release reported on the date and permit number provided.	Release Report Date:	Permit Number:

I would like to use the contractor listed below to conduct all site rehabilitation work for the referenced release reported above:

Name of Contractor:		
Address:		
City:	State:	Zip:
Telephone Number:	Certification Number:	

NOTE: Site rehabilitation activities must be performed by a S.C. Certified Site Rehabilitation Contractor per Section 44-2-120(A) of the SUPERB Act and Section IV(A) of the S.C. DHEC SUPERB Site Rehabilitation and Fund Access Regulation R.61-98.

2. FINANCIAL OR FAMILIAL RELATIONSHIP

Does a financial or familial relationship, as defined below, exist between you and the contractor/person that you listed above?	☐ Yes ☐ No	O/O Initial:

FINANCIAL RELATIONSHIP: A connection or association through a material interest of sources of income which exceed five percent of annual gross income from a business entity.

FAMILIAL RELATIONSHIP: A connection or association by family or relatives, in which a family member or relative has a material interest. Family or relatives include: father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, grandchild, great-grandchild, step-grandparent, step-great-grandparent, step-grandchild, step-great-grandchild or fiancée.

3. PAYMENT

A. The first $25,000.00 in eligible site rehabilitation costs for releases reported subsequent to July 1, 1993 will be applied against the applicable SUPERB deductible per Section 44-2-40(D) of the SUPERB Act, upon submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment.

B. For eligible costs exceeding the $25,000.00 deductible, you can pay the contractor and, upon the submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment, be compensated from the SUPERB Account, or have payment issued directly from the SUPERB Account to the contractor. (Check one.)

☐ For eligible costs exceeding the deductible, I request that payment be made to me after I have paid the contractor.	O/O Initial:
– OR –	
☐ For eligible costs exceeding the deductible, I request that payment be made directly to the contractor.	O/O Initial:

C. If the release qualifies under amnesty (reported prior to July 1, 1993) per Section 44-2-40(B) of the SUPERB Act, you can pay the contractor and be compensated from the SUPERB Account, or have payment issued directly from the SUPERB Account to the contractor. (Check one.)

☐ For eligible costs, I request that payment be made to me after I have paid the contractor.	O/O Initial:
– OR –	
☐ For eligible costs, I request that payment be made directly to the contractor.	O/O Initial:

NOTE: As required by the SUPERB Act, all costs must receive prior financial approval from DHEC regardless of payment option.

4. UST OWNER/OPERATOR OR PARTY RESPONSIBLE FOR ABOVE REFERENCED RELEASE

Signature:	Date Signed:
Printed Name:	Telephone Number: ( )
Affiliation (if applicable):	Email Address:

KLEEN SITES GEOSERVICES, INC.
ENVIRONMENTAL SERVICES

RECEIVED
MAY 24 2024
UST DIVISION

May 20, 2024

UST 76 Tech DOCKETING

Ryan Kellett, Hydrogeologist
South Carolina Department of Health and Environmental Control
Bureau of Land & Waste Management
UST Management Division
2600 Bull Street
Columbia, South Carolina 29201

Re: Submittal of Owner / Operator Contractor Selection Form
Former 501 Amoco
1432 Hwy 501
Myrtle Beach, Horry County, SC
UST Permit # 05156

Dear Mr. Kellett:

Our company, Kleen Sites Geoservices, is reducing the amount of work that we provide to our SUPERB Fund clients. We have recommended to several of our clients that Emerald, Inc. be designated as their SUPERB contractor of choice. I have enclosed a completed Contractor Selection Form for the following site in Horry County:

Former 501 Amoco
1432 Hwy 501
Myrtle Beach, Horry County, SC
UST Permit # 05156

Please make this change in the SCDHEC database. Emerald personnel have your letter requesting that a Site-Specific Work Plan for sampling be prepared. Please contact me at (803) 479-9291 or by email at bill@kleensites.com if you have any questions concerning the enclosed form or if you need any additional information. I appreciate your assistance in this matter.

Sincerely,

Kleen Sites Geoservices, Inc.

Bill Dunnagan, P.G.
Principal Geologist

2047 Industrial Blvd., Lexington, SC 29072
(803) 996-0637 (803) 996-0638 (Fax)
www.kleensites.com

Owner/Operator Contractor Selection Form
Underground Storage Tank (UST) Management Division

1. CONTRACTOR OF CHOICE

As the current or former UST Owner/Operator and the designated party responsible for the confirmed release reported on the date and permit number provided.	Release Report Date: 12/31/91	Permit Number: 05156

I would like to use the contractor listed below to conduct all site rehabilitation work for the referenced release reported above:

Name of Contractor: Emerald, Inc.

Address: P.O. Box 3050

City: Sumter	State: SC	Zip: 29151
Telephone Number: 803-469-5454	Certification Number: 67	

NOTE: Site rehabilitation activities must be performed by a S.C. Certified Site Rehabilitation Contractor per Section 44-2-120(A) of the SUPERB Act and Section IV(A) of the S.C. DHEC SUPERB Site Rehabilitation and Fund Access Regulation R.61-98.

2. FINANCIAL OR FAMILIAL RELATIONSHIP

Does a financial or familial relationship, as defined below, exist between you and the contractor/person that you listed above?	☐ Yes ☑ No	O/O Initial: DT

FINANCIAL RELATIONSHIP: A connection or association through a material interest of sources of income which exceed five percent of annual gross income from a business entity.

FAMILIAL RELATIONSHIP: A connection or association by family or relatives, in which a family member or relative has a material interest. Family or relatives include: father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, grandchild, great-grandchild, step-grandparent, step-great-grandparent, step-grandchild, step-great-grandchild or fiancée.

3. PAYMENT

A. The first $25,000.00 in eligible site rehabilitation costs for releases reported subsequent to July 1, 1993 will be applied against the applicable SUPERB deductible per Section 44-2-40(D) of the SUPERB Act, upon submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment.

B. For eligible costs exceeding the $25,000.00 deductible, you can pay the contractor and, upon the submittal of the canceled check (front and back) or a notarized statement from the contractor verifying payment, be compensated from the SUPERB Account, or have payment issued directly from the SUPERB Account to the contractor. (Check one.)

☐ For eligible costs exceeding the deductible, I request that payment be made to me after I have paid the contractor.	O/O Initial:
– OR –	
☑ For eligible costs exceeding the deductible, I request that payment be made directly to the contractor.	O/O Initial: DT

C. If the release qualifies under amnesty (reported prior to July 1, 1993) per Section 44-2-40(B) of the SUPERB Act, you can pay the contractor and be compensated from the SUPERB Account, or have payment issued directly from the SUPERB Account to the contractor. (Check one.)

☐ For eligible costs, I request that payment be made to me after I have paid the contractor.	O/O Initial:
– OR –	
☑ For eligible costs, I request that payment be made directly to the contractor.	O/O Initial: DT

NOTE: As required by the SUPERB Act, all costs must receive prior financial approval from DHEC regardless of payment option.

4. UST OWNER/OPERATOR OR PARTY RESPONSIBLE FOR ABOVE REFERENCED RELEASE

Signature: [signature], CHAIRMAN	Date Signed: 5/10/2024
Printed Name: DANIEL B. TODD	Telephone Number: (706) 540-0799
Affiliation (if applicable): TODD INVESTMENT PROPERTIES LLC	Email Address: DANIELBTODD@GMAIL.COM

Emerald, Inc.

CONSULTING AND ENGINEERING
SERVICES IN ENVIRONMENTAL AFFAIRS

2520 TAHOE DRIVE · POST OFFICE BOX 3050 · SUMTER, SOUTH CAROLINA 29151

WEBSITE:
www.emeraldinc-us.com

TELEPHONE (803) 469-5454
FAX (803) 469-5465

July 9, 2024

RECEIVED
JUL 12 2024
UST DIVISION

UST 77 Tech DOCKETING

Ryan Kellett, Hydrogeologist
Corrective Action & Field Support Section
Underground Storage Tank Division
Bureau of Land and Waste Management
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, SC 29201

Site Specific Work Plan – Groundwater Sampling
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
Horry County
UST Permit #05156

Mr. Kellett,

Please find the attached Site-Specific Work Plan, figures, and proposed costs for Groundwater Sampling Event at the subject site. If you have any questions or concerns, please feel free to contact Emerald, Inc. at 803-469-5454.

Sincerely,

William C. McClary, P.G.
Project Manager

Attachments
Appendix A - Site Specific Work Plan
Appendix B - Figures
Appendix C – Proposed Costs

Appendix A

Site Specific Work Plan

Site-Specific Work Plan for Approved ACQAP
Underground Storage Tank Management Division

To: Ryan Kellett, Hydrogeologist (SCDHEC Project Manager)
From: William (Chad) McClary, P.G. (Contractor Project Manager)
Contractor: Emerald, Inc. UST Contractor Certification Number: 67

Facility Name: 501 Amoco UST Permit #: 05156
Facility Address: 1432 US Highway 501, Myrtle Beach, SC
Responsible Party: Todd Investments Properties LLC Phone: _____
RP Address: 220 Riverview Road, Athens, GA 30606
Property Owner (if different): SAA
Property Owner Address: SAA
Current Use of Property: Car Lot

Scope of Work (Please check all that apply)

☐ IGWA ☐ Tier II ☑ Groundwater Sampling ☐ GAC
☐ Tier I ☐ Monitoring Well Installation ☐ Other _____

Analyses (Please check all that apply)

Groundwater/Surface Water:

☑ BTEXNMDCA (8260B) ☐ Lead ☐ BOD ☐ Methane
☑ Oxygenates (8260B) ☐ 8 RCRA Metals ☐ Nitrate ☐ Ethanol
☑ EDB (8011) ☐ TPH ☐ Sulfate ☐ Dissolved Iron
☐ PAH (8270D) ☐ pH ☐ Other _____

Drinking Water Supply Wells:

☐ BTEXNMDCA (524.2) ☐ Mecury (200.8 245.1 or 245.2) ☐ EDB (504.1)
☐ Oxygenates & Ethanol (8260B) ☐ RCRA Metals (200.8)

Soil:

☐ BTEXNM ☐ Lead ☐ RCRA Metals ☐ TPH-DRO (3550B/8015B) ☐ Grain Size
☐ PAH ☐ Oil & Grease (9071) ☐ TPH-GRO (5030B/8015B) ☐ TOC

Air:

☐ BTEXN

Sample Collection (Estimate the number of samples of each matrix that are expected to be collected.)

_____ Soil _____ Water Supply Wells _____ Air 2 Field Blank
21 Monitoring Wells _____ Surface Water 2 Duplicate 2 Trip Blank

Field Screening Methodology

Estimate number and total completed depth for each point, and include their proposed locations on the attached map.

# of shallow points proposed: _____ Estimated Footage: _____ feet per point
# of deep points proposed: _____ Estimated Footage: _____ feet per point
Field Screening Methodology: _____

Permanent Monitoring Wells

Estimate number and total completed depth for each well, and include their proposed locations on the attached map.

# of shallow wells: _____ Estimated Footage: _____ feet per point
# of deep wells: _____ Estimated Footage: _____ feet per point
# of recovery wells: _____ Estimated Footage: _____ feet per point
Comments, if warranted:

_____

_____

UST Permit #: 05156 Facility Name: 501 Amoco

Implementation Schedule (Number of calendar days from approval)
Field Work Start-Up: 15 Field Work Completion: 60
Report Submittal: 90 # of Copies Provided to Property Owners: _____

Aquifer Characterization
Pump Test: ☐ Slug Test: ☐ (Check one and provide explanation below for choice)

Investigation Derived Waste Disposal
Soil: _____ Tons Purge Water: 450 Gallons
Drilling Fluids: _____ Gallons Free-Phase Product: _____ Gallons

Additional Details For This Scope of Work
For example, list wells to be sampled, wells to be abandoned/repaired, well pads/bolts/caps to replace, details of AFVR event, etc.

As requested by SCDHEC, Emerald, Inc. will conduct a comprehensive groundwater sampling event to provide current groundwater quality data. Monitoring wells MW-1 through MW-13, TW-1, TW-2, and RW-1 through RW-5 will be sampled for BTEX, Napth, MTBE, DCA, Oxys (EPA 8260D), and EDB (EPA 8011). Each well will be purged prior to sample collection. Wells containing free product will be gauged and not sampled. 3 gauge well only are included in the proposed costs in case product is detected.

Compliance With Annual Contractor Quality Assurance Plan (ACQAP)
Yes Laboratory as indicated in ACQAP? (Yes/No) If no, indicate laboratory information below.
Name of Laboratory: _____
SCDHEC Certification Number: _____
Name of Laboratory Director: _____

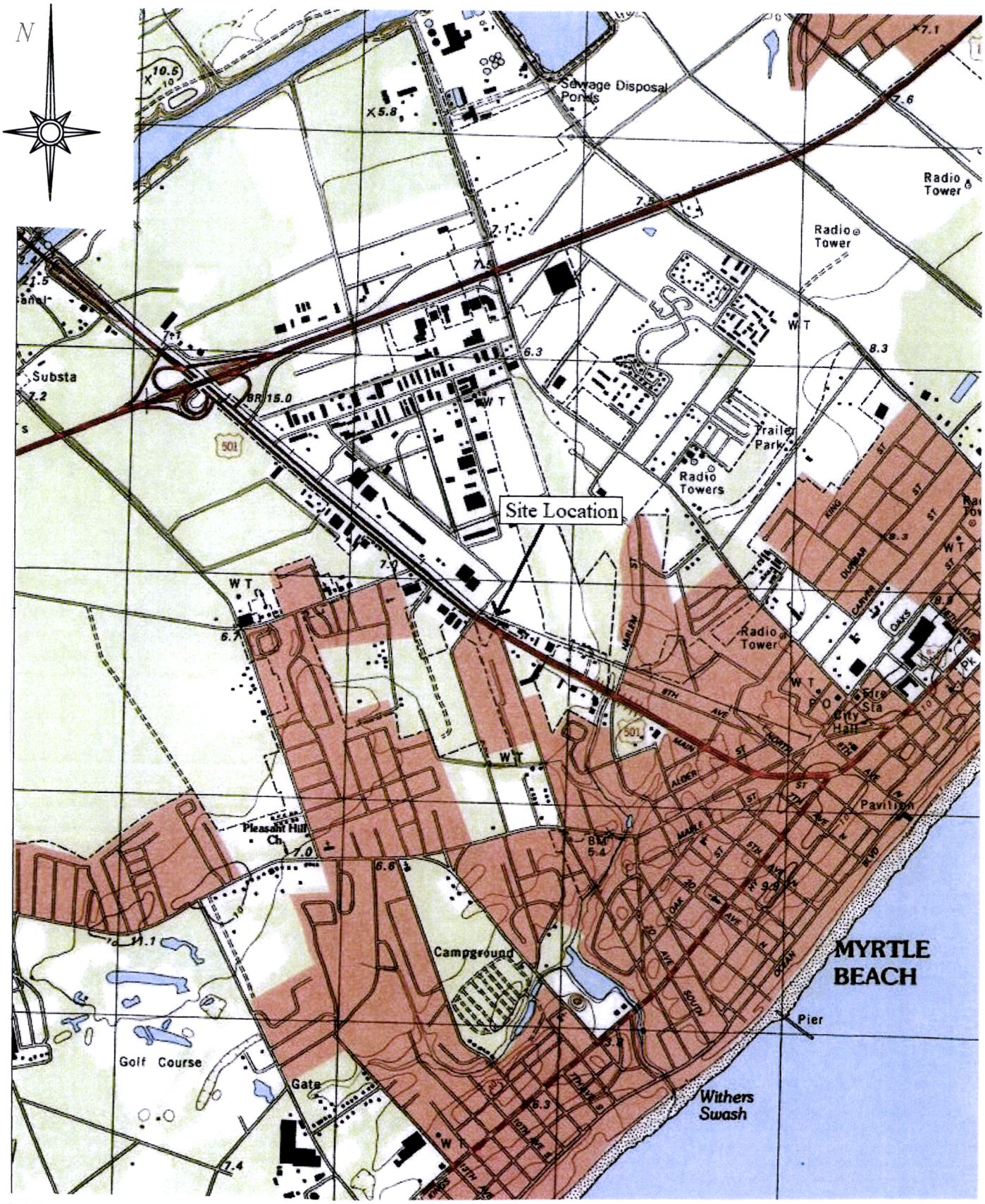
____ Well Driller as indicated in ACQAP? (Yes/No) If no, indicate driller information below.
Name of Well Driller: _____
SCLLR Certification Number: _____

____ Other variations from ACQAP. Please describe below.

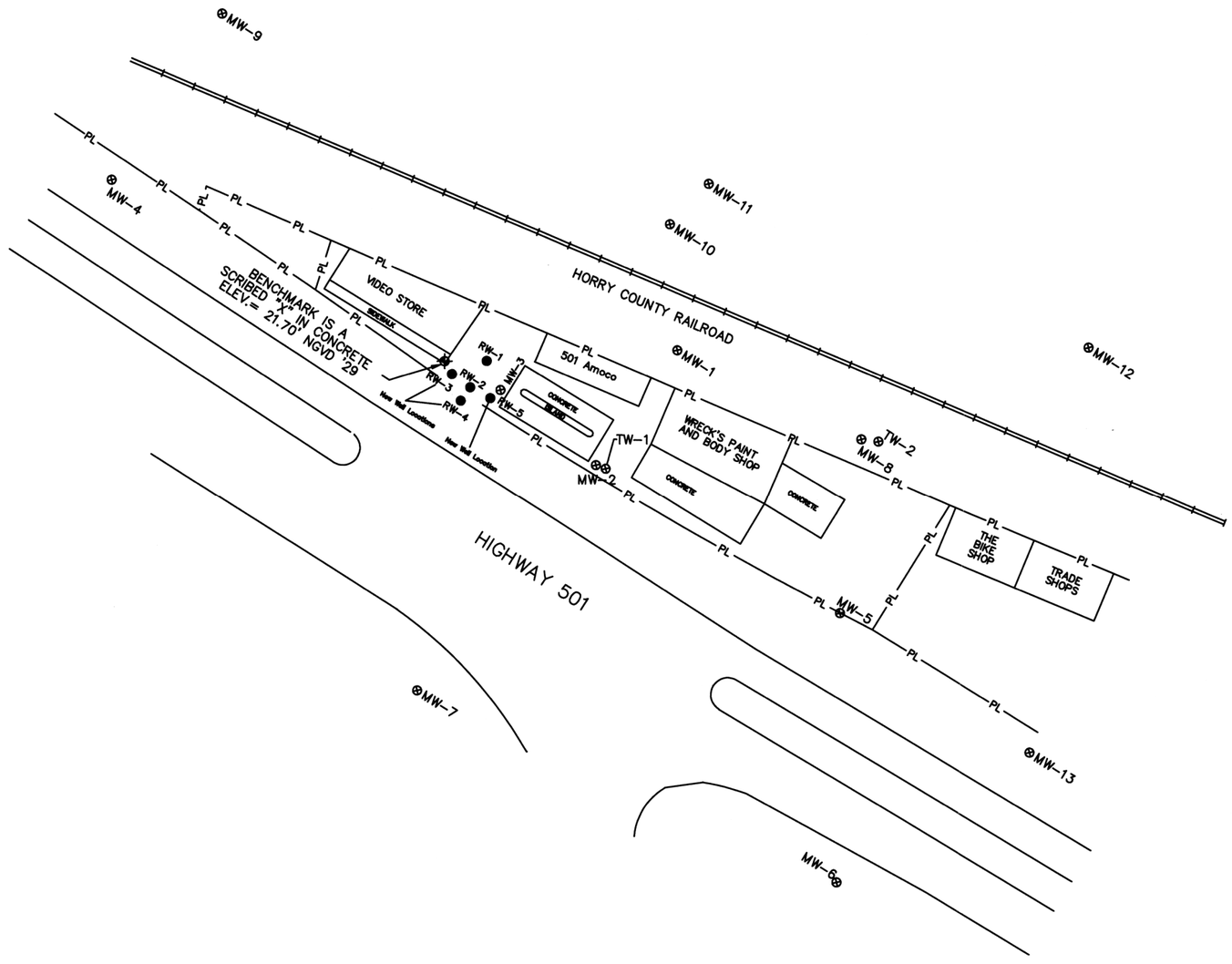
Attachments
1. Attach a copy of the relevant portion of the USGS topographic map showing the site location.
2. Prepare a site base map. This map must be accurately scaled, but does not need to be surveyed. The map must include the following:
   - North Arrow
   - Location of property lines
   - Location of buildings
   - Previous soil sampling locations
   - Previous monitoring well locations
   - Proposed soil boring locations
   - Proposed monitoring well locations
   - Legend with facility name and address, UST permit number, and bar scale
   - Streets or highways (indicate names and numbers)
   - Location of all present and former ASTs and USTs
   - Location of all potential receptors
3. Assessment Component Cost Agreement, SCDHEC Form D-3664

Appendix B

Figures



PROJECT:	SHEET TITLE:	
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST Permit# 05156	Figure 1 USGS Topographic Map 7.5 Minute Series 'Myrtle Beach, SC' Quadrangle Scale: 1 to 2,000 Contour Interval = 2 meters	EMERALD, INC. Sumter, SC



LEGEND

⊕ Location of Groundwater Monitoring Well

SCALE
1 INCH = 40 FEET
0 40′ 80′

Map based Kleen Sites Geoservices Figure 4

PROJECT: 501 Amoco 1432 Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	DATE: 7/9/24	Figure 3 - Site Map
		EMERALD, INC. SUMTER, SOUTH CAROLINA

Appendix C

Proposed Costs

ASSESSMENT COMPONENT COST AGREEMENT

South Carolina Department of Health and Environmental Control
Underground Storage Tank Management Division
State Underground Petroleum Environmental Response Bank Account
August 9, 2023

Facility Name: 501 Amoco

UST Permit #: 05156 **Cost Agreement #:**

ITEM	QUANTITY	UNIT	UNIT PRICE		TOTAL
A. Plan Preparation					
1.2 Site-specific Work Plan	1	each	$183.22		$183.22
2.2 Tax Map		each	$85.50		$0.00
3.2 QAPP Contractor Addendum (App B)		each	$250.00		$0.00
B. Survey					
1.1 Receptor Survey		each	$673.06		$0.00
C. Survey					
1.2 Comprehensive Survey		each	$1,270.36		$0.00
5.1 Ground Penetrating Radar Survey (100 x 100)		each	$1,111.57		$0.00
D. Mob/Demob					
1.2 Equipment		each	$1,245.93		$0.00
2.2 Personnel	2	each	$516.69		$1,033.38
3.2 Adverse Terrain Vehicle		each	$610.75		$0.00
E. Soil Borings					
1.1 Soil Borings (hand auger)		foot	$21.80		$0.00
F. Soil Borings (requiring equipment, push technology, etc) or Field Screening (including sampling and analyst)					
1.2 Standard		per foot	$33.50		$0.00
2.2 Fractured Rock		per foot	$41.40		$0.00
G.					
H. Well Abandonment					
1.2 2" diameter or less		per foot	$3.79		$0.00
2.2 Greater than 2" to 6" diameter		per foot	$5.50		$0.00
3.2 Dug/Bored well (up to 6 feet diameter)		per foot	$18.32		$0.00
I. Well Installation (In accordance with R.61-71)					
1.2 Water Table (hand augered)		per foot	$31.40		$0.00
2.B Water Table (drill rig) 2" Diameter		per foot	$54.90		$0.00
2.2 Single-cased 2" Diameter Monitoring Well >50ft		per foot	$59.80		$0.00
3.2 Telescoping		per foot	$84.70		$0.00
4.2 Rock Drilling		per foot	$81.80		$0.00
5.2 2" Rock Coring		per foot	$88.50		$0.00
6.2 Multi-sampling ports/screens		per foot	$59.40		$0.00
7.2 Recovery Well (4" diameter)		per foot	$69.60		$0.00
9.2 Rotosonic (2" diameter)		per foot	$119.00		$0.00
10.2 Re-develop Existing Well		per foot	$13.44		$0.00
J. Groundwater Sample Collection / Gauging Depth to Water/Product					
1.2 Groundwater Purge	21	per well	$73.29		$1,539.09
2.2 Air or Vapors		sample	$14.66		$0.00

3.2 Water Supply Sample		sample	$26.87		$0.00
4.1A HydraSleeve		sample	$34.20		$0.00
4.2B No-purge Groundwater Sample/Surface water		sample	$57.24		$0.00
5.2 Gauge Well only	3	sample	$8.55		$25.65
6.2 Sample Below Product		sample	$14.66		$0.00
7.2 Passive Diffusion Bag		sample	$31.75		$0.00
8.2 Field Duplicates (MWs & WSWs) and Field Bla	4	sample	$30.06		$120.24
9.2 Groundwater (low flow purge)		sample	$111.16		$0.00
10.2 Equipment Blank		sample	$30.06		$0.00
11.1 Sample Product		per well	$52.66		$0.00
K. Laboratory Analyses-Groundwater					
1.2 BTEXNM+Oxyg's+1,2 DCA+Eth(8260D)	27	per sample	$149.02		$4,023.54
2.2 Lead, Filtered		per sample	$16.85		$0.00
3.2 Rush EPA Method 8260B		per sample	$187.62		$0.00
4.2 Trimethal, Butyl, and Isopropyl Benzenes		per sample	$34.20		$0.00
5.2 PAH's		per sample	$74.02		$0.00
6.2 Lead		per sample	$19.54		$0.00
7.2 EDB by EPA 8011	25	per sample	$55.21		$1,380.25
8.2 EDB by EPA Method 8011 Rush		per sample	$83.31		$0.00
9.2 8 RCRA Metals		per sample	$77.45		$0.00
10.2 TPH (9070)		per sample	$50.09		$0.00
11.2 PH		per sample	$6.35		$0.00
12.2 BOD		per sample	$24.42		$0.00
13.2 Ethanol		per sample	$18.08		$0.00
K. Analyses-Drinking Water					
14.2 BTEXNM+1,2 DCA (524.2)		per sample	$151.52		$0.00
15.2 7-OXYGENATES & ETHANOL (8260D)		per sample	$112.07		$0.00
16.2 EDB (504.1)		per sample	$97.11		$0.00
17.2 RCRA METALS (200.8)		per sample	$122.15		$0.00
K. Analyses-Soil					
18.2 BTEX + Naphth.		per sample	$78.18		$0.00
19.2 PAH's		per sample	$78.22		$0.00
20.2 8 RCRA Metals		per sample	$68.89		$0.00
21.2 TPH-DRO (3550C/8015C)		per sample	$48.86		$0.00
22.2 TPH-GRO (5035B/8015C)		per sample	$43.92		$0.00
23.2 Grain size/hydrometer		per sample	$127.04		$0.00
24.2 Total Organic Carbon		per sample	$37.38		$0.00
K. Analyses-Air					
25.2 BTEX + Naphthalene		per sample	$263.84		$0.00
K. Hydrocarbon Fuel Identification					
27.1 C3-C44 Whole Oil (ASTM D3328)		per sample	$465.93		$0.00
28.1 Fuel Oxygenates (1624 Mod)		per sample	$398.39		$0.00
29.1 ALKYL Leads, EDB MMT (8080)		per sample	$398.39		$0.00
30.1 C8-C40 Full Scan (ASTM 5739)		per sample	$629.64		$0.00
31.1 Simulated Distillation (ASTM 2887)		per sample	$398.39		$0.00
32.1 Parent & Alk. PAH Com. (8270 SIM)		per sample	$723.63		$0.00
33.1 C3-C10 Piano (8260 MOD)		per sample	$599.88		$0.00

34.1 C10+Alkane Fingerprints		per sample	$599.88		$0.00
35.1 Expert Data Interpretation & Report		each	$595.30		$0.00
L. Aquifer Characterization					
1.2 Pumping Test		per hour	$28.09		$0.00
2.2 Slug Test		per test	$233.31		$0.00
3.2 Fractured Rock		per test	$122.15		$0.00
M. Free Product					
1.1 Free Product Recovery Rate Test		each	$46.42		$0.00
N.					
O. Risk Evaluation					
1.2 Tier I Risk Evaluation		each	$366.45		$0.00
2.2 Tier II Risk Evaluation		each	$122.15		$0.00
P. Survey					
1.1 Subsequent Survey		each	$297.65		$0.00
Q. Disposal (gallons or tons)					
1.2 Wastewater	450	gallon	$1.19		$535.50
2.2 Free Product		gallon	$1.63		$0.00
3.2 Soil Treatment/Disposal		ton	$156.25		$0.00
4.2 Drilling fluids		gallon	$1.25		$0.00
R. Miscellaneous (attach receipts)					
		each	$0.00		$0.00
		each	$0.00		$0.00
T. Tier I Assessment (Use DHEC 3665 form)					
1.2 Southeast Region		standard	$12,622.56		$0.00
2.2 All Other Counties		standard	$13,844.06		$0.00
U. IGWA (Use DHEC 3666 form)					
1.2 Southeast Region		standard	$4,353.67		$0.00
2.2 All Other Counties		standard	$4,720.01		$0.00
22. Active Correction Action		PFP	Bid Cost		$0.00
W. Aggressive Fluid & Vapor Recovery (AFVR)					
1.2 8-hour Event		per event	$1,787.40		$0.00
2.1 24-hour Event		per event	$4,407.78		$0.00
3.1 48-hour Event		per event	$7,242.29		$0.00
4.1 96-hour Event		per event	$14,482.28		$0.00
5.1 Off-gas Treatment 8 hour		per event	$141.17		$0.00
6.2 Off-gas Treatment 24 hour		per event	$294.30		$0.00
7.2 Off-gas Treatment 48 hour		per event	$386.10		$0.00
8.1 Off-gas Treatment 96 hour		per event	$898.84		$0.00
9.1 Off-gas Treatment 8 hour (w/chlorinated compounds)		per event	$464.40		$0.00
10.1 Off-gas Treatment 24 hour (w/chlorinated compounds)		per event	$540.00		$0.00
11.1 Off-gas Treatment 48 hour (w/chlorinated compounds)		per event	$1,080.00		$0.00
12.1 Off-gas Treatment 96 hour (w/chlorinated compounds)		per event	$2,160.00		$0.00
13.2 AFVR Effluent Disposal(w/chlorinated compounds)		gallon	$0.64		$0.00
14.2 AFVR Site Reconnaissance		each	$302.40		$0.00
15.1 Additional Hook-ups		each	$29.68		$0.00
16.2 AFVR Effluent Disposal		gallon	$0.53		$0.00
17.2 AFVR Mobilization/Demobilization		each	$777.60		$0.00

18.1 Mobilization for absorbents/skimmers		each	$516.69		$0.00
19.1 Well sock 2" ID well		each	$36.94		$0.00
20.1 Well sock 4" ID well		each	$49.03		$0.00
21.1 pad (per pad)		each	$49.95		$0.00
22.1 3" diameter x 10' length boom		each	$108.00		$0.00
23.1 5" diameter x 10' length boom		each	$132.84		$0.00
24.1 New FPP recovery skimmer (2" wells)		each	$791.10		$0.00
25.1 New FPP recovery skimmer (4" wells)		each	$1,247.40		$0.00
26.1 Refurbished FPP recovery skimmer (2" or 4" wells)		each	$760.32		$0.00
27.1 Disposal of Absorbents		pound	$4.10		$0.00
28.1 Disposal of product from skimmers		gallon	$0.50		$0.00
X. Granulated Activated Carbon (GAC) filter system installation & service:					
1.2 New GAC System Installation		each	$2,320.86		$0.00
2.2 Refurbished GAC Sys. Install		each	$1,099.35		$0.00
3.2 Filter replacement/removal		each	$427.53		$0.00
4.2 GAC System removal, cleaning, & refurbishment		each	$335.92		$0.00
5.2 GAC System housing		each	$305.38		$0.00
6.2 In-line particulate filter		each	$183.22		$0.00
7.2 Additional piping & fittings		foot	$1.84		$0.00
Y. Well Repair					
1.2 Additional Copies of the Report Delivered		each	$61.07		$0.00
2.2 Repair 2x2 MW pad		each	$61.07		$0.00
3.2 Repair 4x4 MW pad		each	$107.49		$0.00
4.2 Replace well vault		each	$144.14		$0.00
5.2 Replace well cover bolts		each	$3.18		$0.00
6.2 Replace locking well cap & lock		each	$18.32		$0.00
7.2 Replace/Repair stick-up		each	$163.68		$0.00
8.2 Convert Flush-mount to Stick-up		each	$183.22		$0.00
9.2 Convert Stick-up to Flush-mount		each	$158.79		$0.00
10.2 Replace missing/illegible well ID plate		each	$14.66		$0.00
11.1 Down-hole Camera		per foot	$29.25		$0.00
Z. High Resolution Site Characterization					
1.1 HRSC Screening Equipment Mobilization		each	$1,468.80		$0.00
2.1 HRSC Drilling Category 1		per foot	$31.32		$0.00
3.1 HRSC Drilling Category 2		per foot	$36.18		$0.00
4.1 HRSC Drilling Category 3		per foot	$29.16		$0.00
5.1 HRSC 3-D Model		each	$4,363.20		$0.00
S. Report Prep & Project Management	12%	percent	$8,840.87		$1,060.90
TOTAL					$9,901.77

SC DEPARTMENT *of*
ENVIRONMENTAL SERVICES

Ryan Kellett
Corrective Action & Field Support Section
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201

JUL 18 2024

TODD INVESTMENT PROPERTIES LLC
220 RIVERVIEW RD
ATHENS GA 30606

UST 78 DOCKETING

Re: **Site Specific Work Plan Approval and Groundwater Sampling Notice to Proceed**
501 Amoco, 1432 Highway 501, Myrtle Beach, SC
UST Permit #05156; CA #68891
Release #1 reported December 31, 1991
Site Specific Work Plan received July 12, 2024
Horry County

Dear Mr. Todd:

The Underground Storage Tank Management Division (UST Division) of the S.C. Department of Environmental Services has reviewed and approved the referenced Site Specific Work Plan (SSWP) submitted by your contractor. The groundwater sampling event should begin immediately upon receipt of this letter. All work should be conducted in compliance with the current revision of the UST Quality Assurance Program Plan (QAPP), your contractor's Annual Contractor Quality Assurance Plan, and all applicable regulations. The QAPP is available at scdhec.gov/environment/land-waste/underground-storage-tanks/release-assessment-clean/quality-assurance.

Pursuant to S.C. Code Ann. Section 44-2-40(D), "The SUPERB Account and the SUPERB Financial Responsibility Fund shall provide combined coverage for site rehabilitation and third party claims, respectively, not to exceed one million dollars per occurrence". **According to UST Division records, approximately $350,171.78 has been expended from the SUPERB Account to date.** This scope of work, as recommended by your contractor, is anticipated to cost approximately $9,901.78.

The contractor must provide notification to the UST Project Manager via email 4 days prior to initiation of any site rehabilitation activities. If there are any changes to the schedule, the UST Project Manager must be contacted within 24 hours of those changes.

In accordance with Section IV.A.4.c of the SUPERB Site Rehabilitation & Fund Access Regulation (R.61-98), the contractor shall be required to indemnify the property owner, underground storage tank owner/operator and the State of South Carolina from and against all claims, damages, losses and expenses arising out of or resulting from activity conducted by the contractor, its agents, employees or subcontractors.

Your contractor can submit an invoice for direct payment from the State Underground Petroleum Environmental Response Bank (SUPERB) Account for pre-approved costs. **The Monitoring Report, contractor checklist (QAPP Appendix K), and invoice should be submitted to the UST Division within sixty (60) days of the date of this correspondence.** If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

If the report cannot be submitted by the required due date, an extension may be requested by

submitting a written request, either via postal mail or email, to my attention prior to the due date. The Department will issue a Notice of Alleged Violation if the report is not submitted by the required due date.

Please note that sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that the SUPERB Account cannot compensate any costs that are not pre-approved. If for any reason additional tasks will be completed, these additional tasks, and the associated cost, must be pre-approved by the UST Division for the cost to be paid. The UST Division reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, the UST Division reserves the right to question and/or reject costs if deemed unreasonable and the right to audit project records at any time during the project or after completion of work. **Per Section III.3.b of the SUPERB Site Rehabilitation and Fund Access Regulations (R.61-98), reimbursement for site rehabilitation activities shall in no event exceed the actual costs incurred.**

Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Any site rehabilitation activity associated with the UST release must be performed by a SCDES-certified site rehabilitation contractor as required by the SUPERB Site Rehabilitation and Fund Access Regulation, R.61-98.

The UST Division grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the Chemical of Concern (CoC) concentrations based on laboratory analysis is below Risk-Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on-site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

The contractor will be responsible for keeping and preserving suitable records of hydrological and other site assessments, site plans, contracts, accounts, invoices, or other transactions related to the cleanup and rehabilitation and the records must be accessible to the department during regular business hours. In addition, this includes all subcontractor agreements, invoices, correspondence, plans, reports, records, including electronic and paper formats. All records must be maintained for 10 years after project completion.

On all correspondence regarding this site, please reference the UST Permit number above. Should you have any questions, please contact me by phone at (803) 898-2946, by fax at (803) 898-0673, or by email at ryan.kellett@des.sc.gov.

Sincerely,

Ryan Kellett

Ryan Kellett, Hydrogeologist

enc: Approved Cost Agreement

cc: Emerald, Inc., P.O. Box 3050, Sumter, SC 29151 (w/ enc)
Technical file (w/ enc)

Approved Cost Agreement 68891

Facility: 05156 501 AMOCO
KELLETRD
PO Number:

Task / Description	Categories	Item	Description	Qty / Pct	Unit Price	Amount
A PLAN PREPARATION						
		1.2	SITE SPECIFIC WORK PLAN	1.0000	$183.220	183.22
D MOB/DEMOB						
		2.2	PERSONNEL	2.0000	$516.690	1,033.38
J SAMPLE COLLECTION						
		1.2	GROUND WATER PURGE	21.0000	$73.290	1,539.09
		5.2	GAUGE WELL ONLY	3.0000	$8.550	25.65
		8.2	FIELD DUPL. (MWS & WSWS) & FB	4.0000	$30.060	120.24
K ANALYSES						
	GW GROUNDWATER	1.2	BTEXNM+OXYGS+1,2 DCA+ETH 8260D	27.0000	$149.020	4,023.54
		7.2	EDB BY EPA 8011	25.0000	$55.210	1,380.25
Q DISPOSAL						
		1.2	WASTEWATER	450.0000	$1.190	535.50
S REPORT PROJECT MANAGEMENT						
		S	REPORT PREP & PROJ. MANAGEMENT	0.1200	$8,840.870	1,060.90
				Total Amount		9,901.77

Ryan D. Kellett

From: Ryan D. Kellett
Sent: Tuesday, November 5, 2024 3:49 PM
To: Chad McClary
Subject: RE: UST Permit #05156 Monitoring Report (CA#68891)

Thanks Chad, I'll get this processed when the report comes in.

Ryan Kellett
Hydrologist I
Corrective Action & Field Support Section
Underground Storage Tank Management Division
O: 803.898.2946
Ryan.Kellett@des.sc.gov

SC DEPARTMENT of ENVIRONMENTAL SERVICES



From: Chad McClary <cmcclary@emeraldinc-us.com>
Sent: Tuesday, November 5, 2024 10:01 AM
To: Ryan D. Kellett <Ryan.Kellett@des.sc.gov>
Subject: Re: UST Permit #05156 Monitoring Report (CA#68891)

Good morning,

You should have a copy of the report in the next few days. Attached is an addendum for the project.

Thanks

From: Ryan D. Kellett <Ryan.Kellett@des.sc.gov>
Sent: Wednesday, October 16, 2024 4:01 PM
To: Chad McClary <cmcclary@emeraldinc-us.com>
Subject: UST Permit #05156 Monitoring Report (CA#68891)

Good afternoon Chad,

I'm reaching out to you to check on the status of the work at this site in Myrtle Beach. The report was due on September 20, 2024. Please let me know when you can.

Thanks,

Ryan Kellett
Hydrologist I
Corrective Action & Field Support Section
Underground Storage Tank Management Division
O: 803.898.2946

ASSESSMENT COMPONENT COST AGREEMENT

South Carolina Department of Health and Environmental Control
Underground Storage Tank Management Division
State Underground Petroleum Environmental Response Bank Account
August 9, 2023

Facility Name: 501 Amoco

UST Permit #: 05156 **Cost Agreement #:** 68891

ITEM	QUANTITY	UNIT	UNIT PRICE		TOTAL
A. Plan Preparation					
1.2 Site-specific Work Plan		each	$183.22		$0.00
2.2 Tax Map		each	$85.50		$0.00
3.2 QAPP Contractor Addendum (App B)		each	$250.00		$0.00
B. Survey					
1.1 Receptor Survey		each	$673.06		$0.00
C. Survey					
1.2 Comprehensive Survey		each	$1,270.36		$0.00
5.1 Ground Penetrating Radar Survey (100 x 100)		each	$1,111.57		$0.00
D. Mob/Demob					
1.2 Equipment		each	$1,245.93		$0.00
2.2 Personnel		each	$516.69		$0.00
3.2 Adverse Terrain Vehicle		each	$610.75		$0.00
E. Soil Borings					
1.1 Soil Borings (hand auger)		foot	$21.80		$0.00
F. Soil Borings (requiring equipment, push technology, etc) or Field Screening (including sampling and analyst)					
1.2 Standard		per foot	$33.50		$0.00
2.2 Fractured Rock		per foot	$41.40		$0.00
G.					
H. Well Abandonment					
1.2 2" diameter or less		per foot	$3.79		$0.00
2.2 Greater than 2" to 6" diameter		per foot	$5.50		$0.00
3.2 Dug/Bored well (up to 6 feet diameter)		per foot	$18.32		$0.00
I. **Well Installation (In accordance with R.61-71)**					
1.2 Water Table (hand augered)		per foot	$31.40		$0.00
2.B Water Table (drill rig) 2" Diameter		per foot	$54.90		$0.00
2.2 Single-cased 2" Diameter Monitoring Well >50ft		per foot	$59.80		$0.00
3.2 Telescoping		per foot	$84.70		$0.00
4.2 Rock Drilling		per foot	$81.80		$0.00
5.2 2" Rock Coring		per foot	$88.50		$0.00
6.2 Multi-sampling ports/screens		per foot	$59.40		$0.00
7.2 Recovery Well (4" diameter)		per foot	$69.60		$0.00
9.2 Rotosonic (2" diameter)		per foot	$119.00		$0.00
10.2 Re-develop Existing Well		per foot	$13.44		$0.00
J. Groundwater Sample Collection / Gauging Depth to Water/Product					
1.2 Groundwater Purge	-11	per well	$73.29		($806.19)
2.2 Air or Vapors		sample	$14.66		$0.00
3.2 Water Supply Sample		sample	$26.87		$0.00
4.1A HydraSleeve		sample	$34.20		$0.00
4.2B No-purge Groundwater Sample/Surface water		sample	$57.24		$0.00
5.2 Gauge Well only	1	sample	$8.55		$8.55
6.2 Sample Below Product		sample	$14.66		$0.00
7.2 Passive Diffusion Bag		sample	$31.75		$0.00
8.2 Field Duplicates (MWs & WSWs) and Field Bla	-1	sample	$30.06		($30.06)
9.2 Groundwater (low flow purge)		sample	$111.16		$0.00
10.2 Equipment Blank		sample	$30.06		$0.00
11.1 Sample Product		per well	$52.66		$0.00
K. Laboratory Analyses-Groundwater					
1.2 BTEXNM+Oxyg's+1,2 DCA+Eth(8260D)	-12	per sample	$149.02		($1,788.24)
2.2 Lead, Filtered		per sample	$16.85		$0.00
3.2 Rush EPA Method 8260B		per sample	$187.62		$0.00
4.2 Trimethal, Butyl, and Isopropyl Benzenes		per sample	$34.20		$0.00
5.2 PAH's		per sample	$74.02		$0.00
6.2 Lead		per sample	$19.54		$0.00

Addendum

Previously Approved:	$9,901.77
Increase:	($4,081.71)
New Approved Total:	**$5,820.06**
Project Manager:	
Section Manager:	
Finance:	
Date:	11/5/2024

# of pages ___	
	From:
Chad McClary	
Emerald Inc.	UST/SCDHEC
cmcclary@emeraldinc-us.com	
fax # ( )	
Phone # ( )	

The SCDHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria.

7.2 EDB by EPA 8011	-12	per sample	$55.21		($662.52)
8.2 EDB by EPA Method 8011 Rush		per sample	$83.31		$0.00
9.2 8 RCRA Metals		per sample	$77.45		$0.00
10.2 TPH (9070)		per sample	$50.09		$0.00
11.2 PH		per sample	$6.35		$0.00
12.2 BOD		per sample	$24.42		$0.00
13.2 Ethanol		per sample	$18.08		$0.00
K. Analyses-Drinking Water					
14.2 BTEXNM+1,2 DCA (524.2)		per sample	$151.52		$0.00
15.2 7-OXYGENATES & ETHANOL (8260D)		per sample	$112.07		$0.00
16.2 EDB (504.1)		per sample	$97.11		$0.00
17.2 RCRA METALS (200.8)		per sample	$122.15		$0.00
K. Analyses-Soil					
18.2 BTEX + Naphth.		per sample	$78.18		$0.00
19.2 PAH's		per sample	$78.22		$0.00
20.2 8 RCRA Metals		per sample	$68.89		$0.00
21.2 TPH-DRO (3550C/8015C)		per sample	$48.86		$0.00
22.2 TPH-GRO (5035B/8015C)		per sample	$43.92		$0.00
23.2 Grain size/hydrometer		per sample	$127.04		$0.00
24.2 Total Organic Carbon		per sample	$37.38		$0.00
K. Analyses-Air					
25.2 BTEX + Naphthalene		per sample	$263.84		$0.00
K. Hydrocarbon Fuel Identification					
27.1 C3-C44 Whole Oil (ASTM D3328)		per sample	$465.93		$0.00
28.1 Fuel Oxygenates (1624 Mod)		per sample	$398.39		$0.00
29.1 ALKYL Leads, EDB MMT (8080)		per sample	$398.39		$0.00
30.1 C8-C40 Full Scan (ASTM 5739)		per sample	$629.64		$0.00
31.1 Simulated Distillation (ASTM 2887)		per sample	$398.39		$0.00
32.1 Parent & Alk. PAH Com. (8270 SIM)		per sample	$723.63		$0.00
33.1 C3-C10 Piano (8260 MOD)		per sample	$599.88		$0.00
34.1 C10+Alkane Fingerprints		per sample	$599.88		$0.00
35.1 Expert Data Interpretation & Report		each	$595.30		$0.00
L. Aquifer Characterization					
1.2 Pumping Test		per hour	$28.09		$0.00
2.2 Slug Test		per test	$233.31		$0.00
3.2 Fractured Rock		per test	$122.15		$0.00
M. Free Product					
1.1 Free Product Recovery Rate Test		each	$46.42		$0.00
N.					
O. Risk Evaluation					
1.2 Tier I Risk Evaluation		each	$366.45		$0.00
2.2 Tier II Risk Evaluation		each	$122.15		$0.00
P. Survey					
1.1 Subsequent Survey		each	$297.65		$0.00
Q. Disposal (gallons or tons)					
1.2 Wastewater	-307.5	gallon	$1.19		($365.93)
2.2 Free Product		gallon	$1.63		$0.00
3.2 Soil Treatment/Disposal		ton	$156.25		$0.00
4.2 Drilling fluids		gallon	$1.25		$0.00
R. Miscellaneous (attach receipts)					
		each	$0.00		$0.00
		each	$0.00		$0.00
		each	$0.00		$0.00
T. Tier I Assessment (Use DHEC 3665 form)					
1.2 Southeast Region		standard	$12,622.56		$0.00
2.2 All Other Counties		standard	$13,844.06		$0.00
U. IGWA (Use DHEC 3666 form)					
1.2 Southeast Region		standard	$4,353.67		$0.00
2.2 All Other Counties		standard	$4,720.01		$0.00
22. Active Correction Action		PFP	Bid Cost		$0.00
W. Aggressive Fluid & Vapor Recovery (AFVR)					
1.2 8-hour Event		per event	$1,787.40		$0.00
2.1 24-hour Event		per event	$4,407.78		$0.00
3.1 48-hour Event		per event	$7,242.29		$0.00
4.1 96-hour Event		per event	$14,482.28		$0.00
5.1 Off-gas Treatment 8 hour		per event	$141.17		$0.00
6.2 Off-gas Treatment 24 hour		per event	$294.30		$0.00
7.2 Off-gas Treatment 48 hour		per event	$386.10		$0.00

10.1 Off-gas Treatment 24 hour (w/chlorinated compounds)		per event	$540.00		$0.00
11.1 Off-gas Treatment 48 hour (w/chlorinated compounds)		per event	$1,080.00		$0.00
12.1 Off-gas Treatment 96 hour (w/chlorinated compounds)		per event	$2,160.00		$0.00
13.2 AFVR Effluent Disposal(w/chlorinated compounds)		gallon	$0.64		$0.00
14.2 AFVR Site Reconnaissance		each	$302.40		$0.00
15.1 Additional Hook-ups		each	$29.68		$0.00
16.2 AFVR Effluent Disposal		gallon	$0.53		$0.00
17.2 AFVR Mobilization/Demobilization		each	$777.60		$0.00
18.1 Mobilization for absorbents/skimmers		each	$516.69		$0.00
19.1 Well sock 2" ID well		each	$36.94		$0.00
20.1 Well sock 4" ID well		each	$49.03		$0.00
21.1 pad (per pad)		each	$49.95		$0.00
22.1 3" diameter x 10' length boom		each	$108.00		$0.00
23.1 5" diameter x 10' length boom		each	$132.84		$0.00
24.1 New FPP recovery skimmer (2" wells)		each	$791.10		$0.00
25.1 New FPP recovery skimmer (4" wells)		each	$1,247.40		$0.00
26.1 Refurbished FPP recovery skimmer (2" or 4" wells)		each	$760.32		$0.00
27.1 Disposal of Absorbents		pound	$4.10		$0.00
28.1 Disposal of product from skimmers		gallon	$0.50		$0.00
X. Granulated Activated Carbon (GAC) filter system installation & service:					
1.2 New GAC System Installation		each	$2,320.86		$0.00
2.2 Refurbished GAC Sys. Install		each	$1,099.35		$0.00
3.2 Filter replacement/removal		each	$427.53		$0.00
4.2 GAC System removal, cleaning, & refurbishment		each	$335.92		$0.00
5.2 GAC System housing		each	$305.38		$0.00
6.2 In-line particulate filter		each	$183.22		$0.00
7.2 Additional piping & fittings		foot	$1.84		$0.00
Y. Well Repair					
1.2 Additional Copies of the Report Delivered		each	$61.07		$0.00
2.2 Repair 2x2 MW pad		each	$61.07		$0.00
3.2 Repair 4x4 MW pad		each	$107.49		$0.00
4.2 Replace well vault		each	$144.14		$0.00
5.2 Replace well cover bolts		each	$3.18		$0.00
6.2 Replace locking well cap & lock		each	$18.32		$0.00
7.2 Replace/Repair stick-up		each	$163.68		$0.00
8.2 Convert Flush-mount to Stick-up		each	$183.22		$0.00
9.2 Convert Stick-up to Flush-mount		each	$158.79		$0.00
10.2 Replace missing/illegible well ID plate		each	$14.66		$0.00
11.1 Down-hole Camera		per foot	$29.25		$0.00
Z. High Resolution Site Characterization					
1.1 HRSC Screening Equipment Mobilization		each	$1,468.80		$0.00
2.1 HRSC Drilling Category 1		per foot	$31.32		$0.00
3.1 HRSC Drilling Category 2		per foot	$36.18		$0.00
4.1 HRSC Drilling Category 3		per foot	$29.16		$0.00
5.1 HRSC 3-D Model		each	$4,363.20		$0.00
S. Report Prep & Project Management	12%	percent	($3,644.39)		($437.33)
TOTAL					($4,081.71)

Ryan K.

Emerald, Inc.

CONSULTING AND ENGINEERING
SERVICES IN ENVIRONMENTAL AFFAIRS

2520 TAHOE DRIVE · POST OFFICE BOX 3050 · SUMTER, SOUTH CAROLINA 29151

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TELEPHONE (803) 469-5454
FAX (803) 469-5465



RECEIVED
NOV 14 2024
UST DIVISION

REPORT OF GROUNDWATER SAMPLING
501 AMOCO
1432 US HIGHWAY 501
MYRTLE BEACH, SOUTH CAROLINA
UST PERMIT #05156
COST AGREEMENT #68891

Prepared For:

Ryan Kellett, Hydrogeologist
Corrective Action and Field Support Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management
South Carolina Department of Environmental Services
2600 Bull Street
Columbia, South Carolina 29201

Prepared By:

Emerald, Inc.
UST Site Rehabilitation Contractor #67
P.O. Box 3050
2520 Tahoe Drive
Sumter, South Carolina 29151

November 4, 2024

Signature Page

This document entitled "Report of Groundwater Sampling", has been prepared for the South Carolina Department of Environmental Services (DES) to describe investigative activities initiated at the 501 Amoco site located in Conway, South Carolina. It has been prepared under the direct supervision of William C. McClary, P.G. in accordance with the Underground Storage Tank (UST) Quality Assurance Division Plan Revision 4.0, Emerald, Inc. Annual Contractor Quality Assurance Plan, and the approved Site Specific Work Plan (SSWP). All questions or comments concerning this report should be directed to Ronny L. Lowder or William C. McClary, P.G., Emerald, Inc., at 803-469-5454.

Emerald, Inc.

Ronny L. Lowder
President

Emerald, Inc.

William C. McClary, P.G.
South Carolina Registration #2386

Report of Groundwater Sampling
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina

TABLE OF CONTENTS

Section **Page**

1.0 Introduction 1

2.0 Site Activities 1

2.1 Static Water Level Measurement 2

2.2 Groundwater Sampling 2

2.3 Analytical Results 3

3.0 Results, Conclusions, and Recommendations 4

Tables

Table 1) - Groundwater Elevations and Field Measurements
Table 2) - Groundwater Analytical Data
Table 3) - Groundwater Analytical Data (Oxygenates)

Figures

Figure 1) - USGS Topographic Map
Figure 2) - Site Map
Figure 3) – Potentiometric Surface Map
Figure 4) - Groundwater CoC Map
Figure 4A) – Benzene Contour Map
Figure 4B) – Toluene Contour Map
Figure 4C) – Ethylbenzene Contour Map
Figure 4D) – Total Xylenes Contour Map
Figure 4E) – Naphthalene Contour Map

Appendices

A) Purge Logs
B) Analytical Data Sheets
C) Disposal Manifests
D) QAPP Contractor's Checklist

1.0 Introduction

The 501 Amoco site (UST Permit #05156) is located at 1432 US Highway 501 in Myrtle Beach, South Carolina. Figure 1 contains an USGS topographic map for the surrounding area. The subject property is currently occupied by a used car lot. According to Horry County tax records, the site is currently owned by Todd Investment Properties LLC (220 Riverview Road, Athens, GA 30606).

The subject site formerly maintained 2-4,000 gallon gasoline USTs and 1-6,000 gallon gasoline UST. These USTs were abandoned by filling with concrete in October 1999. A release of petroleum product was reported in August 1991 and confirmed in March 1992. The responsible party for this release is Todd Investment Properties LLC (220 Riverview Road, Athens, GA 30606).

From 1991 through 2023, assessment work, groundwater sampling, and abatement activities were conducted by Southeastern Environmental and Kleen Sites Geoservices. This work included monitoring well installation, groundwater sampling and aggressive fluid vapor recovery (AFVR) events.

In May 2024, SCDES requested a SSWP for a comprehensive groundwater sampling event. This report documents the findings of the groundwater sampling event.

2.0 Site Activities

Emerald, Inc. personnel conducted this groundwater sampling event at the 501 Amoco site to obtain current groundwater quality data. Field activities required to generate site-specific information for the site are described in detail within this section. Figure 2 contains a site map presenting monitoring wells, receptors, relevant structures, and utilities.

2.1 Static Water Level Measurement

Prior to well purging, sample collection, or gauging of the monitoring wells, water levels were recorded to the nearest 0.01 foot using a graduated electronic interface probe. Free product was encountered in four monitoring wells:

Monitoring Well	Product Thickness
05156 MW-2	Exceeds Solubility Limits
05156 MW-3	0.99 ft.
05156 RW-1	No Access
05156 RW-2	6.37 ft.
05156 RW-4	0.03 ft.
05156 RW-5	1.24 ft.

Measurements were recorded from the surveyed top of the well casing so they could be referenced to a common datum. Water levels and groundwater elevations are summarized in Table 1. Based upon the groundwater elevations recorded during this gauging event, groundwater flow in the shallow aquifer is generally to the northeast. Figure 3 presents a potentiometric surface map for the shallow aquifer.

2.2 Groundwater Sampling

On August 22 and 23, 2024, groundwater samples were collected from ten (10) monitoring wells (MW-2, MW-6, MW-7, MW-8, MW-11, MW-12, MW-13, TW-1, TW-2, and RW-3) at the subject site. MW-3, RW-2, RW-4, and RW-5 contained free product and were not sampled. MW-1 has a bent standpipe and could not be sampled using a bailer or peristaltic pump. MW-4, MW-9, and MW-10 could not be located. MW-5 and RW-1 could not be accessed due to immobile cars covering them. In addition to these groundwater samples, one duplicate sample (MW-2), two field blanks, and two trip blanks were also collected. One trip blank was included in each cooler shipped to the laboratory. Each sample collected at the site was documented as to the cooler in which it was placed, and a dedicated trip blank was included in each cooler for quality control purposes.

Each well was purged prior to sample collection. These wells were purged until the dissolved oxygen, pH, conductivity, temperature readings were within 5%, and turbidity readings reached 10 ntu's or within 5%. A maximum of five well volumes were removed from each well. If the well went dry during purging, it was allowed to recharge for a minimum of three hours or 80% of the original water level before a sample was collected. Field data obtained during the purging of each well is presented in Appendix A.

Field equipment was properly calibrated prior to collecting data at the site. Following well purging or gauging, a groundwater sample was collected from each well using a disposable bailer. Downhole sampling equipment was properly decontaminated between each sampling location. Approximately 142.5 gallons of purge water was treated on-site using an activated carbon drum (See Appendix C for a copy of the disposal manifest). To ensure proper treatment of wastewater, a wastewater composite sample was collected.

Samples were immediately packed in crushed ice in the field ice chest and shipped to Pace Analytical, Inc. of Huntersville, NC (SC Certification #99006001) for laboratory analysis. Each sample was analyzed for BTEX, Naphthalene, MTBE, 1, 2 DCA, 8 Oxygenates (EPA Method 8260D), and EDB (EPA Method 8011). Analytical results for the groundwater samples are presented on Tables 2 and 3 with the laboratory reports in Appendix B.

2.3 Analytical Results

Tables 2 and 3 summarize the groundwater analytical results at the subject site and Appendix B contains a copy of the laboratory reports. Laboratory analytical reports indicate that the concentrations of chemicals of concern (CoC) have increased since the last sampling event. Measurable free product was encountered in MW-3 (0.99 ft.), RW-2 (6.37 ft.), RW-4 (0.03 ft.), and RW-5 (1.24 ft.). Groundwater analytical results from MW-2 exceeded solubility limits but did not contain measurable free product. Figure 4 presents a Groundwater CoC Map for the site. Figures 4A through 4E present iso-concentration maps for CoC's exceeding risk based screening levels (RBSLs).

3.0 Results, Conclusions, and Recommendations

During this groundwater sampling event, ten (10) monitoring wells were sampled at the site. Analytical results from this sampling event indicate levels of petroleum CoCs have increased since the last sampling event. Free product was detected in four monitoring wells. Data from this sampling event indicates the direction of groundwater flow in the shallow aquifer is to the east.

Given the above findings during this Report of Groundwater Sampling at the site, Emerald, Inc. recommends long duration AFVR events to remove free product. The limited extent of free product and elevated dissolved CoC concentrations would appear to make AFVR an effective abatement technique. Additional monitoring wells may be required to fully define the extent of free product and the dissolved phase plume.

TABLES

TABLE 1
GROUNDWATER ELEVATIONS
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC ID #05156

Well Number	Sample Date	Screened Interval (Ft)	Depth to Product (Ft)	Depth to Water (Ft)	Product Thickness (Ft)	Well Head Elevation (Ft)	Groundwater Elevation (Ft)
05156 MW-1	6/1/21	3-13	---	8.86	---	20.87	12.01
	8/22/24		Bent Standpipe				
05156 MW-2	6/1/21	3-13	---	8.99	---	21.44	12.45
	8/22/24		---	6.80	---	21.44	14.64
05156 MW-3	6/1/21	3-13	8.13	8.65	0.52	21.44	13.17
	8/22/24		4.91	5.90	0.99	21.44	16.27
05156 MW-4	6/1/21	4-14	Not Located				
	8/22/24		Not Located				
05156 MW-5	6/1/21	5-15	No Access				
	8/22/24		No Access				
05156 MW-6	6/1/21	5-15	---	8.76	---	20.95	12.19
	8/23/24		---	5.26	---	20.95	15.69
05156 MW-7	6/1/21	5-15	---	8.69	---	22.16	13.47
	8/22/24		---	5.71	---	22.16	16.45
05156 MW-8	6/1/21	5-15	---	8.94	---	20.99	12.05
	8/22/24		---	6.77	---	20.99	14.22
05156 MW-9	6/1/21	5-15	Not Located				
	8/22/24		Not Located				
05156 MW-10	6/1/21	5-15	Not Located				
	8/22/24		Not Located				
05156 MW-11	6/1/21	6-16	---	7.42	---	19.70	12.28
	8/22/24		---	7.82	---	19.70	11.88
05156 MW-12	6/1/21	4-14	---	7.52	---	18.49	10.97
	8/23/24		---	6.47	---	18.49	12.02
05156 MW-13	6/1/21	4-14	---	7.88	---	20.13	12.25
	8/23/24		---	7.90	---	20.13	12.23
05156 TW-1	6/1/21	38-43	---	8.63	---	21.10	12.47
	8/22/24		---	8.33	---	21.10	12.77
05156 TW-2	6/1/21	33-40	---	8.76	---	20.85	12.09
	8/23/24		---	7.82	---	20.85	13.03
05156 RW-1	6/1/21	3-13	---	2.62	---	21.15	18.53
	8/22/24		No Access				
05156 RW-2	6/1/21	3-13	6.65	13.08	6.43	21.17	12.85
	8/22/24		4.74	11.11	6.37	21.17	14.77
05156 RW-3	12/2/21	3-13	---	8.20	---	21.13	12.93
	8/22/24		---	4.15	---	21.13	16.98
05156 RW-4	12/2/21	3-13	---	7.95	---	21.15	13.20
	8/22/24		5.67	5.70	0.03	21.15	15.47
05156 RW-5	12/2/21	3-13	8.11	8.17	0.06	21.28	13.15
	8/22/24		4.81	6.05	1.24	21.28	16.15

Notes:
1. Groundwater depths were measured from the top of the PVC riser pipe
2. Data Prior to August 2024 from DHEC Files
3. Groundwater Elevations corrected for free product using a specific gravity of 0.74 for fuel

TABLE 2
GROUNDWATER ANALYTICAL DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC ID #05156
PAGE 1 OF 2

Well Number	Sample Date	CoC RBSL units	Benzene 5 (ug/l)	Toluene 1,000 (ug/l)	Ethylbenzene 700 (ug/l)	Total Xylenes 10,000 (ug/l)	MTBE 40 (ug/l)	Naphthalene 25 (ug/l)	1,2 DCA 5 (ug/l)	EDB 0.05 (ug/l)
05156 MW-1	8/3/04		Not Sampled							
	12/19/14		**3.3**	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	8/26/19		Not Sampled							
	6/1/21		Not Sampled							
	8/22/24		Bent Standpipe							
05156 MW-2	8/3/04		**10,500**	**99,300**	**1,430**	**7,430**	**4.66**	**704**	NT	**1.96**
	12/19/14		**5,100**	**75,000**	BDL	**5,400**	BDL	BDL	NT	**0.650**
	8/26/19		**6.91**	**151**	**2.74**	**14.6**	<2.50	<2.50	<2.50	**0.477**
	6/1/21		**3,800**	**86,000**	**1,400**	**8,000**	<1,000	**420J**	<1,000	NT
	8/22/24		**2,690**	**66,800**	**1,420**	**7,070**	<500	**551**	<500	<0.021
05156 DUP-1 (MW-2)	8/22/24		**2,420**	**59,300**	**1,300**	**6,430**	<500	**622**	<500	<0.020
05156 MW-3	8/3/04		**10,500**	**67,500**	**1,260**	**4,930**	**900**	713	NT	**0.413**
	12/19/14		1.14 ft. of Free Product							
	8/26/19		0.05 ft. of Free Product							
	6/1/21		0.52 ft. of Free Product							
	8/22/24		0.99 ft. of Free Product							
05156 MW-4	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		Not Located							
	6/1/21		Not Located							
	8/22/24		Not Located							
05156 MW-5	8/3/04		**3.5**	**8.48**	**1.53**	**175**	BDL	BDL	NT	BDL
	12/19/14		**130**	**410**	**11**	**200**	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		No Access							
	8/22/24		No Access							
05156 MW-6	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	8/3/04		BDL	BDL	BDL	BDL	**6.22**	BDL	NT	BDL
	12/19/14		**180**	**220**	**10**	**290**	BDL	**15**	NT	BDL
	8/26/19		22.2	<2.50	**6.74**	**2.54**	**7.52**	**8.48**	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	**6.9**	**8.4**	<1.0	NT
	8/22/24		**5.2**	<1.0	**1.1**	**2.1**	**1.3**	**10.7**	<1.0	<0.020
05156 MW-8	8/3/04		**3,070**	**91.7**	**78.7**	**1,661**	**1.19**	**8.20**	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	**5.4**	<1.0	**1.5**	<1.0	**1.3**	<1.0	NT
	8/22/24		**0.42J**	**28.4**	**1.7**	**9.4**	<1.0	**2.1**	<1.0	<0.020
05156 MW-9	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		Not Located							
	6/1/21		Not Located							
	8/22/24		Not Located							

Notes:

1. ug/l = micrograms per liter
2. "J" Values report detections below the Reporting Limit and greater than the Method Detection Limit
3. RBSL = Risk Based Screening Levels for Groundwater (SCDHEC Prgrammatic QAPP Revision 4.0)
4. Data prior to August 2024 from DHEC Files
5. NT = Not Tested
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TABLE 2
GROUNDWATER ANALYTICAL DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC ID #05156
PAGE 2 OF 2

Well Number	Sample Date	CoC RBSL units	Benzene 5 (ug/l)	Toluene 1,000 (ug/l)	Ethylbenzene 700 (ug/l)	Total Xylenes 10,000 (ug/l)	MTBE 40 (ug/l)	Naphthalene 25 (ug/l)	1,2 DCA 5 (ug/l)	EDB 0.05 (ug/l)
05156 MW-10	8/3/04		**107**	**1.59**	BDL	**5.51**	**5.0**	**13.0**	NT	NT
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	**4.07**	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
	6/1/21		Not Located							
	8/22/24		Not Located							
05156 MW-11	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	<0.020
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	**42.9**	<2.50	**9.13**	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	**0.80J**	<1.0	<1.0	<1.0	<1.0	<2.50	NT
	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	<0.020
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	<0.020
	12/19/14		**20**	**550**	**12**	**59**	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-1	8/3/04		**1.64**	**39.5**	**1.29**	**9.21**	BDL	BDL	NT	BDL
	12/19/14		**47**	**1,100**	BDL	**78**	BDL	BDL	NT	BDL
	8/26/19		<2.50	**32.3**	<2.50	**11.4**	<2.50	<2.50	<2.50	<0.0075
	6/1/21		**1.2**	**27**	**2.9**	**15**	<1.0	**5.8**	<1.0	NT
	8/22/24		<1.0	**2.0**	**0.46J**	**2.2**	<1.0	<1.0	<1.0	<0.020
05156 TW-2	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	8/26/19		0.02 ft of Free Product							
	6/1/21		**1,200**	**2,200**	**1,300**	**3,300**	<50	**1,200**	<50	NT
	8/22/24		No Access							
05156 DUP (RW-1)	6/1/21		**1,200**	**2,400**	**1,300**	**3,300**	<50	**1,200**	<50	NT
05156 RW-2	8/26/19		5.81 ft of Free Product							
	6/1/21		6.43 ft of Free Product							
	8/22/24		6.37 ft. of Free Product							
05156 RW-3	8/22/24		**781**	**45.8**	**789**	**214**	<5.0	**703**	<5.0	<0.020
05156 RW-4	8/22/24		0.03 ft of Free Product							
05156 RW-5	12/2/21		0.06 ft of Free Product							
	8/22/24		1.24 ft. of Free Product							
05156 FIELD BLANK	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 FIELD BLANK 2	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TRIP BLANK	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
05156 TRIP BLANK 2	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
Wastewater Composte	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020

Notes:

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5. NT = Not Tested
6. BDL = Below Detection Limits

TABLE 3
GROUNDWATER ANALYTICAL DATA (OXYGENATES)
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC ID #05156
PAGE 1 OF 3

Well Number	Sample Date	t-Amyl Alcohol (ug/l)	Tert-Amyl Methyl Ether (ug/l)	3,3-Dimethyl-1-Butanol (ug/l)	Tertiary Butyl Alcohol (ug/l)	tert-Butyl Formate (ug/l)	Diisopropyl Ether (ug/l)	Ethanol (ug/l)	Ethyl-tert-butyl Ether (ug/l)
05156 MW-1	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	Not Sampled							
	6/1/21	Not Sampled							
	8/22/24	Bent standpipe							
05156 MW-2	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20,000	<10,000	<20,000	2,800J	<5,000	<1,000	<100,000	<1,000
	8/22/24	<50,000	<5,000	<50,000	<50,000	<25,000	<500	<100,000	<5,000
DUP-1 (MW-2)	8/22/24	<50,000	<5,000	<50,000	<50,000	<25,000	<500	<100,000	<5,000
05156 MW-3	8/3/04	Not Tested							
	12/19/14	1.14 ft. of Free Product							
	8/26/19	0.05 ft. of Free Product							
	6/1/21	0.52 ft. of Free Product							
	8/22/24	0.99 ft. of Free Product							
05156 MW-4	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	Not Located							
	6/1/21	Not Located							
	8/22/24	Not Located							
05156 MW-5	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	No Access							
	8/22/24	No Access							
05156 MW-6	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0

Notes:
1. ug/l = micrograms per liter
2. "J" Values report detections below the Reporting Limit and greater than the Method Detection Limit
3. RBSL = Risk Based Screening Levels for Groundwater (SCDHEC Prgrammatic QAPP Revision 4.0)
4. Data prior to August 2024 from DHEC Files
5. NS = Not Sampled
6. BDL = Below Detection Limit

TABLE 3
GROUNDWATER ANALYTICAL DATA (OXYGENATES)
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC ID #05156
PAGE 2 OF 3

Well Number	Sample Date	t-Amyl Alcohol (µg/l)	Tert-Amyl Methyl Ether (µg/l)	3,3-Dimethyl-1-Butanol (µg/l)	Tertiary Butyl Alcohol (µg/l)	tert-Butyl Formate (µg/l)	Diisopropyl Ether (µg/l)	Ethanol (µg/l)	Ethyl-tert-butyl Ether (µg/l)
05156 MW-7	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	**31.0**	<2.50	<37.6	**100**	<2.50	<2.50	<125	<2.50
	6/1/21	**45**	<10	<20	**84**	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-8	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-9	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	Not Tested							
	6/1/21	Not Tested							
	8/22/24	Not Located							
05156 MW-10	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	Not Tested							
	8/22/24	Not Located							
05156 MW-11	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-12	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-13	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0

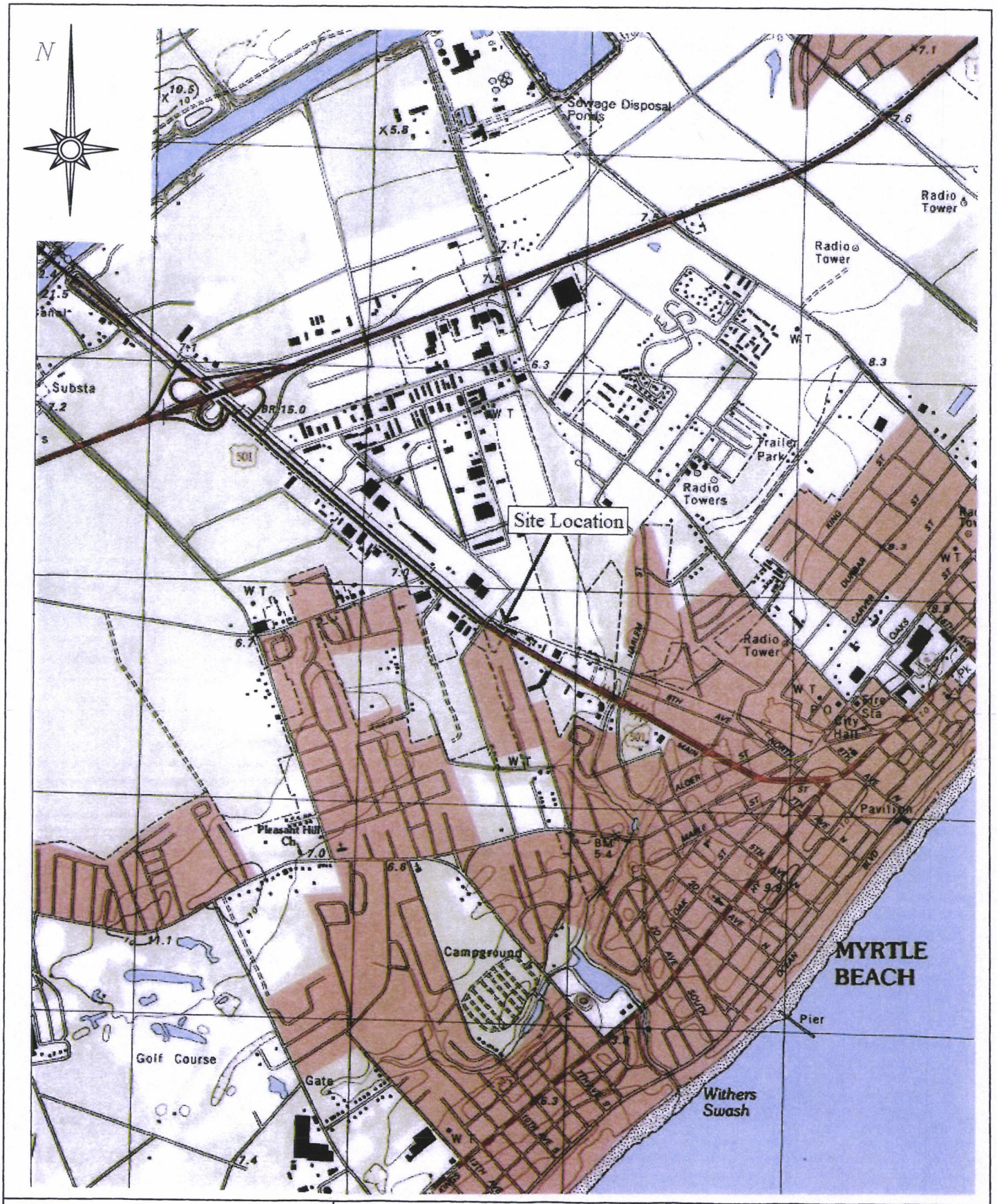
Notes:
1. ug/l = micrograms per liter
2. "J" Values report detections below the Reporting Limit and greater than the Method Detection Limit
3. RBSL = Risk Based Screening Levels for Groundwater (SCDHEC Prgrammatic QAPP Revision 4.0)
4. Data prior to August 2024 from DHEC Files
5. NS = Not Sampled
6. BDL = Below Detection Limit

TABLE 3
GROUNDWATER ANALYTICAL DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDHEC ID #05156
PAGE 3 OF 3

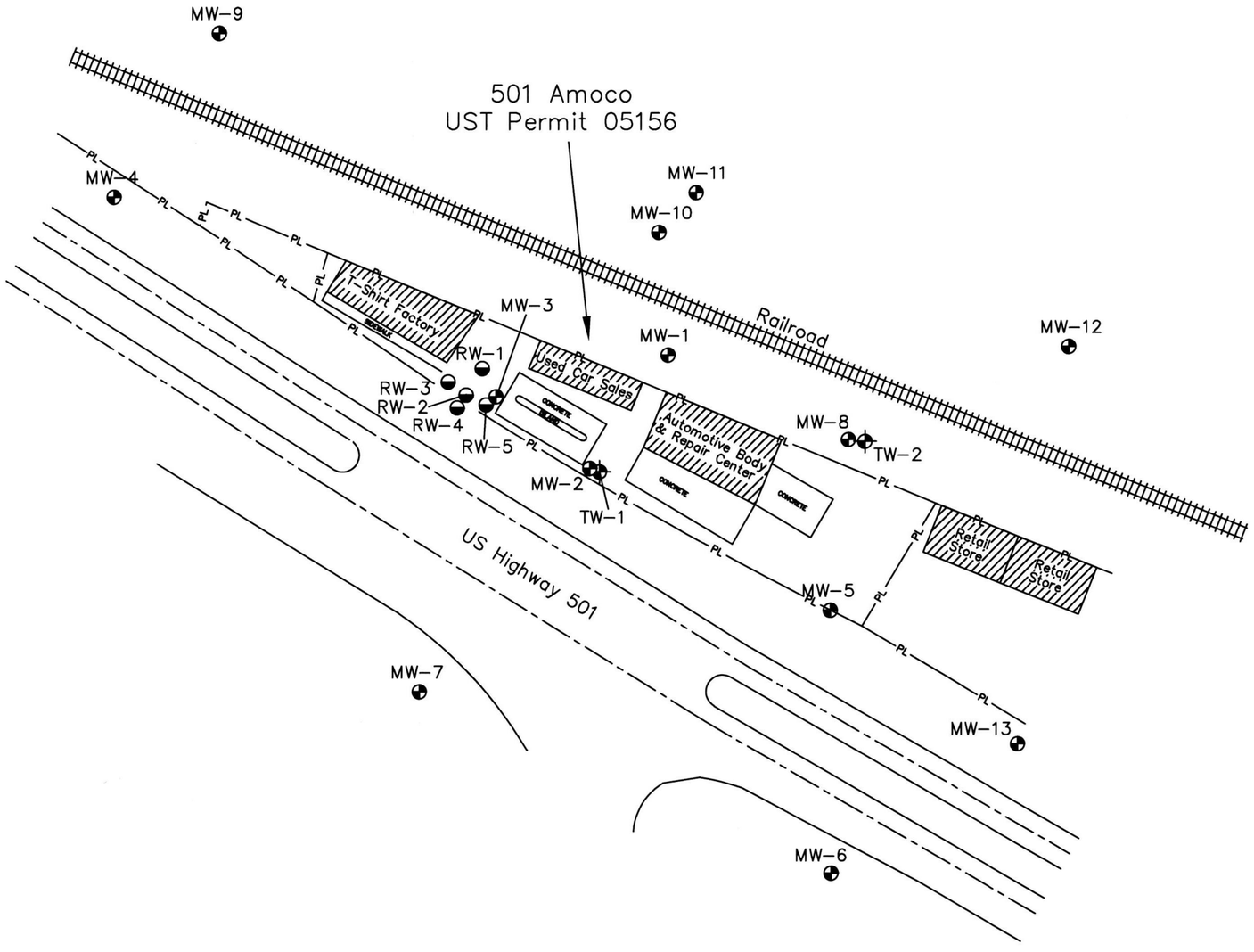
Well Number	Sample Date	t-Amyl Alcohol (ug/l)	Tert-Amyl Methyl Ether (ug/l)	3,3-Dimethyl-1-Butanol (ug/l)	Tertiary Butyl Alcohol (ug/l)	tert-Butyl Formate (ug/l)	Diisopropyl Ether (ug/l)	Ethanol (ug/l)	Ethyl-tert-butyl Ether (ug/l)
05156 TW-1	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	**1.9J**	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 TW-2	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 RW-1	8/26/19	0.02 ft. of Free Product							
	6/1/21	**470J**	<500	<1,000	**1,200**	<250	<50	<5,000	<50
	8/22/24	No Access							
DUP (RW-1)	6/1/21	**470J**	<500	<1,000	**1,200**	<250	<50	<5,000	<50
05156 RW-2	8/26/19	5.81 ft. of Free Product							
	6/1/21	6.43 ft. of Free Product							
	8/22/24	6.37 ft. of Free Product							
05156 RW-3	8/22/24	<500	<50.0	<500	**1,130**	<250	<5.0	<1,000	<50.0
05156 RW-4	8/22/24	0.03 ft. of Free Product							
05156 RW-5	12/2/21	0.06 ft. of Free Product							
	8/22/24	1.24 ft. of Free Product							
FIELD BLANK	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
FIELD BLANK 2	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
TRIP BLANK	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
TRIP BLANK 2	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
Wastewater	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0

Notes:
1. ug/l = micrograms per liter
2. "J" Values report detections below the Reporting Limit and greater than the Method Detection Limit
3. RBSL = Risk Based Screening Levels for Groundwater (SCDHEC Prgrammatic QAPP Revision 4.0)
4. Data prior to August 2024 from DHEC Files
5. NS = Not Sampled
6. BDL = Below Detection Limit

FIGURES



PROJECT:	SHEET TITLE:	
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST Permit# 05156	Figure 1 USGS Topographic Map 7.5 Minute Series "Myrtle Beach, SC" Quadrangle Scale: 1 to 2,000 Contour Interval = 2 meters	EMERALD, INC. Sumter, SC



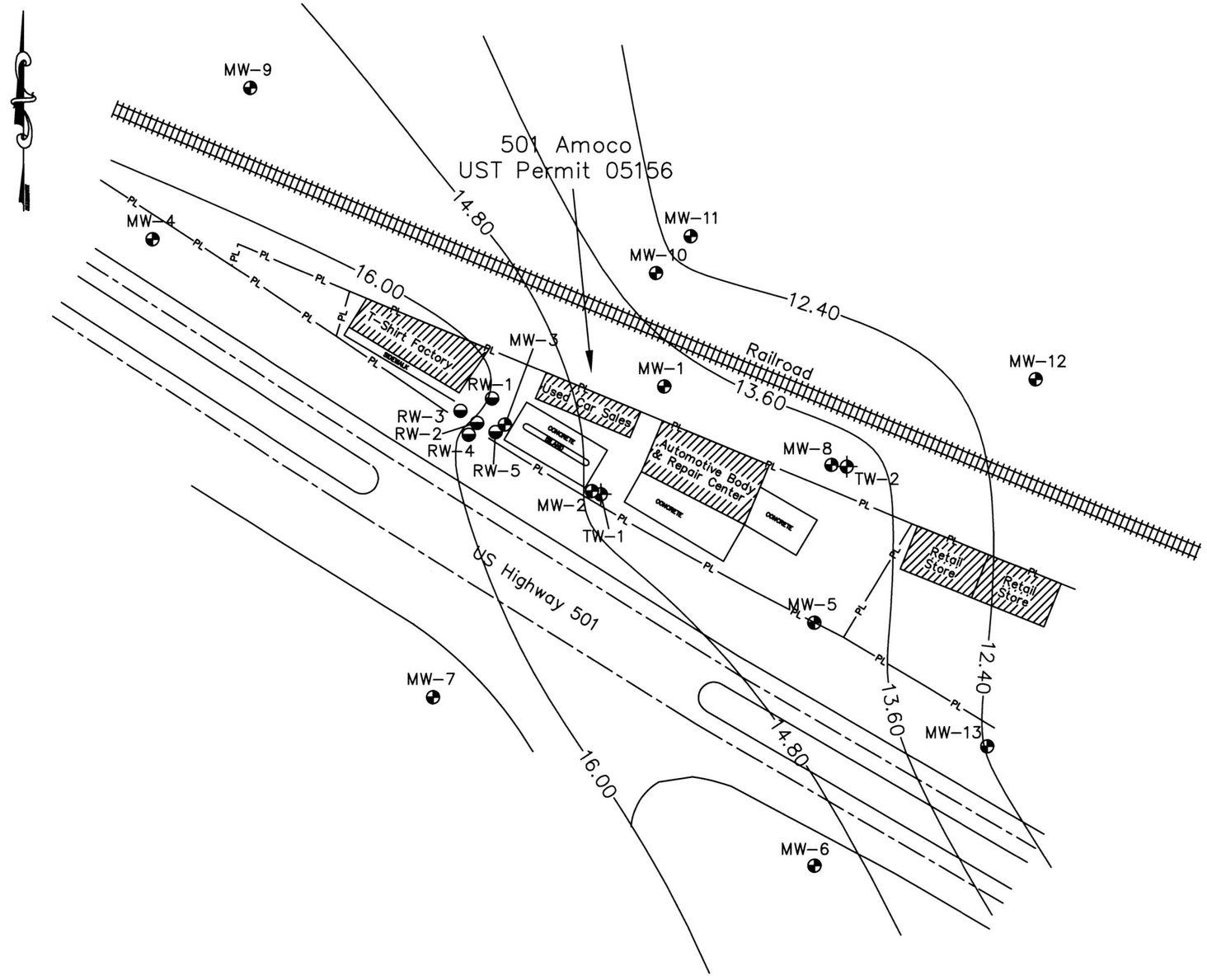
LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

SCALE
1 INCH = 80 FEET
0 80′ 160′

Map based Kleen Sites Geoservices Figure 4

PROJECT: 501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	DATE: 11/4/24	Figure 2 - Site Map
		EMERALD, INC. SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Well Number	Screened Interval (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Top of Casing Elevation (ft)	Groundwater Elevation (ft)
05156 MW-1	3-13	NS	NS	NS	20.87	NS
05156 MW-2	3-13	---	6.80	---	21.44	14.64
05156 MW-3	3-13	4.91	5.90	0.99	21.44	16.27
05156 MW-4	4-14	NL	NL	NL	21.32	NL
05156 MW-5	5-15	NL	NL	NL	20.15	NL
05156 MW-6	5-15	---	5.26	---	20.95	15.69
05156 MW-7	5-15	---	5.71	---	22.16	16.45
05156 MW-8	5-15	---	6.77	---	20.99	14.22
05156 MW-9	5-15	NL	NL	NL	19.62	NL
05156 MW-10	5-15	NL	NL	NL	19.09	NL
05156 MW-11	6-16	---	7.82	---	19.70	11.88
05156 MW-12	4-14	---	6.47	---	18.49	12.02
05156 MW-13	4-14	---	7.90	---	20.13	12.23
05156 TW-1	38-43	---	8.33	---	21.10	12.77
05156 TW-2	33-40	---	7.82	---	20.85	13.03
05156 RW-1	3-13	Covered	Covered	Covered	21.15	Covered
05156 RW-2	3-13	4.74	11.11	6.37	21.17	14.77
05156 RW-3	3-13	---	4.15	---	21.13	16.98
05156 RW-4	3-13	5.67	5.70	0.03	21.15	15.47
05156 RW-5	3-13	4.81	6.05	1.24	21.28	16.15

Notes:

Contour Interval = 1.20 Feet

Depth to Water measured August 22 and 234, 2024

Shallow wells used in contouring

Groundwater Contours Produced using
Surfer by Golden Graphics with modifications
By Emerald, Inc. Personnel.

NS = Not Sampled

NL = Not Located

SCALE
1 INCH = 80 FEET
0 80′ 160′

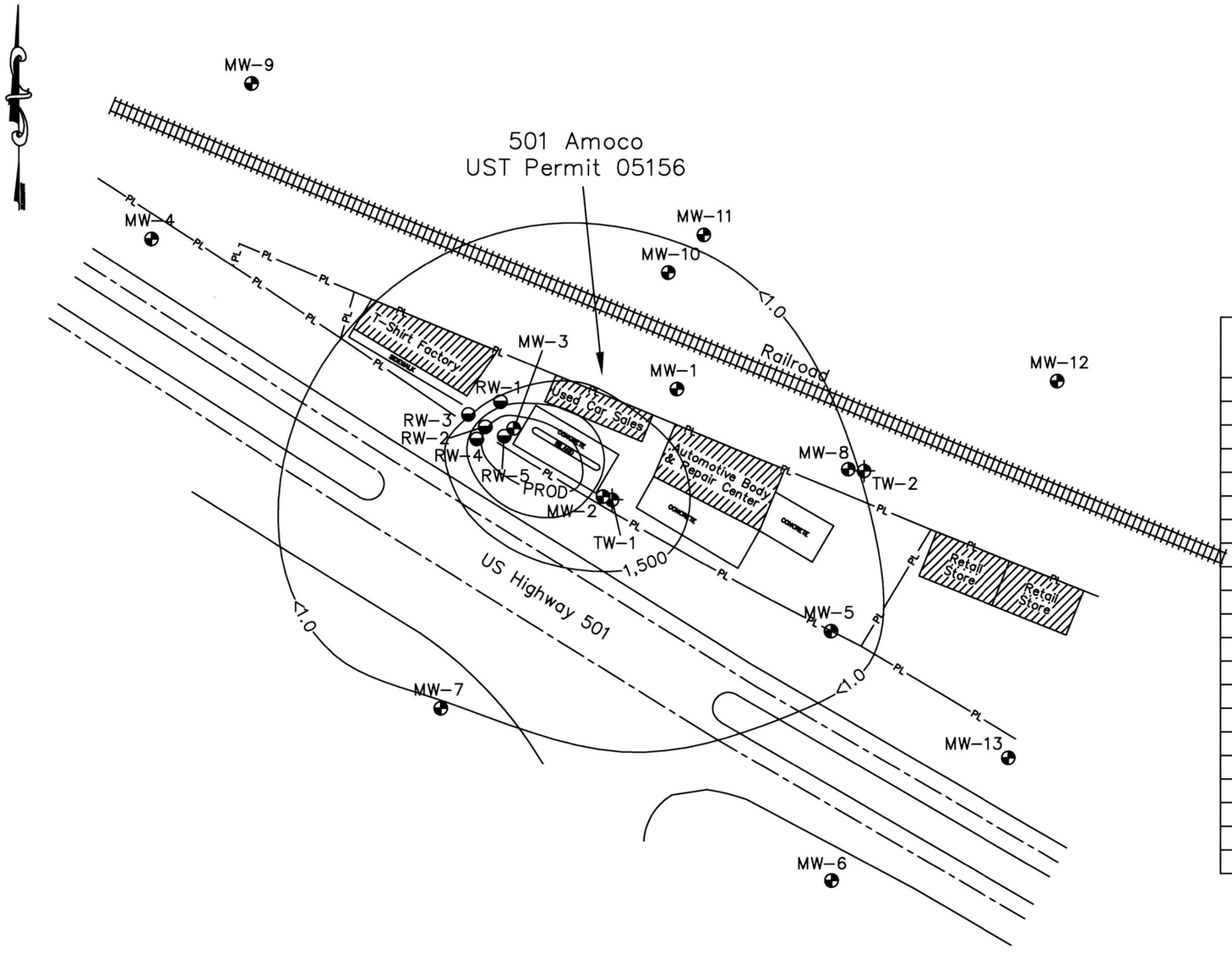
Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
11/4/24

Figure 3 - Potentiometric Surface Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,690	66,800	1,420	7,070	<500	551	<500	<0.021
DUP-1 (MW-2)	2,420	59,300	1,300	6,430	<500	622	<500	<0.020
05156 MW-3	0.99 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	5.2	<1.0	1.1	2.1	1.3	10.7	<1.0	<0.020
05156 MW-8	0.42J	28.4	1.7	9.4	<1.0	2.1	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-1	<1.0	2.0	0.46J	2.2	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	No Access							
05156 RW-2	6.37 ft. of Free Product							
05156 RW-3	781	45.8	789	214	<5.0	703	<5.0	<0.020
05156 RW-4	0.03 ft. of Free Product							
05156 RW-5	1.24 ft. of Free Product							

Notes: Contour Interval = 1,500 ug/l

Samples Collected on August 22 and 23, 2024

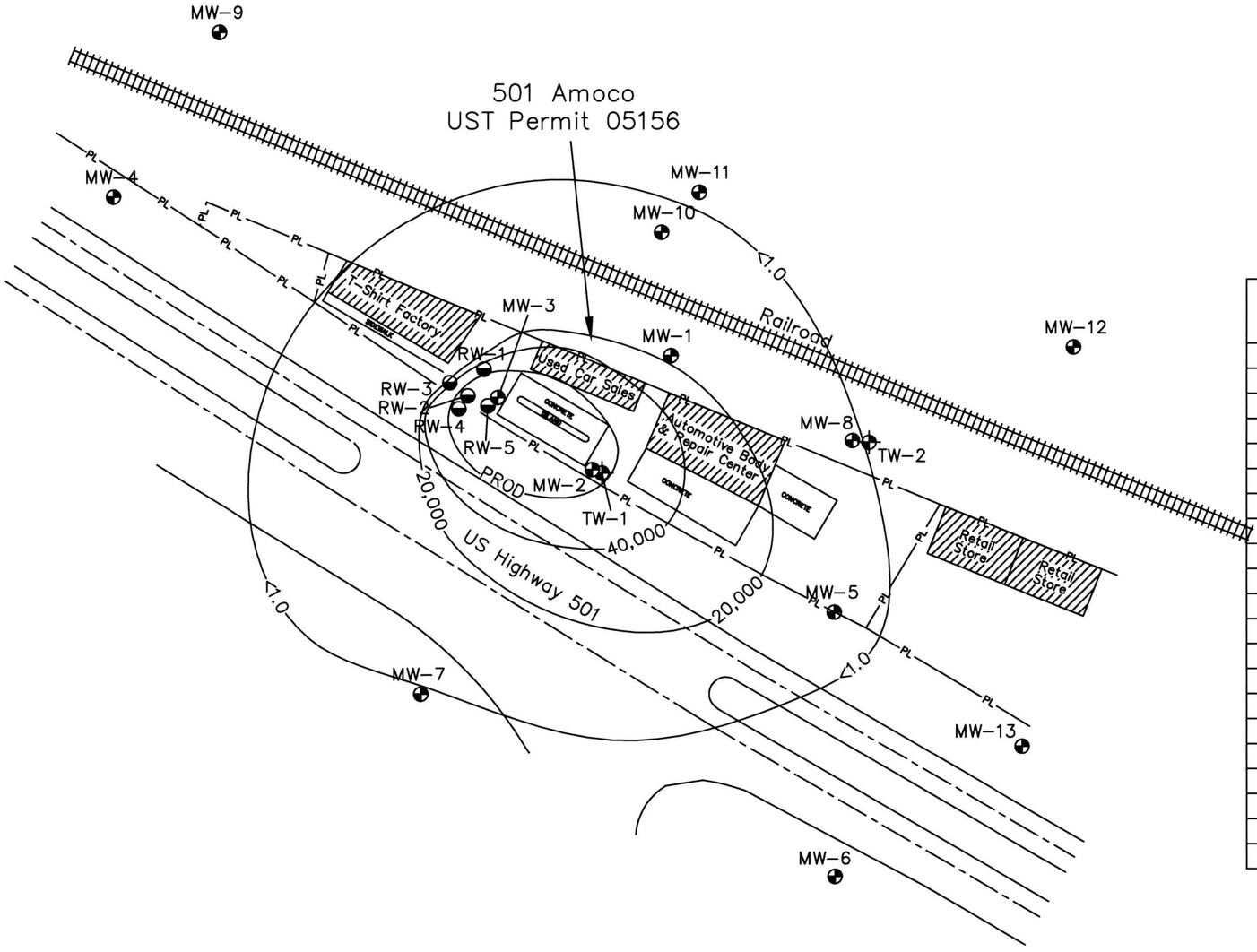
ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

SCALE
1 INCH = 80 FEET
0 80' 160'

Map based Kleen Sites Geoservices Figure 4

PROJECT:	DATE:	Figure 4A - Benzene Contour Map
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	11/4/24	EMERALD, INC. SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,690	66,800	1,420	7,070	<500	551	<500	<0.021
DUP-1 (MW-2)	2,420	59,300	1,300	6,430	<500	622	<500	<0.020
05156 MW-3	0.99 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	5.2	<1.0	1.1	2.1	1.3	10.7	<1.0	<0.020
05156 MW-8	0.42J	28.4	1.7	9.4	<1.0	2.1	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-1	<1.0	2.0	0.46J	2.2	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	No Access							
05156 RW-2	6.37 ft. of Free Product							
05156 RW-3	781	45.8	789	214	<5.0	703	<5.0	<0.020
05156 RW-4	0.03 ft. of Free Product							
05156 RW-5	1.24 ft. of Free Product							

Notes: Contour Interval = 20,000 ug/l

Samples Collected on August 22 and 23, 2024

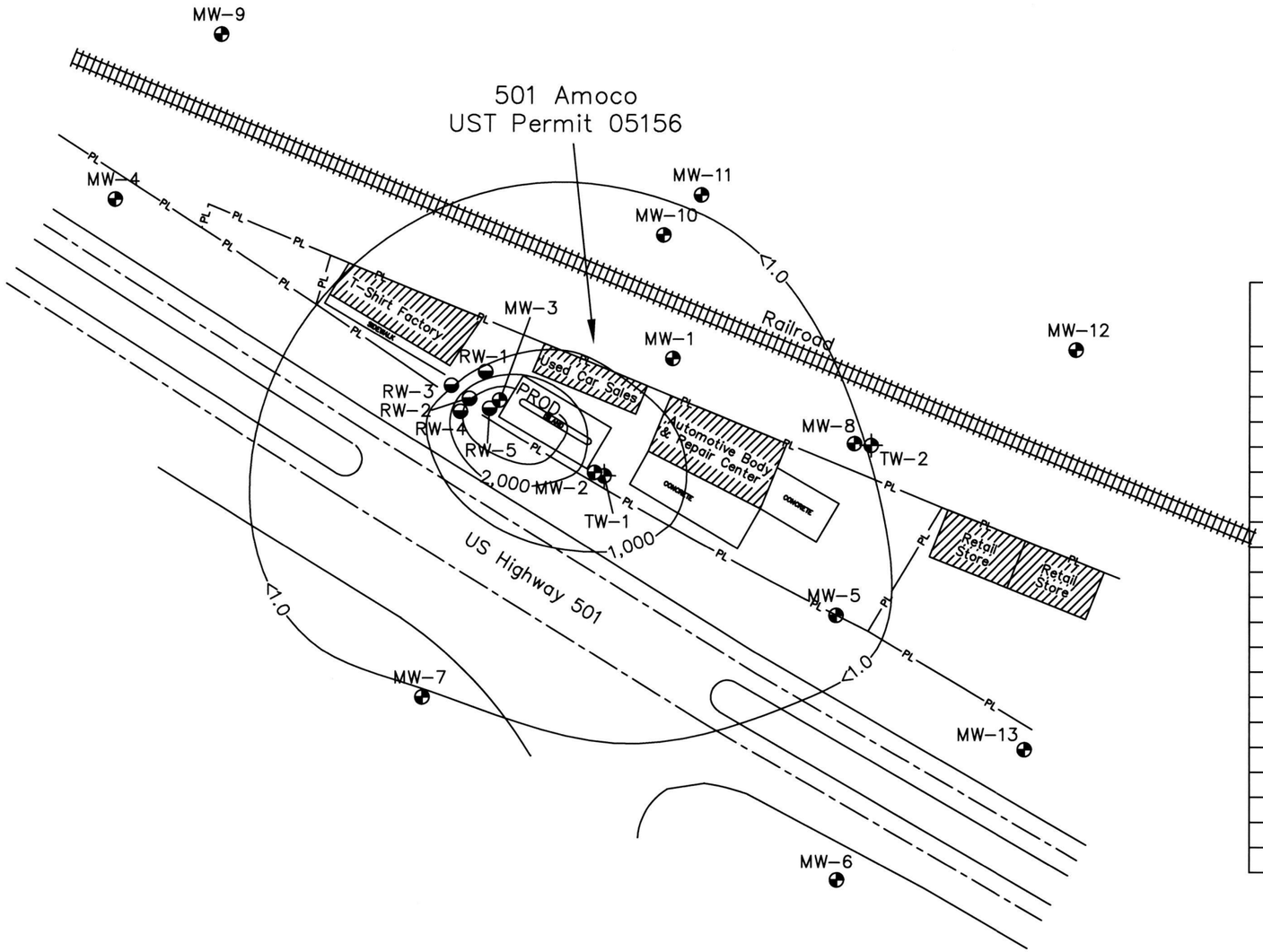
ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

SCALE
1 INCH = 80 FEET
0 80′ 160′

Map based Kleen Sites Geoservices Figure 4

PROJECT:	DATE:	Figure 4B - Toluene Contour Map
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	11/4/24	EMERALD, INC. SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,690	66,800	1,420	7,070	<500	551	<500	<0.021
DUP-1 (MW-2)	2,420	59,300	1,300	6,430	<500	622	<500	<0.020
05156 MW-3	0.99 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	5.2	<1.0	1.1	2.1	1.3	10.7	<1.0	<0.020
05156 MW-8	0.42J	28.4	1.7	9.4	<1.0	2.1	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-1	<1.0	2.0	0.46J	2.2	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	No Access							
05156 RW-2	6.37 ft. of Free Product							
05156 RW-3	781	45.8	789	214	<5.0	703	<5.0	<0.020
05156 RW-4	0.03 ft. of Free Product							
05156 RW-5	1.24 ft. of Free Product							

Notes: Contour Interval = 1,000 ug/l

Samples Collected on August 22 and 23, 2024

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

SCALE
1 INCH = 80 FEET
0 80' 160'

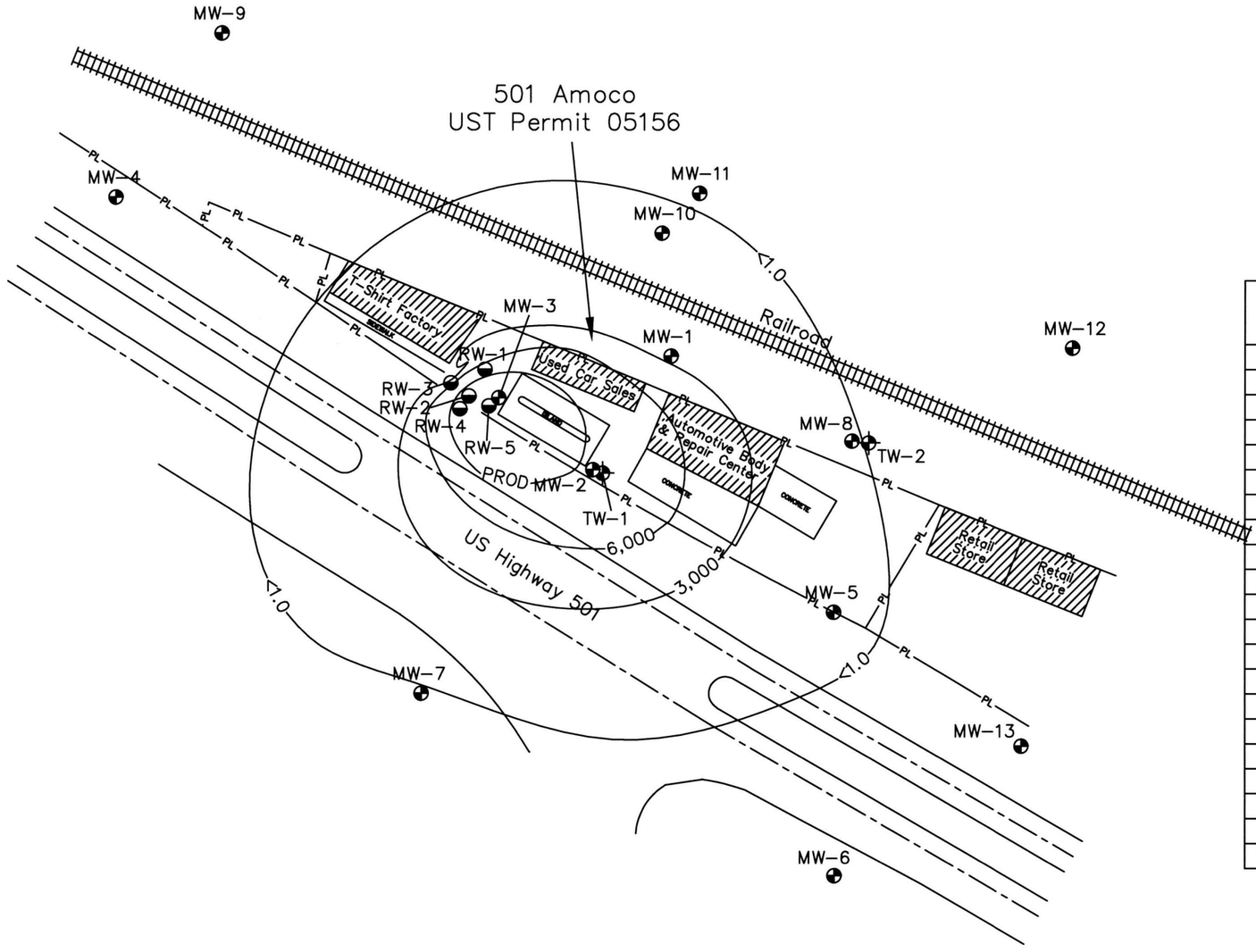
Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
11/4/24

Figure 4C - Ethylbenzene Contour Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,690	66,800	1,420	7,070	<500	551	<500	<0.021
DUP-1 (MW-2)	2,420	59,300	1,300	6,430	<500	622	<500	<0.020
05156 MW-3	0.99 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	5.2	<1.0	1.1	2.1	1.3	10.7	<1.0	<0.020
05156 MW-8	0.42J	28.4	1.7	9.4	<1.0	2.1	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-1	<1.0	2.0	0.46J	2.2	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	No Access							
05156 RW-2	6.37 ft. of Free Product							
05156 RW-3	781	45.8	789	214	<5.0	703	<5.0	<0.020
05156 RW-4	0.03 ft. of Free Product							
05156 RW-5	1.24 ft. of Free Product							

Notes: Contour Interval = 3,000 ug/l

Samples Collected on August 22 and 23, 2024

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

SCALE
1 INCH = 80 FEET
0 80′ 160′

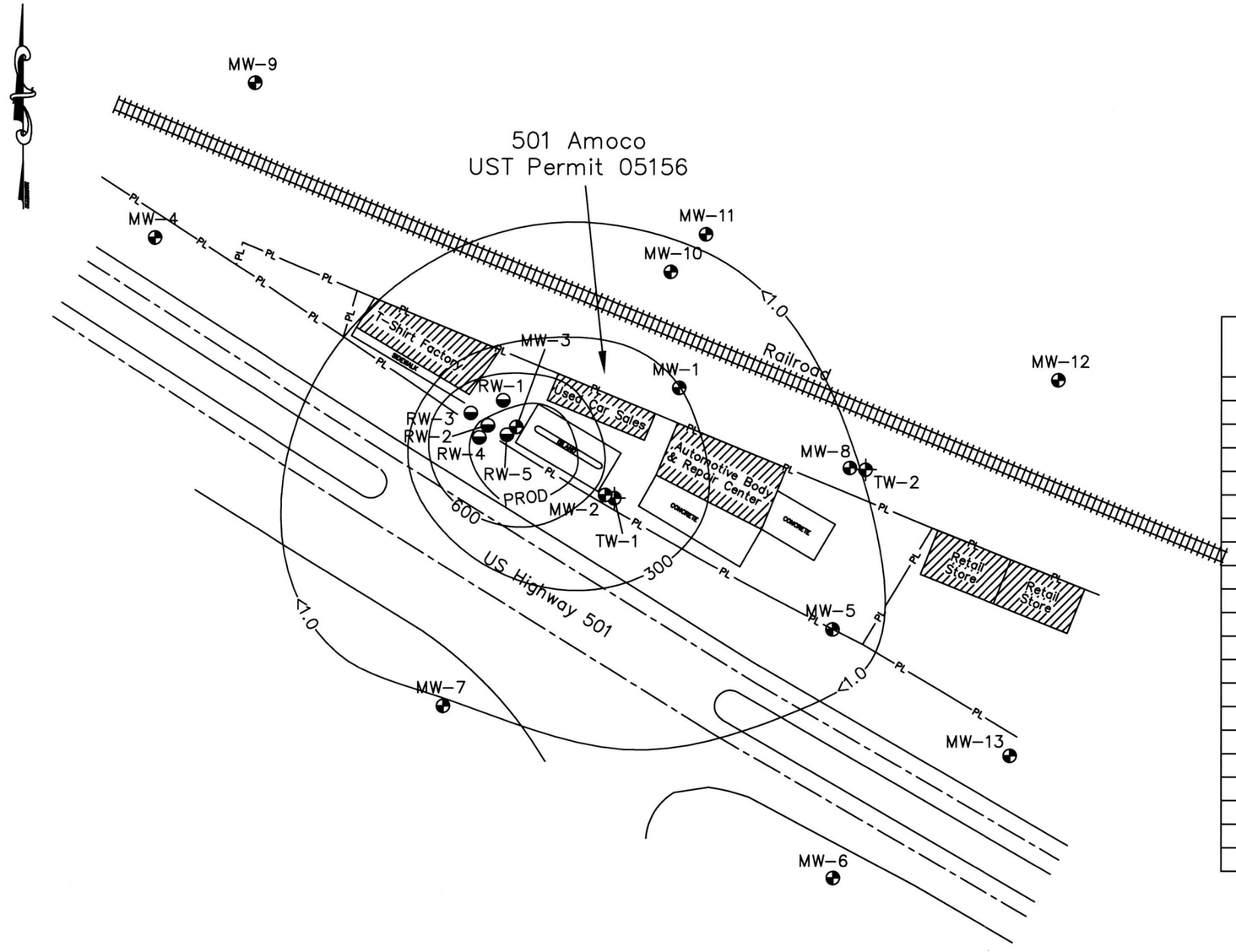
Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
11/4/24

Figure 4D - Total Xylenes Contour Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,690	66,800	1,420	7,070	<500	551	<500	<0.021
DUP-1 (MW-2)	2,420	59,300	1,300	6,430	<500	622	<500	<0.020
05156 MW-3	0.99 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	5.2	<1.0	1.1	2.1	1.3	10.7	<1.0	<0.020
05156 MW-8	0.42J	28.4	1.7	9.4	<1.0	2.1	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-1	<1.0	2.0	0.46J	2.2	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	No Access							
05156 RW-2	6.37 ft. of Free Product							
05156 RW-3	781	45.8	789	214	<5.0	703	<5.0	<0.020
05156 RW-4	0.03 ft. of Free Product							
05156 RW-5	1.24 ft. of Free Product							

Notes: Contour Interval = 300 ug/l

Samples Collected on August 22 and 23, 2024

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

SCALE
1 INCH = 80 FEET
0 80' 160'

Map based Kleen Sites Geoservices Figure 4

PROJECT:	DATE:	Figure 4E - Naphthalene Contour Map
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	11/4/24	EMERALD, INC. SUMTER, SOUTH CAROLINA

APPENDIX A

PURGE LOGS

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-1

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 13.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.119 x 5 = 10.6 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Sampled
3rd						Bent Standpipe - Could not get bailer or tubing past bend
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-2

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 6.80 Ft.

WATER HEIGHT (Hw): 6.20 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.011 x 5 = 5.1 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 5.0 Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.55	25.0	6.31	141.3	63.05	Clear, Petroleum Odor
1st	1.62	25.2	6.35	144.7	93.77	Clear, Petroleum Odor
2nd	1.50	25.4	6.39	148.9	156.1	Clear, Petroleum Odor
3rd	1.41	25.5	6.42	150.6	180.2	Clear, Petroleum Odor
4th	1.35	25.6	6.46	153.1	221.1	Clear, Petroleum Odor
5th	1.32	25.7	6.48	155.0	287.6	Slightly Cloudy, Petroleum Odor
Sample collected at 1400						
Duplicate colleced at 1403						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-3

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	0.00 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	13.00 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	2.119 x 5 = 10.6 Gallons
		PURGE VOLUME:	0.0 Gallons
DATE:	8/22/24	**EMERALD, INC. PERSONNEL:**	M. Slaybaugh/M. Elvington

Field Equipment

		Serial Number		Serial Number		Serial Number
Interface Probe		02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627		DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Depth to Product - 4.91 ft.
3rd						Depth to Water - 5.90 ft.
4th						0.99 ft. of Product
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-4

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 4-14 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 14.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.282 x 5 = 11.4 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Located
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-5

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 15.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.445 x 5 = 12.2 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						No Access
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 00808 MW-6

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: 5.26 Ft.

WATER HEIGHT (Hw): 9.74 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.588 x 5 = 7.9 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 7.5 Gallons

DATE: 8/23/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.74	23.8	6.47	147.9	91.51	Clear, No Petroleum Odor
1st	1.61	24.0	6.51	152.1	170.3	Clear, No Petroleum Odor
2nd	1.48	24.2	6.55	157.6	215.7	Clear, No Petroleum Odor
3rd	1.39	24.4	6.57	160.7	241.0	Clear, No Petroleum Odor
4th	1.32	24.4	6.61	162.9	264.0	Slightly Cloudy, No Petroleum Odor
5th	1.26	24.4	6.64	165.4	323.9	Slightly Cloudy, No Petroleum Odor
Sample collected at 1330						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-7

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: 5.71 Ft.

WATER HEIGHT (Hw): 9.29 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.514 x 5 = 7.6 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 7.5 Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Partly Cloudy, 73-90°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.80	23.9	5.77	193.1	68.53	Clear, No Petroleum Odor
1st	1.67	24.4	5.72	198.6	95.30	Clear, No Petroleum Odor
2nd	1.53	24.7	5.68	201.4	141.6	Clear, No Petroleum Odor
3rd	1.41	24.9	5.74	204.8	180.2	Clear, No Petroleum Odor
4th	1.35	25.1	5.78	207.7	230.5	Clear, No Petroleum Odor
5th	1.29	25.1	5.80	208.0	297.8	Slightly Cloudy, No Petroleum Odor
Sample collected at 1450						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-8

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	5-15 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	6.77 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	8.23 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.341 x 5 = 6.7 Gallons
		PURGE VOLUME:	7.5 Gallons
DATE:	8/22/24	**EMERALD, INC. PERSONNEL:**	M. Slaybaugh/M. Elvington

Field Equipment

		Serial Number		Serial Number		Serial Number
Interface Probe		02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627		DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.48	23.8	7.07	225.5	40.80	Clear, No Petroleum Odor
1st	1.77	27.7	7.04	222.4	63.45	Clear, No Petroleum Odor
2nd	1.55	27.5	7.02	220.6	96.37	Clear, No Petroleum Odor
3rd	1.41	23.4	7.00	217.7	121.5	Clear, No Petroleum Odor
4th	1.33	23.4	6.97	216.2	130.5	Clear, No Petroleum Odor
5th	1.20	21.2	6.95	214.1	152.9	Clear, No Petroleum Odor
Sample collected at 1230						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-9

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 15.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.445 x 5 = 12.2 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Located
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-10

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 15.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.445 x 5 = 12.2 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Located
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-11

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	6-16 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	7.82 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	8.18 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.333 x 5 = 6.7 Gallons
		PURGE VOLUME:	7.5 Gallons
DATE:	8/22/24	**EMERALD, INC. PERSONNEL:**	M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.65	23.0	6.34	180.2	39.77	Clear, No Petroleum Odor
1st	1.71	23.2	6.37	184.6	56.50	Clear, No Petroleum Odor
2nd	1.58	23.4	6.40	188.0	93.01	Clear, No Petroleum Odor
3rd	1.46	23.5	6.42	191.3	121.0	Clear, No Petroleum Odor
4th	1.39	23.6	6.44	194.4	144.5	Clear, No Petroleum Odor
5th	1.34	23.7	6.45	197.3	153.7	Clear, No Petroleum Odor
Sample collected at 1430						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-12

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	4-14 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	6.47 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	7.53 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.227 x 5 = 6.1 Gallons
		PURGE VOLUME:	7.5 Gallons
DATE:	8/23/24	**EMERALD, INC. PERSONNEL:**	M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.69	22.3	5.98	190.3	34.95	Clear, No Petroleum Odor
1st	1.48	22.5	5.92	194.7	53.35	Clear, No Petroleum Odor
2nd	1.32	22.6	5.85	199.5	71.90	Clear, No Petroleum Odor
3rd	1.21	22.7	5.79	204.8	83.53	Clear, No Petroleum Odor
4th	1.10	22.7	5.76	207.1	81.41	Clear, No Petroleum Odor
5th	1.04	22.8	5.75	209.1	186.5	Clear, No Petroleum Odor
Sample collected at 1245						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-13

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 4-14 Ft.

STATIC WATER LEVEL: 7.90 Ft.

WATER HEIGHT (Hw): 6.10 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.994 x 5 = 5.0 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 5.0 Gallons

DATE: 8/23/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

		Serial Number		Serial Number		Serial Number
Interface Probe		02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627		DO Meter	11K00954		

Conditions: Partly Cloudy, 73-90°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.83	26.8	6.31	115.3	523.7	Cloudy, No Petroleum Odor
1st	1.62	26.7	6.25	119.0	788.6	Cloudy, No Petroleum Odor
2nd	1.49	26.5	6.22	122.4	955.0	Cloudy, No Petroleum Odor
3rd	1.37	26.3	6.18	125.7	828.2	Cloudy, No Petroleum Odor
4th	1.30	26.2	6.15	127.8	877.5	Cloudy, No Petroleum Odor
5th	1.26	26.1	6.13	129.0	901.4	Cloudy, No Petroleum Odor
Sample collected at 1115						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 TW-1

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 38-43 Ft.

STATIC WATER LEVEL: 8.33 Ft.

WATER HEIGHT (Hw): 34.67 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 5.651 x 5 = 28.3 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 30.0 Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.93	23.2	10.22	200.4	15.29	Clear, No Petroleum Odor
1st	2.01	23.3	10.25	207.3	29.77	Clear, No Petroleum Odor
2nd	1.80	23.5	10.47	211.4	41.46	Clear, No Petroleum Odor
3rd	1.62	23.7	10.55	215.6	53.23	Clear, No Petroleum Odor
4th	1.54	23.7	10.60	218.0	59.45	Clear, No Petroleum Odor
5th	1.49	23.7	10.64	219.7	69.11	Clear, No Petroleum Odor
Sample collected at 1340						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 TW-2

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 35-40 Ft.

STATIC WATER LEVEL: 7.82 Ft.

WATER HEIGHT (Hw): 32.18 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 5.245 x 5 = 26.2 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 30.0 Gallons

DATE: 8/23/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	2.25	22.0	6.32	203.4	25.60	Clear, No Petroleum Odor
1st	2.07	22.3	6.27	211.2	39.44	Clear, No Petroleum Odor
2nd	1.93	22.5	6.20	216.5	53.98	Clear, No Petroleum Odor
3rd	1.80	22.5	6.14	221.9	65.56	Clear, No Petroleum Odor
4th	1.66	22.6	6.09	226.0	77.47	Clear, No Petroleum Odor
5th	1.55	22.6	6.05	231.1	95.33	Clear, No Petroleum Odor
Sample collected at 1200						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-1

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 13.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.119 x 5 = 10.6 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						No Access
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-2

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 11.11 Ft.

WATER HEIGHT (Hw): 1.89 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.308 x 5 = 1.5 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						Depth to Product - 4.74 ft.
2nd						Depth to Water - 11.11 ft.
3rd						6.37 ft. of Product
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-3

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	3.15 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	9.85 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	6.432 x 5 = 32.2 Gallons
		PURGE VOLUME:	35.0 Gallons
DATE:	8/22/24	**EMERALD, INC. PERSONNEL:**	M. Slaybaugh/M. Elvington

Field Equipment

		Serial Number		Serial Number		Serial Number
Interface Probe		02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627		DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	2.45	26.6	6.47	172.9	432.9	Slilghtly Cloudy, Petroleum Odor
1st	2.29	26.7	6.53	180.2	532.1	Cloudy, Petroleum Odor
2nd	2.09	26.8	6.58	187.6	596.5	Cloudy, Petroleum Odor
3rd	1.97	26.8	6.64	293.5	670.2	Cloudy, Petroleum Odor
4th	1.88	26.8	6.68	200.7	744.4	Cloudy, Petroleum Odor
5th	1.83	26.9	6.71	208.8	798.2	Cloudy, Petroleum Odor
Sample collected at 1200						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-4

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 5.70 Ft.

WATER HEIGHT (Hw): 7.30 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.19 x 5 = 5.9 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						Depth to Product - 5.67 ft.
2nd						Depth to Water - 5.70 ft.
3rd						0.03 ft. of Product
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-5

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 5.70 Ft.

WATER HEIGHT (Hw): 7.30 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.19 x 5 = 5.9 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: Gallons

DATE: 8/22/24

EMERALD, INC. PERSONNEL: M. Slaybaugh/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 73-94°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						Depth to Product - 4.81 ft.
2nd						Depth to Water - 6.05 ft.
3rd						1.24 ft. of Product
4th						
5th						
Sample collected at						

APPENDIX B

ANALYTICAL DATA SHEETS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

September 04, 2024

Ms. Robbin Boykin
Emerald, Inc.
2520 Tahoe Drive
Sumter, SC 29150

RE: Project: SOL AMOCO 05156
Pace Project No.: 92749838

Dear Ms. Boykin:

Enclosed are the analytical results for sample(s) received by the laboratory on August 23, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Charlotte

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jonathan W Biddix
jonathan.biddix@pacelabs.com
704-977-0978
Project Manager

Enclosures

cc: Chad McClary, Emerald, Inc.
Dalton Reames, Emerald, Inc.
Alex Skoler, Emerald, Inc.

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CERTIFICATIONS

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92749838001	**05156 MW-2**	Water	08/22/24 14:00	08/23/24 11:15
92749838002	**05156 MW-8**	Water	08/22/24 12:30	08/23/24 11:15
92749838003	**05156 MW-11**	Water	08/22/24 14:30	08/23/24 11:15
92749838004	**05156 TW-1**	Water	08/22/24 13:40	08/23/24 11:15
92749838005	**05156 RW-3**	Water	08/22/24 12:00	08/23/24 11:15
92749838006	**05156 DUP-1**	Water	08/22/24 00:00	08/23/24 11:15
92749838007	**05156 FIELD BLANK 1**	Water	08/22/24 15:00	08/23/24 11:15
92749838008	**05156 TRIP BLANK 1**	Water	08/22/24 00:00	08/23/24 11:15
92749838009	**05156 MW-7**	Water	08/22/24 14:45	08/23/24 11:15

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SAMPLE ANALYTE COUNT

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92749838001	**05156 MW-2**	EPA 8011	HH	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92749838002	**05156 MW-8**	EPA 8011	HH	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92749838003	**05156 MW-11**	EPA 8011	HH	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92749838004	**05156 TW-1**	EPA 8011	HH	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92749838005	**05156 RW-3**	EPA 8011	HH	2	PASI-C
		EPA 8260D	TMK	20	PASI-C
92749838006	**05156 DUP-1**	EPA 8011	HH	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92749838007	**05156 FIELD BLANK 1**	EPA 8011	HH	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92749838008	**05156 TRIP BLANK 1**	EPA 8260D	LMB	20	PASI-C
92749838009	**05156 MW-7**	EPA 8011	HH	2	PASI-C
		EPA 8260D	LMB	20	PASI-C

PASI-C = Pace Analytical Services - Charlotte

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Sample: 05156 MW-2 **Lab ID: 92749838001** Collected: 08/22/24 14:00 Received: 08/23/24 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.021	0.0078	1	08/29/24 17:20	08/30/24 03:05	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	117	%	60-140		1	08/29/24 17:20	08/30/24 03:05	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	50000	18200	500		08/31/24 02:08	75-85-4	L1,v1
tert-Amylmethyl ether	ND	ug/L	5000	1330	500		08/31/24 02:08	994-05-8	
Benzene	**2690**	ug/L	500	172	500		08/31/24 02:08	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	50000	26000	500		08/31/24 02:08	624-95-3	
tert-Butyl Alcohol	ND	ug/L	50000	13400	500		08/31/24 02:08	75-65-0	
tert-Butyl Formate	ND	ug/L	25000	14700	500		08/31/24 02:08	762-75-4	
1,2-Dichloroethane	ND	ug/L	500	161	500		08/31/24 02:08	107-06-2	
Diisopropyl ether	ND	ug/L	500	154	500		08/31/24 02:08	108-20-3	
Ethanol	ND	ug/L	100000	36100	500		08/31/24 02:08	64-17-5	
Ethylbenzene	**1420**	ug/L	500	152	500		08/31/24 02:08	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	5000	1620	500		08/31/24 02:08	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	500	211	500		08/31/24 02:08	1634-04-4	
Naphthalene	**551**	ug/L	500	322	500		08/31/24 02:08	91-20-3	
Toluene	**66800**	ug/L	500	242	500		08/31/24 02:08	108-88-3	
Xylene (Total)	**7070**	ug/L	500	169	500		08/31/24 02:08	1330-20-7	
m&p-Xylene	**4450**	ug/L	1000	354	500		08/31/24 02:08	179601-23-1	
o-Xylene	**2620**	ug/L	500	169	500		08/31/24 02:08	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		500		08/31/24 02:08	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		500		08/31/24 02:08	17060-07-0	
Toluene-d8 (S)	101	%	70-130		500		08/31/24 02:08	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Sample: 05156 MW-8 **Lab ID: 92749838002** Collected: 08/22/24 12:30 Received: 08/23/24 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	08/29/24 17:20	08/30/24 03:16	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	99	%	60-140		1	08/29/24 17:20	08/30/24 03:16	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		08/30/24 09:33	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		08/30/24 09:33	994-05-8	
Benzene	**0.42J**	ug/L	1.0	0.34	1		08/30/24 09:33	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		08/30/24 09:33	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		08/30/24 09:33	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		08/30/24 09:33	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		08/30/24 09:33	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		08/30/24 09:33	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		08/30/24 09:33	64-17-5	
Ethylbenzene	**1.7**	ug/L	1.0	0.30	1		08/30/24 09:33	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		08/30/24 09:33	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		08/30/24 09:33	1634-04-4	
Naphthalene	**2.1**	ug/L	1.0	0.64	1		08/30/24 09:33	91-20-3	
Toluene	**28.4**	ug/L	1.0	0.48	1		08/30/24 09:33	108-88-3	
Xylene (Total)	**9.4**	ug/L	1.0	0.34	1		08/30/24 09:33	1330-20-7	
m&p-Xylene	**6.2**	ug/L	2.0	0.71	1		08/30/24 09:33	179601-23-1	
o-Xylene	**3.3**	ug/L	1.0	0.34	1		08/30/24 09:33	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		08/30/24 09:33	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130		1		08/30/24 09:33	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		08/30/24 09:33	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Sample: 05156 MW-11 **Lab ID: 92749838003** Collected: 08/22/24 14:30 Received: 08/23/24 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0077	1	08/29/24 17:20	08/30/24 04:10	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	104	%	60-140		1	08/29/24 17:20	08/30/24 04:10	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		08/30/24 09:51	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		08/30/24 09:51	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		08/30/24 09:51	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		08/30/24 09:51	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		08/30/24 09:51	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		08/30/24 09:51	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		08/30/24 09:51	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		08/30/24 09:51	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		08/30/24 09:51	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		08/30/24 09:51	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		08/30/24 09:51	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		08/30/24 09:51	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		08/30/24 09:51	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		08/30/24 09:51	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		08/30/24 09:51	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		08/30/24 09:51	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		08/30/24 09:51	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		08/30/24 09:51	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		08/30/24 09:51	17060-07-0	
Toluene-d8 (S)	97	%	70-130		1		08/30/24 09:51	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Sample: 05156 TW-1 **Lab ID: 92749838004** Collected: 08/22/24 13:40 Received: 08/23/24 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	08/29/24 17:20	08/30/24 04:21	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	103	%	60-140		1	08/29/24 17:20	08/30/24 04:21	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		08/30/24 10:10	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		08/30/24 10:10	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		08/30/24 10:10	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		08/30/24 10:10	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		08/30/24 10:10	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		08/30/24 10:10	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		08/30/24 10:10	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		08/30/24 10:10	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		08/30/24 10:10	64-17-5	
Ethylbenzene	**0.46J**	ug/L	1.0	0.30	1		08/30/24 10:10	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		08/30/24 10:10	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		08/30/24 10:10	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		08/30/24 10:10	91-20-3	
Toluene	**2.0**	ug/L	1.0	0.48	1		08/30/24 10:10	108-88-3	
Xylene (Total)	**2.2**	ug/L	1.0	0.34	1		08/30/24 10:10	1330-20-7	
m&p-Xylene	**1.6J**	ug/L	2.0	0.71	1		08/30/24 10:10	179601-23-1	
o-Xylene	**0.67J**	ug/L	1.0	0.34	1		08/30/24 10:10	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		08/30/24 10:10	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		08/30/24 10:10	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		08/30/24 10:10	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Sample: 05156 RW-3 **Lab ID: 92749838005** Collected: 08/22/24 12:00 Received: 08/23/24 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	08/29/24 17:20	08/30/24 04:53	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	110	%	60-140		1	08/29/24 17:20	08/30/24 04:53	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	500	182	5		08/31/24 23:33	75-85-4	M1
tert-Amylmethyl ether	ND	ug/L	50.0	13.3	5		08/31/24 23:33	994-05-8	
Benzene	**781**	ug/L	5.0	1.7	5		08/31/24 23:33	71-43-2	M1
3,3-Dimethyl-1-Butanol	ND	ug/L	500	260	5		08/31/24 23:33	624-95-3	
tert-Butyl Alcohol	**1130**	ug/L	500	134	5		08/31/24 23:33	75-65-0	
tert-Butyl Formate	ND	ug/L	250	147	5		08/31/24 23:33	762-75-4	P5
1,2-Dichloroethane	ND	ug/L	5.0	1.6	5		08/31/24 23:33	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	1.5	5		08/31/24 23:33	108-20-3	
Ethanol	ND	ug/L	1000	361	5		08/31/24 23:33	64-17-5	
Ethylbenzene	**789**	ug/L	5.0	1.5	5		08/31/24 23:33	100-41-4	M1
Ethyl-tert-butyl ether	ND	ug/L	50.0	16.2	5		08/31/24 23:33	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.1	5		08/31/24 23:33	1634-04-4	
Naphthalene	**703**	ug/L	5.0	3.2	5		08/31/24 23:33	91-20-3	M1
Toluene	**45.8**	ug/L	5.0	2.4	5		08/31/24 23:33	108-88-3	
Xylene (Total)	**214**	ug/L	5.0	1.7	5		08/31/24 23:33	1330-20-7	MS
m&p-Xylene	**195**	ug/L	10.0	3.5	5		08/31/24 23:33	179601-23-1	M1
o-Xylene	**19.4**	ug/L	5.0	1.7	5		08/31/24 23:33	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		5		08/31/24 23:33	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130		5		08/31/24 23:33	17060-07-0	
Toluene-d8 (S)	100	%	70-130		5		08/31/24 23:33	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Sample: 05156 DUP-1 **Lab ID: 92749838006** Collected: 08/22/24 00:00 Received: 08/23/24 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	08/29/24 17:20	08/30/24 05:14	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	112	%	60-140		1	08/29/24 17:20	08/30/24 05:14	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	50000	18200	500		08/31/24 01:31	75-85-4	L1,v1
tert-Amylmethyl ether	ND	ug/L	5000	1330	500		08/31/24 01:31	994-05-8	
Benzene	**2420**	ug/L	500	172	500		08/31/24 01:31	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	50000	26000	500		08/31/24 01:31	624-95-3	
tert-Butyl Alcohol	ND	ug/L	50000	13400	500		08/31/24 01:31	75-65-0	
tert-Butyl Formate	ND	ug/L	25000	14700	500		08/31/24 01:31	762-75-4	
1,2-Dichloroethane	ND	ug/L	500	161	500		08/31/24 01:31	107-06-2	
Diisopropyl ether	ND	ug/L	500	154	500		08/31/24 01:31	108-20-3	
Ethanol	ND	ug/L	100000	36100	500		08/31/24 01:31	64-17-5	
Ethylbenzene	**1300**	ug/L	500	152	500		08/31/24 01:31	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	5000	1620	500		08/31/24 01:31	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	500	211	500		08/31/24 01:31	1634-04-4	
Naphthalene	**622**	ug/L	500	322	500		08/31/24 01:31	91-20-3	
Toluene	**59300**	ug/L	500	242	500		08/31/24 01:31	108-88-3	
Xylene (Total)	**6430**	ug/L	500	169	500		08/31/24 01:31	1330-20-7	
m&p-Xylene	**3980**	ug/L	1000	354	500		08/31/24 01:31	179601-23-1	
o-Xylene	**2450**	ug/L	500	169	500		08/31/24 01:31	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		500		08/31/24 01:31	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		500		08/31/24 01:31	17060-07-0	
Toluene-d8 (S)	99	%	70-130		500		08/31/24 01:31	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Sample: 05156 FIELD BLANK 1 **Lab ID: 92749838007** Collected: 08/22/24 15:00 Received: 08/23/24 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0076	1	08/29/24 17:20	08/30/24 05:25	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	99	%	60-140		1	08/29/24 17:20	08/30/24 05:25	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		08/29/24 20:36	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		08/29/24 20:36	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		08/29/24 20:36	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		08/29/24 20:36	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		08/29/24 20:36	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		08/29/24 20:36	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		08/29/24 20:36	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		08/29/24 20:36	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		08/29/24 20:36	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		08/29/24 20:36	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		08/29/24 20:36	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		08/29/24 20:36	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		08/29/24 20:36	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		08/29/24 20:36	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		08/29/24 20:36	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		08/29/24 20:36	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		08/29/24 20:36	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		08/29/24 20:36	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		08/29/24 20:36	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		08/29/24 20:36	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Sample: 05156 TRIP BLANK 1 **Lab ID: 92749838008** Collected: 08/22/24 00:00 Received: 08/23/24 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		08/30/24 06:50	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		08/30/24 06:50	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		08/30/24 06:50	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		08/30/24 06:50	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		08/30/24 06:50	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		08/30/24 06:50	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		08/30/24 06:50	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		08/30/24 06:50	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		08/30/24 06:50	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		08/30/24 06:50	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		08/30/24 06:50	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		08/30/24 06:50	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		08/30/24 06:50	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		08/30/24 06:50	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		08/30/24 06:50	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		08/30/24 06:50	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		08/30/24 06:50	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		08/30/24 06:50	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		08/30/24 06:50	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		08/30/24 06:50	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Sample: 05156 MW-7 **Lab ID: 92749838009** Collected: 08/22/24 14:45 Received: 08/23/24 11:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	08/29/24 17:20	08/30/24 05:36	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	101	%	60-140		1	08/29/24 17:20	08/30/24 05:36	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		08/30/24 10:28	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		08/30/24 10:28	994-05-8	
Benzene	**5.2**	ug/L	1.0	0.34	1		08/30/24 10:28	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		08/30/24 10:28	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		08/30/24 10:28	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		08/30/24 10:28	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		08/30/24 10:28	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		08/30/24 10:28	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		08/30/24 10:28	64-17-5	
Ethylbenzene	**1.1**	ug/L	1.0	0.30	1		08/30/24 10:28	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		08/30/24 10:28	637-92-3	
Methyl-tert-butyl ether	**1.3**	ug/L	1.0	0.42	1		08/30/24 10:28	1634-04-4	
Naphthalene	**10.7**	ug/L	1.0	0.64	1		08/30/24 10:28	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		08/30/24 10:28	108-88-3	
Xylene (Total)	**2.1**	ug/L	1.0	0.34	1		08/30/24 10:28	1330-20-7	
m&p-Xylene	**2.1**	ug/L	2.0	0.71	1		08/30/24 10:28	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		08/30/24 10:28	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		08/30/24 10:28	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130		1		08/30/24 10:28	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		08/30/24 10:28	2037-26-5	

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

QC Batch: 879307
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92749838007

METHOD BLANK: 4528835 Matrix: Water
Associated Lab Samples: 92749838007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	08/29/24 18:47	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	08/29/24 18:47	
Benzene	ug/L	ND	1.0	0.34	08/29/24 18:47	
Diisopropyl ether	ug/L	ND	1.0	0.31	08/29/24 18:47	
Ethanol	ug/L	ND	200	72.2	08/29/24 18:47	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	08/29/24 18:47	
Ethylbenzene	ug/L	ND	1.0	0.30	08/29/24 18:47	
m&p-Xylene	ug/L	ND	2.0	0.71	08/29/24 18:47	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	08/29/24 18:47	
Naphthalene	ug/L	ND	1.0	0.64	08/29/24 18:47	
o-Xylene	ug/L	ND	1.0	0.34	08/29/24 18:47	
tert-Amyl Alcohol	ug/L	ND	100	36.4	08/29/24 18:47	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	08/29/24 18:47	
tert-Butyl Alcohol	ug/L	ND	100	26.8	08/29/24 18:47	
tert-Butyl Formate	ug/L	ND	50.0	29.4	08/29/24 18:47	
Toluene	ug/L	ND	1.0	0.48	08/29/24 18:47	
Xylene (Total)	ug/L	ND	1.0	0.34	08/29/24 18:47	
1,2-Dichloroethane-d4 (S)	%	99	70-130		08/29/24 18:47	
4-Bromofluorobenzene (S)	%	99	70-130		08/29/24 18:47	
Toluene-d8 (S)	%	99	70-130		08/29/24 18:47	

LABORATORY CONTROL SAMPLE: 4528836

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	19.0	95	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	445	111	70-130	
Benzene	ug/L	20	19.1	95	70-130	
Diisopropyl ether	ug/L	20	17.7	88	70-130	
Ethanol	ug/L	800	836	105	70-130	
Ethyl-tert-butyl ether	ug/L	40	36.0	90	70-130	
Ethylbenzene	ug/L	20	19.7	98	70-130	
m&p-Xylene	ug/L	40	39.2	98	70-130	
Methyl-tert-butyl ether	ug/L	20	18.3	91	70-130	
Naphthalene	ug/L	20	22.3	112	70-130	
o-Xylene	ug/L	20	19.6	98	70-130	
tert-Amyl Alcohol	ug/L	400	448	112	70-130	
tert-Amylmethyl ether	ug/L	40	38.5	96	70-130	
tert-Butyl Alcohol	ug/L	200	202	101	70-130	
tert-Butyl Formate	ug/L	160	136	85	70-130	

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

LABORATORY CONTROL SAMPLE: 4528836

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	19.2	96	70-130	
Xylene (Total)	ug/L	60	58.8	98	70-130	
1,2-Dichloroethane-d4 (S)	%			91	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE SAMPLE: 4528837

Parameter	Units	92749375023 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	ND	20	22.6	113	70-137	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	406	102	39-157	
Benzene	ug/L	ND	20	22.9	114	70-151	
Diisopropyl ether	ug/L	ND	20	21.2	106	63-144	
Ethanol	ug/L	ND	800	919	115	39-176	
Ethyl-tert-butyl ether	ug/L	ND	40	42.0	105	66-137	
Ethylbenzene	ug/L	ND	20	22.8	114	66-153	
m&p-Xylene	ug/L	ND	40	45.2	113	69-152	
Methyl-tert-butyl ether	ug/L	ND	20	21.0	105	54-156	
Naphthalene	ug/L	ND	20	18.4	92	61-148	
o-Xylene	ug/L	ND	20	22.8	114	70-148	
tert-Amyl Alcohol	ug/L	ND	400	474	119	54-153	
tert-Amylmethyl ether	ug/L	ND	40	41.8	105	69-139	
tert-Butyl Alcohol	ug/L	ND	200	309	155	43-188	
tert-Butyl Formate	ug/L	ND	160	ND	16	10-170	
Toluene	ug/L	ND	20	22.3	112	59-148	
Xylene (Total)	ug/L	ND	60	68.1	113	63-158	
1,2-Dichloroethane-d4 (S)	%				106	70-130	
4-Bromofluorobenzene (S)	%				104	70-130	
Toluene-d8 (S)	%				101	70-130	

SAMPLE DUPLICATE: 4528838

Parameter	Units	92749375032 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane	ug/L	ND	ND		30	
3,3-Dimethyl-1-Butanol	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethanol	ug/L	ND	ND		30	
Ethyl-tert-butyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	56.3	51.8	8	30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

SAMPLE DUPLICATE: 4528838

Parameter	Units	92749375032 Result	Dup Result	RPD	Max RPD	Qualifiers
tert-Amyl Alcohol	ug/L	277	260	6	30	
tert-Amylmethyl ether	ug/L	ND	ND		30	
tert-Butyl Alcohol	ug/L	596	750	23	30	
tert-Butyl Formate	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	102	105			
4-Bromofluorobenzene (S)	%	98	101			
Toluene-d8 (S)	%	98	102			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

QC Batch: 879338 Analysis Method: EPA 8260D
QC Batch Method: EPA 8260D Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92749838002, 92749838003, 92749838004, 92749838008, 92749838009

METHOD BLANK: 4529053 Matrix: Water
Associated Lab Samples: 92749838002, 92749838003, 92749838004, 92749838008, 92749838009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	08/30/24 06:14	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	08/30/24 06:14	
Benzene	ug/L	ND	1.0	0.34	08/30/24 06:14	
Diisopropyl ether	ug/L	ND	1.0	0.31	08/30/24 06:14	
Ethanol	ug/L	ND	200	72.2	08/30/24 06:14	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	08/30/24 06:14	
Ethylbenzene	ug/L	ND	1.0	0.30	08/30/24 06:14	
m&p-Xylene	ug/L	ND	2.0	0.71	08/30/24 06:14	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	08/30/24 06:14	
Naphthalene	ug/L	ND	1.0	0.64	08/30/24 06:14	
o-Xylene	ug/L	ND	1.0	0.34	08/30/24 06:14	
tert-Amyl Alcohol	ug/L	ND	100	36.4	08/30/24 06:14	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	08/30/24 06:14	
tert-Butyl Alcohol	ug/L	ND	100	26.8	08/30/24 06:14	
tert-Butyl Formate	ug/L	ND	50.0	29.4	08/30/24 06:14	
Toluene	ug/L	ND	1.0	0.48	08/30/24 06:14	
Xylene (Total)	ug/L	ND	1.0	0.34	08/30/24 06:14	
1,2-Dichloroethane-d4 (S)	%	101	70-130		08/30/24 06:14	
4-Bromofluorobenzene (S)	%	98	70-130		08/30/24 06:14	
Toluene-d8 (S)	%	99	70-130		08/30/24 06:14	

LABORATORY CONTROL SAMPLE: 4529054

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	19.3	96	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	406	101	70-130	
Benzene	ug/L	20	19.3	97	70-130	
Diisopropyl ether	ug/L	20	18.8	94	70-130	
Ethanol	ug/L	800	848	106	70-130	
Ethyl-tert-butyl ether	ug/L	40	36.4	91	70-130	
Ethylbenzene	ug/L	20	19.3	97	70-130	
m&p-Xylene	ug/L	40	38.3	96	70-130	
Methyl-tert-butyl ether	ug/L	20	18.3	92	70-130	
Naphthalene	ug/L	20	21.0	105	70-130	
o-Xylene	ug/L	20	19.3	96	70-130	
tert-Amyl Alcohol	ug/L	400	415	104	70-130	
tert-Amylmethyl ether	ug/L	40	38.1	95	70-130	
tert-Butyl Alcohol	ug/L	200	191	95	70-130	
tert-Butyl Formate	ug/L	160	133	83	70-130	

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

LABORATORY CONTROL SAMPLE: 4529054

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	18.9	95	70-130	
Xylene (Total)	ug/L	60	57.6	96	70-130	
1,2-Dichloroethane-d4 (S)	%			95	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4529055 4529056

Parameter	Units	92749375030 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	20	20	36.7J	35.3J	184	176	70-137		30	M1
3,3-Dimethyl-1-Butanol	ug/L	ND	400	400	ND	ND	172	160	39-157		30	M1
Benzene	ug/L	619	20	20	633	623	68	22	70-151	1	30	M1
Diisopropyl ether	ug/L	ND	20	20	34.4J	34.1J	172	171	63-144		30	M1
Ethanol	ug/L	ND	800	800	ND	ND	194	172	39-176		30	M1
Ethyl-tert-butyl ether	ug/L	ND	40	40	ND	ND	164	165	66-137		30	M1
Ethylbenzene	ug/L	ND	20	20	47.5	44.8	237	224	66-153	6	30	M1
m&p-Xylene	ug/L	ND	40	40	147	144	213	204	69-152	2	30	M1
Methyl-tert-butyl ether	ug/L	4440	20	20	4040	4000	-2000	-2200	54-156	1	30	M1
Naphthalene	ug/L	ND	20	20	60.8	52.8	222	183	61-148	14	30	M1
o-Xylene	ug/L	40.3	20	20	86.1	80.1	229	199	70-148	7	30	M1
tert-Amyl Alcohol	ug/L	ND	400	400	2960J	3060J	149	174	54-153		30	M1
tert-Amylmethyl ether	ug/L	ND	40	40	ND	ND	183	184	69-139		30	M1
tert-Butyl Alcohol	ug/L	ND	200	200	1600J	1650J	164	189	43-188		30	M1
tert-Butyl Formate	ug/L	ND	160	160	ND	ND	116	114	10-170		30	
Toluene	ug/L	132	20	20	163	156	157	121	59-148	5	30	M1
Xylene (Total)	ug/L	40.3	60	60	233	224	321	306	63-158	4	30	MS
1,2-Dichloroethane-d4 (S)	%						100	100	70-130			
4-Bromofluorobenzene (S)	%						99	98	70-130			
Toluene-d8 (S)	%						97	93	70-130			

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

QC Batch: 879607
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92749838001, 92749838006

METHOD BLANK: 4530646 Matrix: Water
Associated Lab Samples: 92749838001, 92749838006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	08/30/24 17:59	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	08/30/24 17:59	
Benzene	ug/L	ND	1.0	0.34	08/30/24 17:59	
Diisopropyl ether	ug/L	ND	1.0	0.31	08/30/24 17:59	
Ethanol	ug/L	ND	200	72.2	08/30/24 17:59	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	08/30/24 17:59	
Ethylbenzene	ug/L	ND	1.0	0.30	08/30/24 17:59	
m&p-Xylene	ug/L	ND	2.0	0.71	08/30/24 17:59	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	08/30/24 17:59	
Naphthalene	ug/L	ND	1.0	0.64	08/30/24 17:59	
o-Xylene	ug/L	ND	1.0	0.34	08/30/24 17:59	
tert-Amyl Alcohol	ug/L	ND	100	36.4	08/30/24 17:59	v1
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	08/30/24 17:59	
tert-Butyl Alcohol	ug/L	ND	100	26.8	08/30/24 17:59	
tert-Butyl Formate	ug/L	ND	50.0	29.4	08/30/24 17:59	
Toluene	ug/L	ND	1.0	0.48	08/30/24 17:59	
Xylene (Total)	ug/L	ND	1.0	0.34	08/30/24 17:59	
1,2-Dichloroethane-d4 (S)	%	106	70-130		08/30/24 17:59	
4-Bromofluorobenzene (S)	%	99	70-130		08/30/24 17:59	
Toluene-d8 (S)	%	101	70-130		08/30/24 17:59	

LABORATORY CONTROL SAMPLE: 4530647

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	22.4	112	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	513	128	70-130	
Benzene	ug/L	20	22.0	110	70-130	
Diisopropyl ether	ug/L	20	25.8	129	70-130	
Ethanol	ug/L	800	991	124	70-130	
Ethyl-tert-butyl ether	ug/L	40	45.3	113	70-130	
Ethylbenzene	ug/L	20	21.3	107	70-130	
m&p-Xylene	ug/L	40	42.5	106	70-130	
Methyl-tert-butyl ether	ug/L	20	22.1	111	70-130	
Naphthalene	ug/L	20	24.5	123	70-130	
o-Xylene	ug/L	20	21.3	106	70-130	
tert-Amyl Alcohol	ug/L	400	574	144	70-130	L1,v1
tert-Amylmethyl ether	ug/L	40	44.9	112	70-130	
tert-Butyl Alcohol	ug/L	200	254	127	70-130	
tert-Butyl Formate	ug/L	160	185	116	70-130	

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

LABORATORY CONTROL SAMPLE: 4530647

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	21.2	106	70-130	
Xylene (Total)	ug/L	60	63.8	106	70-130	
1,2-Dichloroethane-d4 (S)	%			104	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 4530648

Parameter	Units	92749475009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	ND	20	25.6	128	70-137	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	242	60	39-157	v3
Benzene	ug/L	ND	20	24.6	123	70-151	
Diisopropyl ether	ug/L	ND	20	27.7	138	63-144	
Ethanol	ug/L	ND	800	989	124	39-176	
Ethyl-tert-butyl ether	ug/L	ND	40	49.4	123	66-137	
Ethylbenzene	ug/L	ND	20	21.7	108	66-153	
m&p-Xylene	ug/L	ND	40	43.3	108	69-152	
Methyl-tert-butyl ether	ug/L	ND	20	22.7	113	54-156	
Naphthalene	ug/L	ND	20	21.2	106	61-148	
o-Xylene	ug/L	ND	20	20.9	105	70-148	
tert-Amyl Alcohol	ug/L	ND	400	379	95	54-153	v3
tert-Amylmethyl ether	ug/L	ND	40	43.7	109	69-139	
tert-Butyl Alcohol	ug/L	ND	200	188	94	43-188	v3
tert-Butyl Formate	ug/L	ND	160	132	82	10-170	
Toluene	ug/L	ND	20	23.2	116	59-148	
Xylene (Total)	ug/L	ND	60	64.2	107	63-158	
1,2-Dichloroethane-d4 (S)	%				113	70-130	
4-Bromofluorobenzene (S)	%				101	70-130	
Toluene-d8 (S)	%				100	70-130	

SAMPLE DUPLICATE: 4530649

Parameter	Units	92749846006 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane	ug/L	ND	ND		30	
3,3-Dimethyl-1-Butanol	ug/L	ND	ND		30	v2
Benzene	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethanol	ug/L	ND	ND		30	
Ethyl-tert-butyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

SAMPLE DUPLICATE: 4530649

Parameter	Units	92749846006 Result	Dup Result	RPD	Max RPD	Qualifiers
tert-Amyl Alcohol	ug/L	ND	ND		30	v2
tert-Amylmethyl ether	ug/L	ND	ND		30	
tert-Butyl Alcohol	ug/L	ND	ND		30	v2
tert-Butyl Formate	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	105	126			
4-Bromofluorobenzene (S)	%	98	103			
Toluene-d8 (S)	%	99	109			

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

QC Batch: 879615
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92749838005

METHOD BLANK: 4530688 Matrix: Water
Associated Lab Samples: 92749838005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	08/31/24 17:02	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	08/31/24 17:02	
Benzene	ug/L	ND	1.0	0.34	08/31/24 17:02	
Diisopropyl ether	ug/L	ND	1.0	0.31	08/31/24 17:02	
Ethanol	ug/L	ND	200	72.2	08/31/24 17:02	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	08/31/24 17:02	
Ethylbenzene	ug/L	ND	1.0	0.30	08/31/24 17:02	
m&p-Xylene	ug/L	ND	2.0	0.71	08/31/24 17:02	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	08/31/24 17:02	
Naphthalene	ug/L	ND	1.0	0.64	08/31/24 17:02	
o-Xylene	ug/L	ND	1.0	0.34	08/31/24 17:02	
tert-Amyl Alcohol	ug/L	ND	100	36.4	08/31/24 17:02	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	08/31/24 17:02	
tert-Butyl Alcohol	ug/L	ND	100	26.8	08/31/24 17:02	
tert-Butyl Formate	ug/L	ND	50.0	29.4	08/31/24 17:02	
Toluene	ug/L	ND	1.0	0.48	08/31/24 17:02	
Xylene (Total)	ug/L	ND	1.0	0.34	08/31/24 17:02	
1,2-Dichloroethane-d4 (S)	%	104	70-130		08/31/24 17:02	
4-Bromofluorobenzene (S)	%	97	70-130		08/31/24 17:02	
Toluene-d8 (S)	%	98	70-130		08/31/24 17:02	

LABORATORY CONTROL SAMPLE: 4530689

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	21.6	108	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	388	97	70-130	
Benzene	ug/L	20	20.0	100	70-130	
Diisopropyl ether	ug/L	20	21.5	107	70-130	
Ethanol	ug/L	800	738	92	70-130	
Ethyl-tert-butyl ether	ug/L	40	41.7	104	70-130	
Ethylbenzene	ug/L	20	20.2	101	70-130	
m&p-Xylene	ug/L	40	39.5	99	70-130	
Methyl-tert-butyl ether	ug/L	20	20.1	101	70-130	
Naphthalene	ug/L	20	19.4	97	70-130	
o-Xylene	ug/L	20	20.0	100	70-130	
tert-Amyl Alcohol	ug/L	400	394	98	70-130	
tert-Amylmethyl ether	ug/L	40	40.1	100	70-130	
tert-Butyl Alcohol	ug/L	200	192	96	70-130	
tert-Butyl Formate	ug/L	160	175	109	70-130	

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

LABORATORY CONTROL SAMPLE: 4530689

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	19.5	98	70-130	
Xylene (Total)	ug/L	60	59.6	99	70-130	
1,2-Dichloroethane-d4 (S)	%			105	70-130	
4-Bromofluorobenzene (S)	%			98	70-130	
Toluene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4530690 4530691

Parameter	Units	92749838005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	20	20	27.2	22.1	136	111	70-137	21	30	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	400	569	553	142	138	39-157	3	30	
Benzene	ug/L	781	20	20	828	855	236	372	70-151	3	30	M1
Diisopropyl ether	ug/L	ND	20	20	20.4	18.3	102	92	63-144	11	30	
Ethanol	ug/L	ND	800	800	677J	695J	85	87	39-176		30	v3
Ethyl-tert-butyl ether	ug/L	ND	40	40	46.9J	39.6J	117	99	66-137		30	
Ethylbenzene	ug/L	789	20	20	862	902	366	562	66-153	4	30	M1
m&p-Xylene	ug/L	195	40	40	255	258	151	157	69-152	1	30	M1
Methyl-tert-butyl ether	ug/L	ND	20	20	29.7	27.3	148	137	54-156	8	30	
Naphthalene	ug/L	703	20	20	777	944	372	1210	61-148	19	30	M1
o-Xylene	ug/L	19.4	20	20	44.4	41.2	125	109	70-148	8	30	
tert-Amyl Alcohol	ug/L	ND	400	400	802	921	201	230	54-153	14	30	M1
tert-Amylmethyl ether	ug/L	ND	40	40	49.8J	42.1J	125	105	69-139		30	
tert-Butyl Alcohol	ug/L	1130	200	200	1340	1500	108	183	43-188	11	30	
tert-Butyl Formate	ug/L	ND	160	160	151J	ND	95	76	10-170		30	P5
Toluene	ug/L	45.8	20	20	68.4	65.1	113	96	59-148	5	30	
Xylene (Total)	ug/L	214	60	60	299	299	142	141	63-158	0	30	MS
1,2-Dichloroethane-d4 (S)	%						105	107	70-130			
4-Bromofluorobenzene (S)	%						99	100	70-130			
Toluene-d8 (S)	%						100	100	70-130			

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

QC Batch: 879268
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92749838001, 92749838002

METHOD BLANK: 4528485 Matrix: Water
Associated Lab Samples: 92749838001, 92749838002

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	0.0075	08/29/24 22:46	
1-Chloro-2-bromopropane (S)	%	107	60-140		08/29/24 22:46	

LABORATORY CONTROL SAMPLE & LCSD: 4528486 4528487

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.26	0.23	0.25	90	98	60-140	10	20	
1-Chloro-2-bromopropane (S)	%				88	98	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4528488 4528489

Parameter	Units	92749746005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	0.24	0.24	0.25	0.25	101	102	60-140	1	20	
1-Chloro-2-bromopropane (S)	%						97	98	60-140			

SAMPLE DUPLICATE: 4528490

Parameter	Units	92749746006 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	101	97			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92749838

QC Batch: 879271 — Analysis Method: EPA 8011
QC Batch Method: EPA 8011 — Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92749838003, 92749838004, 92749838005, 92749838006, 92749838007, 92749838009

METHOD BLANK: 4528492 — Matrix: Water
Associated Lab Samples: 92749838003, 92749838004, 92749838005, 92749838006, 92749838007, 92749838009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	0.0075	08/30/24 03:37	
1-Chloro-2-bromopropane (S)	%	93	60-140		08/30/24 03:37	

LABORATORY CONTROL SAMPLE & LCSD: 4528493 4528494

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.26	0.30	0.28	119	108	60-140	9	20	
1-Chloro-2-bromopropane (S)	%				115	105	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4528495 4528496

Parameter	Units	92749838004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	0.25	0.25	0.29	0.30	118	121	60-140	3	20	
1-Chloro-2-bromopropane (S)	%						109	111	60-140			

SAMPLE DUPLICATE: 4528497

Parameter	Units	92749838005 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	110	110			

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: SOL AMOCO 05156
Pace Project No.: 92749838

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
P5	The EPA or method required sample preservation degrades this compound, therefore acceptable recoveries may not be achieved in sample matrix spikes.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.
v2	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SOL AMOCO 05156
Pace Project No.: 92749838

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92749838001	**05156 MW-2**	EPA 8011	879268	EPA 8011	879343
92749838002	**05156 MW-8**	EPA 8011	879268	EPA 8011	879343
92749838003	**05156 MW-11**	EPA 8011	879271	EPA 8011	879344
92749838004	**05156 TW-1**	EPA 8011	879271	EPA 8011	879344
92749838005	**05156 RW-3**	EPA 8011	879271	EPA 8011	879344
92749838006	**05156 DUP-1**	EPA 8011	879271	EPA 8011	879344
92749838007	**05156 FIELD BLANK 1**	EPA 8011	879271	EPA 8011	879344
92749838009	**05156 MW-7**	EPA 8011	879271	EPA 8011	879344
92749838001	**05156 MW-2**	EPA 8260D	879607		
92749838002	**05156 MW-8**	EPA 8260D	879338		
92749838003	**05156 MW-11**	EPA 8260D	879338		
92749838004	**05156 TW-1**	EPA 8260D	879338		
92749838005	**05156 RW-3**	EPA 8260D	879615		
92749838006	**05156 DUP-1**	EPA 8260D	879607		
92749838007	**05156 FIELD BLANK 1**	EPA 8260D	879307		
92749838008	**05156 TRIP BLANK 1**	EPA 8260D	879338		
92749838009	**05156 MW-7**	EPA 8260D	879338		

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CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or

WO# : 92749838

92749838

SE ONLY

ager:

** Prese ... (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Company: Emerald	Billing Information:
Address: PO Box 3050 Sumter SC 29151	
Report To: C. McClary	Email To:
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: SOI Amoco	State: SC County/City: Myrtle Beach Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: 803-469-5454 Email:	Site/Facility ID #: 05156 Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Matthew Flowers	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Immediately Packed on Ice: [ ] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: 8260 STEX+MTBE+Naphthalene (8260)	Analyses: EDB (Soil)	Lab Profile/Line:
05156 MW-2	GW	G			8/22/24	1400		6	X	X	001
MW-8						1230					002
MW-11						1470					003
TW-1						1340					004
RW-3						1200					005
DUP-1						—					006
FieldBlank1						1500		6			007
05156 TripBlank1	GW	G			8/22/24	—		2	X		008

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:
92749838

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used: BB

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2792492

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: 95170716
Cooler 1 Temp Upon Receipt: 2.0 oC
Cooler 1 Therm Corr. Factor: 0 oC
Cooler 1 Corrected Temp: 2.0 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 8/22/24	Received by/Company: (Signature)	Date/Time: 8/23/24 1115	MTJL LAB USE ONLY
Relinquished by/Company: (Signature)	Date/Time: 8/23/24 1700	Received by/Company: (Signature) Conn Peyton	Date/Time: 8/23/24 1700	Table #: Acctnum: Template: Prelogin: PM: PB:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of: 1

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92749838**

PM: JWB Due Date: 09/03/24
CLIENT: 92-EMERALD

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client_____ Profile/EZ (Circle one)_____ Notes_____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)		BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC																													
1																	6												
2																	6												
3																	6												
4																	6												
5																	6												
6																	6												
7																	6												
8																	2												
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical

Sample Receiving Non-Conformance Form (NCF)

Date: 8/27/24	Evaluated by: DMH
Client: Emerald	

Affix Work... W WO#: 92749838 ...e
PM: JWB Due Date: 09/03/24
CLIENT: 92-EMERALD

1. If Chain-of-Custody (COC) is not received: contact client and if necessa... a COC and indicate that it was filled out by lab personnel. Note issues on this NCF.

2. If COC is incomplete, check applicable issues below and add details where appropriate:

	Collection date/time missing or incorrect		Analyses or analytes: missing or clarification needed	✓	Samples listed on COC do not match samples received (missing, additional, etc.)
	Sample IDs on COC do not match sample labels		Required trip blanks were not received		Required signatures are missing

Comments/Details/Other Issues not listed above:
received extra sample not on COC "MW-7" 8/27/24 1455

3. Sample integrity issues: check applicable issues below and add details where appropriate:

	Samples: Past holding time		Samples: Condition needs to be brought to lab personnel's attention (details below)		Preservation: Improper
	Samples: Not field filtered		Containers: Broken or compromised		Temperature: not within acceptance criteria (typically 0-6C)
	Samples: Insufficient volume received		Containers: Incorrect		Temperature: Samples arrived frozen
	Samples: Cooler damaged or compromised		Custody Seals: Missing or compromised on samples, trip blanks or coolers		Vials received with improper headspace
	Samples: contain chlorine or sulfides		Packing Material: Insufficient/Improper		Other:

Comments/Details:

4. If Samples not preserved properly and Sample Receiving adjusts pH, add details below:

Sample ID:	Date/Time:	Amount/type pres added:
Preserved by:	Initial and Final pH:	Lot # of pres added:
Sample ID:	Date/Time:	Amount/type pres added:
Preserved by:	Initial and Final pH:	Lot # of pres added:
Sample ID:	Date/Time:	Amount/type pres added:
Preserved by:	Initial and Final pH:	Lot # of pres added:

5. Client Contact: If client is contacted for any issue listed above, fill in details below:

Client:	Contacted per:	
PM Initials:	Date/Time:	

Client Comments/Instructions:

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

September 06, 2024

Ms. Robbin Boykin
Emerald, Inc.
2520 Tahoe Drive
Sumter, SC 29150

RE: Project: SOL AMOCO 05156
Pace Project No.: 92750759

Dear Ms. Boykin:

Enclosed are the analytical results for sample(s) received by the laboratory on August 28, 2024. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Charlotte

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jonathan W Biddix
jonathan.biddix@pacelabs.com
704-977-0978
Project Manager

Enclosures

cc: Chad McClary, Emerald, Inc.
Dalton Reames, Emerald, Inc.
Alex Skoler, Emerald, Inc.

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CERTIFICATIONS

Project: SOL AMOCO 05156
Pace Project No.: 92750759

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

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SAMPLE SUMMARY

Project: SOL AMOCO 05156
Pace Project No.: 92750759

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92750759001	**05156 MW-6**	Water	08/23/24 13:30	08/28/24 17:00
92750759002	**05156 MW-12**	Water	08/23/24 12:45	08/28/24 17:00
92750759003	**05156 MW-13**	Water	08/23/24 11:15	08/28/24 17:00
92750759004	**05156 TW-2**	Water	08/23/24 12:00	08/28/24 17:00
92750759005	**05156 WASTE WATER COMPOSITE**	Water	08/23/24 13:35	08/28/24 17:00
92750759006	**05156 FIELD BLANK 2**	Water	08/23/24 11:10	08/28/24 17:00
92750759007	**05156 TRIP BLANK 2**	Water	08/23/24 00:00	08/28/24 17:00

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SAMPLE ANALYTE COUNT

Project: SOL AMOCO 05156
Pace Project No.: 92750759

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92750759001	**05156 MW-6**	EPA 8011	HH	2	PASI-C
		EPA 8260D	GAW	20	PASI-C
92750759002	**05156 MW-12**	EPA 8011	HH	2	PASI-C
		EPA 8260D	GAW	20	PASI-C
92750759003	**05156 MW-13**	EPA 8011	HH	2	PASI-C
		EPA 8260D	GAW	20	PASI-C
92750759004	**05156 TW-2**	EPA 8011	HH	2	PASI-C
		EPA 8260D	GAW	20	PASI-C
92750759005	**05156 WASTE WATER COMPOSITE**	EPA 8011	HH	2	PASI-C
		EPA 8260D	GAW	20	PASI-C
92750759006	**05156 FIELD BLANK 2**	EPA 8011	HH	2	PASI-C
		EPA 8260D	GAW	20	PASI-C
92750759007	**05156 TRIP BLANK 2**	EPA 8260D	GAW	20	PASI-C

PASI-C = Pace Analytical Services - Charlotte

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92750759

Sample: 05156 MW-6 **Lab ID: 92750759001** Collected: 08/23/24 13:30 Received: 08/28/24 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	09/05/24 07:10	09/05/24 22:15	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	92	%	60-140		1	09/05/24 07:10	09/05/24 22:15	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		09/05/24 06:34	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		09/05/24 06:34	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		09/05/24 06:34	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		09/05/24 06:34	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		09/05/24 06:34	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		09/05/24 06:34	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		09/05/24 06:34	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		09/05/24 06:34	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		09/05/24 06:34	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		09/05/24 06:34	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		09/05/24 06:34	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		09/05/24 06:34	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		09/05/24 06:34	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		09/05/24 06:34	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		09/05/24 06:34	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		09/05/24 06:34	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		09/05/24 06:34	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		09/05/24 06:34	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		09/05/24 06:34	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		09/05/24 06:34	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92750759

Sample: 05156 MW-12 **Lab ID: 92750759002** Collected: 08/23/24 12:45 Received: 08/28/24 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	09/05/24 07:10	09/05/24 22:37	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	90	%	60-140		1	09/05/24 07:10	09/05/24 22:37	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		09/05/24 06:51	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		09/05/24 06:51	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		09/05/24 06:51	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		09/05/24 06:51	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		09/05/24 06:51	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		09/05/24 06:51	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		09/05/24 06:51	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		09/05/24 06:51	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		09/05/24 06:51	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		09/05/24 06:51	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		09/05/24 06:51	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		09/05/24 06:51	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		09/05/24 06:51	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		09/05/24 06:51	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		09/05/24 06:51	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		09/05/24 06:51	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		09/05/24 06:51	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		09/05/24 06:51	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		1		09/05/24 06:51	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		09/05/24 06:51	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92750759

Sample: 05156 MW-13 **Lab ID: 92750759003** Collected: 08/23/24 11:15 Received: 08/28/24 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	09/05/24 07:10	09/05/24 23:09	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	87	%	60-140		1	09/05/24 07:10	09/05/24 23:09	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		09/05/24 07:09	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		09/05/24 07:09	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		09/05/24 07:09	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		09/05/24 07:09	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		09/05/24 07:09	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		09/05/24 07:09	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		09/05/24 07:09	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		09/05/24 07:09	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		09/05/24 07:09	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		09/05/24 07:09	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		09/05/24 07:09	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		09/05/24 07:09	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		09/05/24 07:09	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		09/05/24 07:09	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		09/05/24 07:09	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		09/05/24 07:09	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		09/05/24 07:09	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		09/05/24 07:09	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130		1		09/05/24 07:09	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		09/05/24 07:09	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92750759

Sample: 05156 TW-2 **Lab ID: 92750759004** Collected: 08/23/24 12:00 Received: 08/28/24 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	09/05/24 07:10	09/05/24 23:19	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	88	%	60-140		1	09/05/24 07:10	09/05/24 23:19	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		09/05/24 07:27	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		09/05/24 07:27	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		09/05/24 07:27	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		09/05/24 07:27	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		09/05/24 07:27	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		09/05/24 07:27	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		09/05/24 07:27	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		09/05/24 07:27	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		09/05/24 07:27	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		09/05/24 07:27	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		09/05/24 07:27	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		09/05/24 07:27	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		09/05/24 07:27	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		09/05/24 07:27	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		09/05/24 07:27	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		09/05/24 07:27	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		09/05/24 07:27	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		09/05/24 07:27	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130		1		09/05/24 07:27	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		09/05/24 07:27	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92750759

Sample: 05156 WASTE WATER COMPOSITE **Lab ID: 92750759005** Collected: 08/23/24 13:35 Received: 08/28/24 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	09/05/24 07:10	09/05/24 23:30	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	86	%	60-140		1	09/05/24 07:10	09/05/24 23:30	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		09/05/24 07:45	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		09/05/24 07:45	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		09/05/24 07:45	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		09/05/24 07:45	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		09/05/24 07:45	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		09/05/24 07:45	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		09/05/24 07:45	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		09/05/24 07:45	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		09/05/24 07:45	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		09/05/24 07:45	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		09/05/24 07:45	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		09/05/24 07:45	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		09/05/24 07:45	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		09/05/24 07:45	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		09/05/24 07:45	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		09/05/24 07:45	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		09/05/24 07:45	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		09/05/24 07:45	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	70-130		1		09/05/24 07:45	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		09/05/24 07:45	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92750759

Sample: 05156 FIELD BLANK 2 **Lab ID: 92750759006** Collected: 08/23/24 11:10 Received: 08/28/24 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0076	1	09/05/24 07:10	09/05/24 23:40	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	87	%	60-140		1	09/05/24 07:10	09/05/24 23:40	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		09/05/24 00:55	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		09/05/24 00:55	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		09/05/24 00:55	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		09/05/24 00:55	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		09/05/24 00:55	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		09/05/24 00:55	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		09/05/24 00:55	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		09/05/24 00:55	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		09/05/24 00:55	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		09/05/24 00:55	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		09/05/24 00:55	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		09/05/24 00:55	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		09/05/24 00:55	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		09/05/24 00:55	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		09/05/24 00:55	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		09/05/24 00:55	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		09/05/24 00:55	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		09/05/24 00:55	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		09/05/24 00:55	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		09/05/24 00:55	2037-26-5	

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ANALYTICAL RESULTS

Project: SOL AMOCO 05156
Pace Project No.: 92750759

Sample: 05156 TRIP BLANK 2 **Lab ID: 92750759007** Collected: 08/23/24 00:00 Received: 08/28/24 17:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		09/05/24 01:13	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		09/05/24 01:13	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		09/05/24 01:13	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		09/05/24 01:13	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		09/05/24 01:13	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		09/05/24 01:13	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		09/05/24 01:13	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		09/05/24 01:13	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		09/05/24 01:13	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		09/05/24 01:13	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		09/05/24 01:13	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		09/05/24 01:13	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		09/05/24 01:13	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		09/05/24 01:13	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		09/05/24 01:13	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		09/05/24 01:13	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		09/05/24 01:13	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		09/05/24 01:13	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		09/05/24 01:13	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		09/05/24 01:13	2037-26-5	

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92750759

QC Batch: 880172 | Analysis Method: EPA 8260D
QC Batch Method: EPA 8260D | Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92750759001, 92750759002, 92750759003, 92750759004, 92750759005

METHOD BLANK: 4532925 Matrix: Water
Associated Lab Samples: 92750759001, 92750759002, 92750759003, 92750759004, 92750759005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	09/05/24 00:19	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	09/05/24 00:19	
Benzene	ug/L	ND	1.0	0.34	09/05/24 00:19	
Diisopropyl ether	ug/L	ND	1.0	0.31	09/05/24 00:19	
Ethanol	ug/L	ND	200	72.2	09/05/24 00:19	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	09/05/24 00:19	
Ethylbenzene	ug/L	ND	1.0	0.30	09/05/24 00:19	
m&p-Xylene	ug/L	ND	2.0	0.71	09/05/24 00:19	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	09/05/24 00:19	
Naphthalene	ug/L	ND	1.0	0.64	09/05/24 00:19	
o-Xylene	ug/L	ND	1.0	0.34	09/05/24 00:19	
tert-Amyl Alcohol	ug/L	ND	100	36.4	09/05/24 00:19	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	09/05/24 00:19	
tert-Butyl Alcohol	ug/L	ND	100	26.8	09/05/24 00:19	
tert-Butyl Formate	ug/L	ND	50.0	29.4	09/05/24 00:19	
Toluene	ug/L	ND	1.0	0.48	09/05/24 00:19	
Xylene (Total)	ug/L	ND	1.0	0.34	09/05/24 00:19	
1,2-Dichloroethane-d4 (S)	%	98	70-130		09/05/24 00:19	
4-Bromofluorobenzene (S)	%	99	70-130		09/05/24 00:19	
Toluene-d8 (S)	%	99	70-130		09/05/24 00:19	

LABORATORY CONTROL SAMPLE: 4532926

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	21.5	108	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	455	114	70-130	
Benzene	ug/L	20	20.0	100	70-130	
Diisopropyl ether	ug/L	20	20.0	100	70-130	
Ethanol	ug/L	800	848	106	70-130	
Ethyl-tert-butyl ether	ug/L	40	41.1	103	70-130	
Ethylbenzene	ug/L	20	21.9	109	70-130	
m&p-Xylene	ug/L	40	43.7	109	70-130	
Methyl-tert-butyl ether	ug/L	20	19.9	99	70-130	
Naphthalene	ug/L	20	23.7	118	70-130	
o-Xylene	ug/L	20	22.3	112	70-130	
tert-Amyl Alcohol	ug/L	400	462	116	70-130	
tert-Amylmethyl ether	ug/L	40	42.2	106	70-130	
tert-Butyl Alcohol	ug/L	200	229	114	70-130	
tert-Butyl Formate	ug/L	160	178	111	70-130	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92750759

LABORATORY CONTROL SAMPLE: 4532926

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	21.1	106	70-130	
Xylene (Total)	ug/L	60	66.0	110	70-130	
1,2-Dichloroethane-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4532927 4532928

Parameter	Units	92750759001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	20	20	18.5	20.5	92	103	70-137	10	30	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	400	352	412	88	103	39-157	16	30	
Benzene	ug/L	ND	20	20	19.9	22.6	100	113	70-151	13	30	
Diisopropyl ether	ug/L	ND	20	20	17.2	18.7	86	94	63-144	9	30	
Ethanol	ug/L	ND	800	800	706	736	88	92	39-176	4	30	
Ethyl-tert-butyl ether	ug/L	ND	40	40	34.2	38.3	86	96	66-137	11	30	
Ethylbenzene	ug/L	ND	20	20	20.1	22.2	101	111	66-153	10	30	
m&p-Xylene	ug/L	ND	40	40	40.2	45.0	100	113	69-152	11	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	17.6	19.6	88	98	54-156	11	30	
Naphthalene	ug/L	ND	20	20	18.9	21.1	95	106	61-148	11	30	
o-Xylene	ug/L	ND	20	20	20.4	22.5	102	113	70-148	10	30	
tert-Amyl Alcohol	ug/L	ND	400	400	353	411	88	103	54-153	15	30	
tert-Amylmethyl ether	ug/L	ND	40	40	36.6	41.5	92	104	69-139	12	30	
tert-Butyl Alcohol	ug/L	ND	200	200	176	201	88	100	43-188	13	30	
tert-Butyl Formate	ug/L	ND	160	160	82.8	89.9	52	56	10-170	8	30	v3
Toluene	ug/L	ND	20	20	20.0	22.4	100	112	59-148	11	30	
Xylene (Total)	ug/L	ND	60	60	60.6	67.6	101	113	63-158	11	30	
1,2-Dichloroethane-d4 (S)	%						89	88	70-130			
4-Bromofluorobenzene (S)	%						96	96	70-130			
Toluene-d8 (S)	%						97	98	70-130			

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QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92750759

QC Batch: 880176
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92750759006, 92750759007

METHOD BLANK: 4532942 Matrix: Water
Associated Lab Samples: 92750759006, 92750759007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	09/05/24 00:19	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	09/05/24 00:19	
Benzene	ug/L	ND	1.0	0.34	09/05/24 00:19	
Diisopropyl ether	ug/L	ND	1.0	0.31	09/05/24 00:19	
Ethanol	ug/L	ND	200	72.2	09/05/24 00:19	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	09/05/24 00:19	
Ethylbenzene	ug/L	ND	1.0	0.30	09/05/24 00:19	
m&p-Xylene	ug/L	ND	2.0	0.71	09/05/24 00:19	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	09/05/24 00:19	
Naphthalene	ug/L	ND	1.0	0.64	09/05/24 00:19	
o-Xylene	ug/L	ND	1.0	0.34	09/05/24 00:19	
tert-Amyl Alcohol	ug/L	ND	100	36.4	09/05/24 00:19	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	09/05/24 00:19	
tert-Butyl Alcohol	ug/L	ND	100	26.8	09/05/24 00:19	
tert-Butyl Formate	ug/L	ND	50.0	29.4	09/05/24 00:19	
Toluene	ug/L	ND	1.0	0.48	09/05/24 00:19	
Xylene (Total)	ug/L	ND	1.0	0.34	09/05/24 00:19	
1,2-Dichloroethane-d4 (S)	%	98	70-130		09/05/24 00:19	
4-Bromofluorobenzene (S)	%	99	70-130		09/05/24 00:19	
Toluene-d8 (S)	%	99	70-130		09/05/24 00:19	

LABORATORY CONTROL SAMPLE: 4532943

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	21.5	108	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	455	114	70-130	
Benzene	ug/L	20	20.0	100	70-130	
Diisopropyl ether	ug/L	20	20.0	100	70-130	
Ethanol	ug/L	800	848	106	70-130	
Ethyl-tert-butyl ether	ug/L	40	41.1	103	70-130	
Ethylbenzene	ug/L	20	21.9	109	70-130	
m&p-Xylene	ug/L	40	43.7	109	70-130	
Methyl-tert-butyl ether	ug/L	20	19.9	99	70-130	
Naphthalene	ug/L	20	23.7	118	70-130	
o-Xylene	ug/L	20	22.3	112	70-130	
tert-Amyl Alcohol	ug/L	400	462	116	70-130	
tert-Amylmethyl ether	ug/L	40	42.2	106	70-130	
tert-Butyl Alcohol	ug/L	200	229	114	70-130	
tert-Butyl Formate	ug/L	160	178	111	70-130	

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92750759

LABORATORY CONTROL SAMPLE: 4532943

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	21.1	106	70-130	
Xylene (Total)	ug/L	60	66.0	110	70-130	
1,2-Dichloroethane-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534769 4534770

Parameter	Units	92750738040 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	20	20	18.9	19.8	94	99	70-137	5	30	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	400	356	394	89	99	39-157	10	30	
Benzene	ug/L	ND	20	20	19.9	21.8	100	109	70-151	9	30	
Diisopropyl ether	ug/L	ND	20	20	17.4	18.3	87	92	63-144	5	30	
Ethanol	ug/L	ND	800	800	680	730	85	91	39-176	7	30	
Ethyl-tert-butyl ether	ug/L	ND	40	40	35.3	37.6	88	94	66-137	6	30	
Ethylbenzene	ug/L	ND	20	20	20.5	22.2	102	111	66-153	8	30	
m&p-Xylene	ug/L	ND	40	40	40.5	44.4	101	111	69-152	9	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	18.4	19.0	92	95	54-156	3	30	
Naphthalene	ug/L	ND	20	20	19.0	21.1	95	106	61-148	11	30	
o-Xylene	ug/L	ND	20	20	20.5	22.5	103	112	70-148	9	30	
tert-Amyl Alcohol	ug/L	ND	400	400	356	395	89	99	54-153	10	30	
tert-Amylmethyl ether	ug/L	ND	40	40	37.7	40.6	94	102	69-139	8	30	
tert-Butyl Alcohol	ug/L	ND	200	200	186	206	93	103	43-188	10	30	
tert-Butyl Formate	ug/L	ND	160	160	34.4J	ND	21	16	10-170		30	v3
Toluene	ug/L	ND	20	20	20.0	22.0	100	110	59-148	9	30	
Xylene (Total)	ug/L	ND	60	60	61.0	66.9	102	111	63-158	9	30	
1,2-Dichloroethane-d4 (S)	%						88	92	70-130			
4-Bromofluorobenzene (S)	%						95	97	70-130			
Toluene-d8 (S)	%						96	99	70-130			

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SOL AMOCO 05156
Pace Project No.: 92750759

QC Batch: 880390 | Analysis Method: EPA 8011
QC Batch Method: EPA 8011 | Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92750759001, 92750759002, 92750759003, 92750759004, 92750759005, 92750759006

METHOD BLANK: 4534186 Matrix: Water
Associated Lab Samples: 92750759001, 92750759002, 92750759003, 92750759004, 92750759005, 92750759006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	0.0074	09/05/24 21:22	
1-Chloro-2-bromopropane (S)	%	96	60-140		09/05/24 21:22	

LABORATORY CONTROL SAMPLE & LCSD: 4534187 4534188

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.25	0.26	0.24	106	97	60-140	9	20	
1-Chloro-2-bromopropane (S)	%				97	96	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4534190 4534191

Parameter	Units	92750759002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	0.25	0.25	0.23	0.23	95	93	60-140	2	20	
1-Chloro-2-bromopropane (S)	%						96	92	60-140			

SAMPLE DUPLICATE: 4534189

Parameter	Units	92750759001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	92	96			

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Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: SOL AMOCO 05156
Pace Project No.: 92750759

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SOL AMOCO 05156
Pace Project No.: 92750759

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92750759001	**05156 MW-6**	EPA 8011	880390	EPA 8011	880505
92750759002	**05156 MW-12**	EPA 8011	880390	EPA 8011	880505
92750759003	**05156 MW-13**	EPA 8011	880390	EPA 8011	880505
92750759004	**05156 TW-2**	EPA 8011	880390	EPA 8011	880505
92750759005	**05156 WASTE WATER COMPOSITE**	EPA 8011	880390	EPA 8011	880505
92750759006	**05156 FIELD BLANK 2**	EPA 8011	880390	EPA 8011	880505
92750759001	**05156 MW-6**	EPA 8260D	880172		
92750759002	**05156 MW-12**	EPA 8260D	880172		
92750759003	**05156 MW-13**	EPA 8260D	880172		
92750759004	**05156 TW-2**	EPA 8260D	880172		
92750759005	**05156 WASTE WATER COMPOSITE**	EPA 8260D	880172		
92750759006	**05156 FIELD BLANK 2**	EPA 8260D	880176		
92750759007	**05156 TRIP BLANK 2**	EPA 8260D	880176		

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WO# : 92750759

92750759

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB Number or

LY

Company: Emerald	Billing Information:
Address: PO Box 7050 Sumter SC 29151	
Report To: C. McClary	Email To:
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: SOI Amoco	State: SC County/City: Myrtle Beach Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET
Phone: 864-469-5454 Email:	Site/Facility ID #: 05156 Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Matthew Elvington	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Immediately Packed on Ice: [ ] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)
	Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

Container Preservative Type **

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: 8260 (BTEX & MTBE & Oxygenates)	Analyses: EDB (8011)	Lab Sample # / Comments
05156 MW-6	GW	G			8/23/24	1330		6	X	X	001
MW-12						1245					002
MW-13						1115					003
TW-2						1200					004
Waste Water Composite						1335					005
Field Blank 2						1110		6			006
05156 Trip Blank 2	GW	G			8/23/24	—		2	X		007

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: (Wet) Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y (N) N/A

Lab Tracking #: 2792495

Samples received via: FEDEX UPS Client Courier (Pace Courier)

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips:			
Sample pH Acceptable	Y	N	NA
pH Strips:			
Sulfide Present	Y	N	NA
Lead Acetate Strips:			

LAB USE ONLY:

Lab Sample Temperature Info:

Temp Blank Received: Y (N) NA

Therm ID#: 92704E

Cooler 1 Temp Upon Receipt: 3.3 oC

Cooler 1 Therm Corr. Factor: 0.0 oC

Cooler 1 Corrected Temp: 3.3 oC

Comments:

Relinquished by/Company: (Signature)	Date/Time: 8/23/24 1300	Received by/Company: (Signature) Pace	Date/Time: 8/28/24 1300
Relinquished by/Company: (Signature)	Date/Time: 8/28/24 1700	Received by/Company: (Signature) HHM/Pace HCL	Date/Time: 8/30/24 8:00
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY

Table #:

Acctnum:

Template:

Prelogin:

PM:

PB:

Trip Blank Received: (Y) N NA

HCL MeOH TSP Other

Non Conformance(s): YES / (NO)

Page: 1 of: 1

Pace	DC#_Title: ENV-FRM-HUN1-0083 v05_Sample Condition Upon Receipt
	Effective Date: 05/24/2024

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project # **WO#: 92750759**

PM: JWB Due Date: 09/06/24
CLIENT: 92-EMERALD

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client Emerald Profile/EZ (Circle one)_____ Notes_____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)		BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass Jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG84-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - bb)	SP2T-250 mL Sterile Plastic (N/A - bb)	VG9H	BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC																														
1																	5									1				
2																										1				
3																										1				
4																										1				
5																										1				
6																										1				
7																	2													
8																														
9																														
10																														
11																														
12																														

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

APPENDIX C

DISPOSAL MANIFEST

Emerald, Inc.
CONSULTING AND ENGINEERING
SERVICES IN ENVIRONMENTAL AFFAIRS

2520 TAHOE DRIVE · POST OFFICE BOX 3050 · SUMTER, SOUTH CAROLINA 29151

WEBSITE:
www.emeraldinc-us.com

TELEPHONE (803) 469-5454
FAX (803) 469-5465

November 4, 2024

Mr. Ryan Kellett Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
Bureau of Land and Waste Management
South Carolina Department of Environmental Services
2600 Bull Street
Columbia, SC 29201-1708

RE: Purge Water Treatment
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
Horry County
UST Permit #05156

Dear Mr. Kellett,

Emerald, Inc. is providing this letter to certify the on-site treatment of purge water at the subject site. This purge water was treated in compliance with the conditions set forth in "Proposed Conditions for use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater".

Applicability:

Groundwater to be treated is generated from well development and sampling.

Conditions:

1. The purge and development water is mixed prior to treatment by the activated carbon unit.
2. Free product was not detected in the purge water.

3. Groundwater analytical results from monitoring wells indicate average concentrations of hydrocarbons to be less than 5,000 parts per billion (ppb) Benzene and less than 20,000 ppb total BTEX.
4. The carbon filter material will be replaced after 5,000 gallons of treatment.
5. A record of usage will be maintained by the Contractor.
6. The manufacturer's recommendations have been adhered to.
7. Any SCDHEC recommendations and any conditions set forth by SCDHEC will be adhered to.

Purge waters were treated on-site by Emerald, Inc. personnel using a treatment drum loaded with approximately 50 pounds of activated carbon. This carbon will be loaded to a maximum amount of 3 pounds of total organic carbon or 5,000 gallons of development/purge water, whichever occurs first. Cumulative organic compounds absorbed by the activated carbon is tracked to ensure the capacity of the carbon is not exceeded.

Origin of Water	Treatment Date	Amount
Purge Water	8/22 and 8/24/24	142.5 Gallons

If you have any additional questions please contact Emerald, Inc. at your convenience. Emerald, Inc. can be reached at 803-469-5454.

Yours very truly,
EMERALD, INC.

W.C. McClary/RB

William C. McClary, P.G.
Project Geologist

APPENDIX D

QAPP CONTRACTOR'S CHECKLIST

South Carolina
Underground Storage Tank Program

501 Amoco
SCDHEC ID #05156
November 4, 2024

Contractor Checklist

For each report submitted to the UST Management Division, the contractor will be required to verify that all data elements for the required scope of work have been provided. For items not required for the scope of work, the N/A box should be checked. For items required and not completed or provided, the No box should be checked and a thorough description of the reason must be provided.

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

Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk Evaluation)			X
29	Have the exposure pathways been analyzed? (Tier 2 Risk Evaluation)			X
30	Have the SSTLs for each compund and pathway been calculated? (Tier 2 Risk Evaluation)			X
31	Have recommendations for further action been provided and explained?	X		
32	Has the soil analytical data for the site been provided in tabular format?			X
33	Has the potentiometric data for the site been provided in tabular format?			X
34	Has the current and historical laboratory data been provided in tabular format? (Table 1 thru 3)	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			X
36	Have the Site conceptual model tables been included? (Tier 1 Risk Evaluation)			X
37	Has the topographic map been provided with all required elements?	X		
38	Has the site base map been provided with all required elements?	X		
39	Have the CoC site maps been provided? (Figure 4 through 4E)			X
40	Has the site potentiometric map been provided? (Figure 3)			X
41	Have the geologic cross-sections been provided?			X
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements?			X
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements? (Appendix D)	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements?			X
47	Have the soil boring/field screening logs been provided?			X
48	Have the well completion logs and SCDHEC Form 1903 been provided?			X
49	Have the aquifer evaluation forms, data, graphs, equation, etc. been provided?			X
50	Have the disposal manifests been provided? (Appendix C)	X		
51	Has a copy of the local zoning regulations been provided?			X
52	Has all fate and transport modeling been provided?			X
53	Have copies of all access agreements obtained by the contractor been provided?			X
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided? (Appendix D)	X		

RECEIVED
DEC 17 2024
UST DIVISION

Emerald, Inc.
CONSULTING AND ENGINEERING
SERVICES IN ENVIRONMENTAL AFFAIRS

2520 TAHOE DRIVE · POST OFFICE BOX 3050 · SUMTER, SOUTH CAROLINA 29151

WEBSITE:
www.emeraldinc-us.com

TELEPHONE (803) 469-5454
FAX (803) 469-5465

December 13, 2024

Ryan Kellett, Hydrogeologist
Corrective Action & Field Support Section
Underground Storage Tank Division
Bureau of Land and Waste Management
South Carolina Department Environmental Services
2600 Bull Street
Columbia, SC 29201

UST DOCKETING

Site Specific Work Plan – MW Installation, AFVR, and GW Sampling
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
Horry County
UST Permit #05156

Mr. Kellett,

Please find the attached Site-Specific Work Plan, figures, and proposed costs for the installation of additional monitoring wells to define the extent of free product, one AFVR event and groundwater sampling at the subject site. If you have any questions or concerns, please feel free to contact Emerald, Inc. at 803-469-5454.

Sincerely,

William C. McClary, P.G.
Project Manager

Attachments
Appendix A - Site Specific Work Plan
Appendix B - Figures
Appendix C – Proposed Costs

Appendix A

Site Specific Work Plan

Site-Specific Work Plan for Approved ACQAP
Underground Storage Tank Management Division

To: Ryan Kellett, Hydrogeologist (SCDHEC Project Manager)
From: William (Chad) McClary, P.G. (Contractor Project Manager)
Contractor: Emerald, Inc. UST Contractor Certification Number: 67

Facility Name: 501 Amoco UST Permit #: 05156
Facility Address: 1432 US Highway 501, Myrtle Beach, SC
Responsible Party: Todd Investments Properties LLC Phone:
RP Address: 220 Riverview Road, Athens, GA 30606
Property Owner (if different): SAA
Property Owner Address: SAA
Current Use of Property: Car Lot

Scope of Work (Please check all that apply)

- ☐ IGWA
- ☐ Tier I
- ☐ Tier II
- ☑ Monitoring Well Installation
- ☑ Groundwater Sampling
- ☑ Other AFVR
- ☐ GAC

Analyses (Please check all that apply)

Groundwater/Surface Water:

- ☑ BTEXNMDCA (8260B)
- ☑ Oxygenates (8260B)
- ☑ EDB (8011)
- ☐ PAH (8270D)
- ☐ Lead
- ☐ 8 RCRA Metals
- ☐ TPH
- ☐ pH
- ☐ BOD
- ☐ Nitrate
- ☐ Sulfate
- ☐ Other
- ☐ Methane
- ☐ Ethanol
- ☐ Dissolved Iron

Drinking Water Supply Wells:

- ☐ BTEXNMDCA (524.2)
- ☐ Oxygenates & Ethanol (8260B)
- ☐ Mecury (200.8 245.1 or 245.2)
- ☐ RCRA Metals (200.8)
- ☐ EDB (504.1)

Soil:

- ☐ BTEXNM
- ☐ Lead
- ☐ RCRA Metals
- ☐ PAH
- ☐ Oil & Grease (9071)
- ☐ TPH-DRO (3550B/8015B)
- ☐ TPH-GRO (5030B/8015B)
- ☐ Grain Size
- ☐ TOC

Air:

- ☐ BTEXN

Sample Collection (Estimate the number of samples of each matrix that are expected to be collected.)

____ Soil	____ Water Supply Wells	____ Air	2 Field Blank
27 Monitoring Wells	____ Surface Water	2 Duplicate	2 Trip Blank

Field Screening Methodology

Estimate number and total completed depth for each point, and include their proposed locations on the attached map.

# of shallow points proposed: ____ Estimated Footage: ____ feet per point
# of deep points proposed: ____ Estimated Footage: ____ feet per point
Field Screening Methodology: ____

Permanent Monitoring Wells

Estimate number and total completed depth for each well, and include their proposed locations on the attached map.

# of shallow wells: 7 Estimated Footage: Screened 5-15 (105 ft total) feet per point
# of deep wells: ____ Estimated Footage: ____ feet per point
# of recovery wells: ____ Estimated Footage: ____ feet per point
Comments, if warranted:
Shallow wells to define free product

UST Permit #: 05156 Facility Name: 501 Amoco

Implementation Schedule (Number of calendar days from approval)
Field Work Start-Up: 15 Field Work Completion: 60
Report Submittal: 90 # of Copies Provided to Property Owners: _____

Aquifer Characterization
Pump Test: ☐ Slug Test: ☐ (Check one and provide explanation below for choice)

Investigation Derived Waste Disposal
Soil: 5 Tons Purge Water: 500 Gallons
Drilling Fluids: _____ Gallons Free-Phase Product: _____ Gallons

Additional Details For This Scope of Work
For example, list wells to be sampled, wells to be abandoned/repaired, well pads/bolts/caps to replace, details of AFVR event, etc.

Emerald, Inc. proposes monitoring well installation, AFVR, and groundwater sampling. Seven shallow wells are proposed to define the extent of free product. Proposed well locations are shown on Figure 3. After allowing the new wells to equilibrate, a 96-hour AFVR is proposed on wells containing free product. Extraction wells used during the AFVR event will be discussed with DES prior to the event. 30 days after the AFVR event, a comprehensive groundwater sampling event is proposed. Monitoring wells MW-1 through MW-13, TW-1, TW-2, the seven new wells, and RW-1 through RW-5 will be sampled for BTEX, Napth, MTBE, DCA, Oxys (EPA 8260D), and EDB (EPA 8011). Only wells not bracketing the watertable will be purged. Wells containing free product will be gauged and not sampled. One surface water (pond) located 650 ft. east will be sampled for BTEX, Napth, MTBE, DCA, Oxys (EPA 8260D), and EDB (EPA 8011).

Compliance With Annual Contractor Quality Assurance Plan (ACQAP)
Yes Laboratory as indicated in ACQAP? (Yes/No) If no, indicate laboratory information below.
Name of Laboratory: _____
SCDHEC Certification Number: _____
Name of Laboratory Director: _____

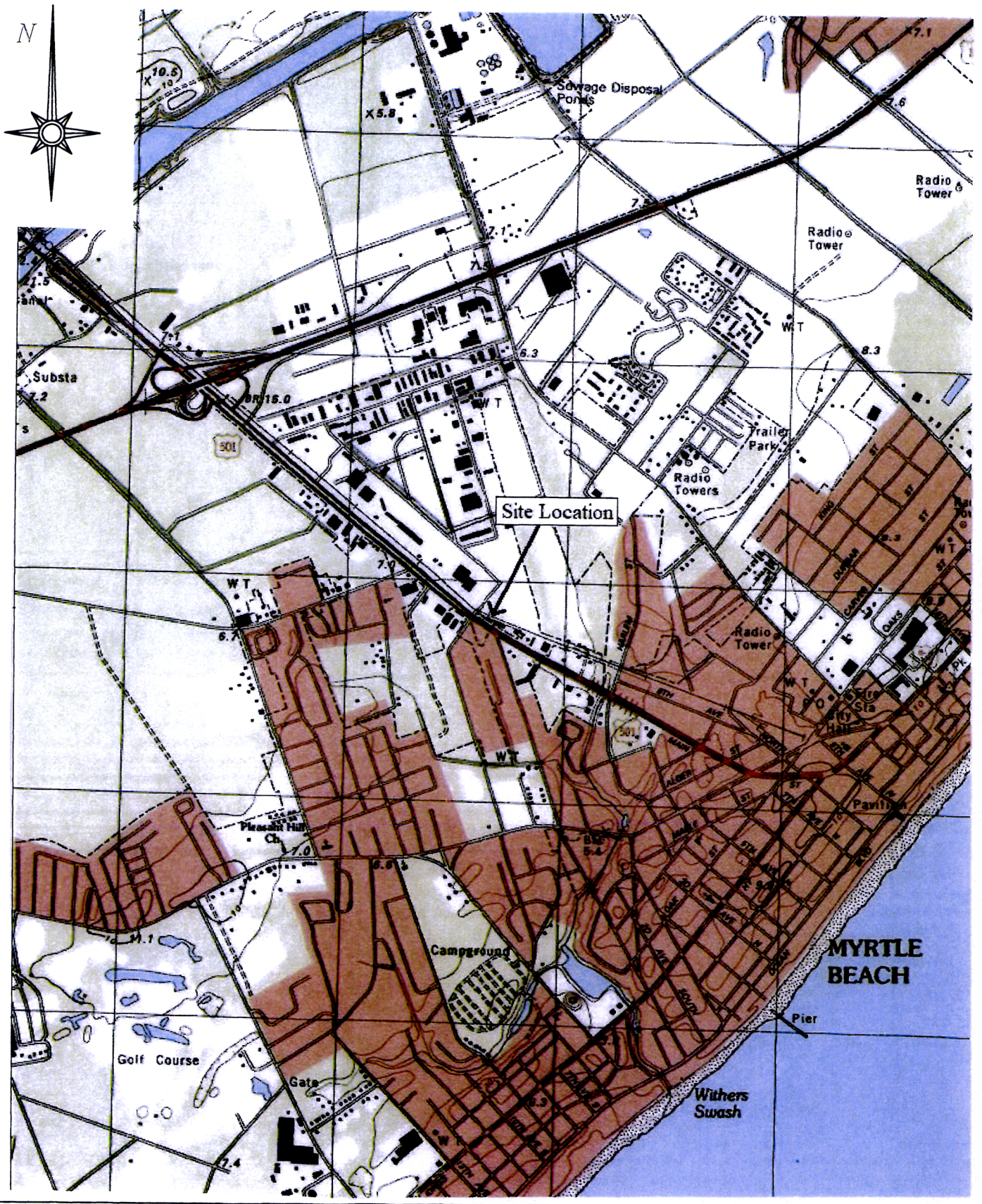
Yes Well Driller as indicated in ACQAP? (Yes/No) If no, indicate driller information below.
Name of Well Driller: _____
SCLLR Certification Number: _____

____ Other variations from ACQAP. Please describe below.

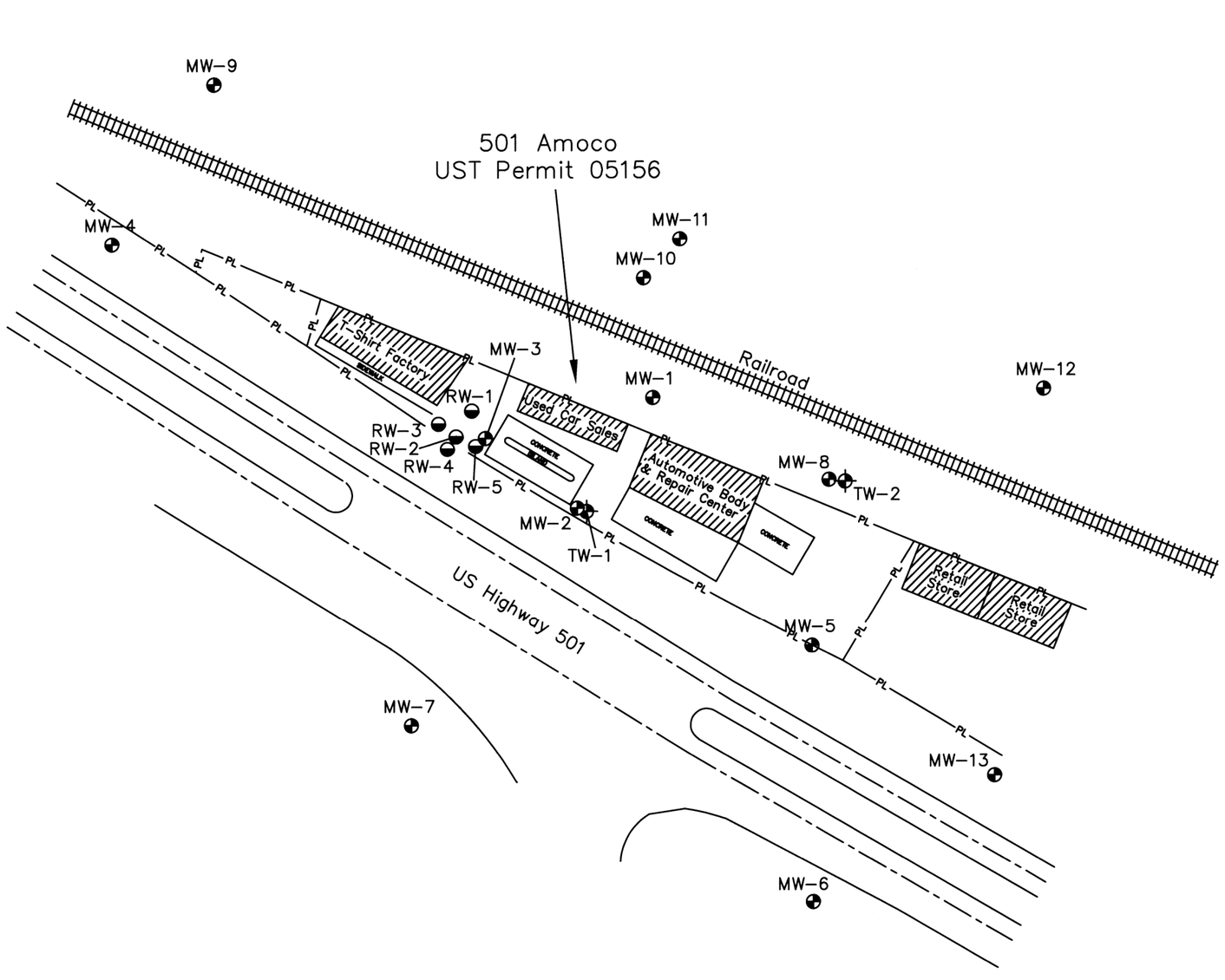
Attachments
1. Attach a copy of the relevant portion of the USGS topographic map showing the site location.
2. Prepare a site base map. This map must be accurately scaled, but does not need to be surveyed. The map must include the following:
   - North Arrow
   - Location of property lines
   - Location of buildings
   - Previous soil sampling locations
   - Previous monitoring well locations
   - Proposed soil boring locations
   - Proposed monitoring well locations
   - Legend with facility name and address, UST permit number, and bar scale
   - Streets or highways (indicate names and numbers)
   - Location of all present and former ASTs and USTs
   - Location of all potential receptors
3. Assessment Component Cost Agreement, SCDHEC Form D-3664

Appendix B

Figures



PROJECT:	SHEET TITLE:	
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST Permit# 05156	Figure 1 USGS Topographic Map 7.5 Minute Series "Myrtle Beach, SC" Quadrangle Scale: 1 to 2,000 Contour Interval = 2 meters	EMERALD, INC. Sumter, SC



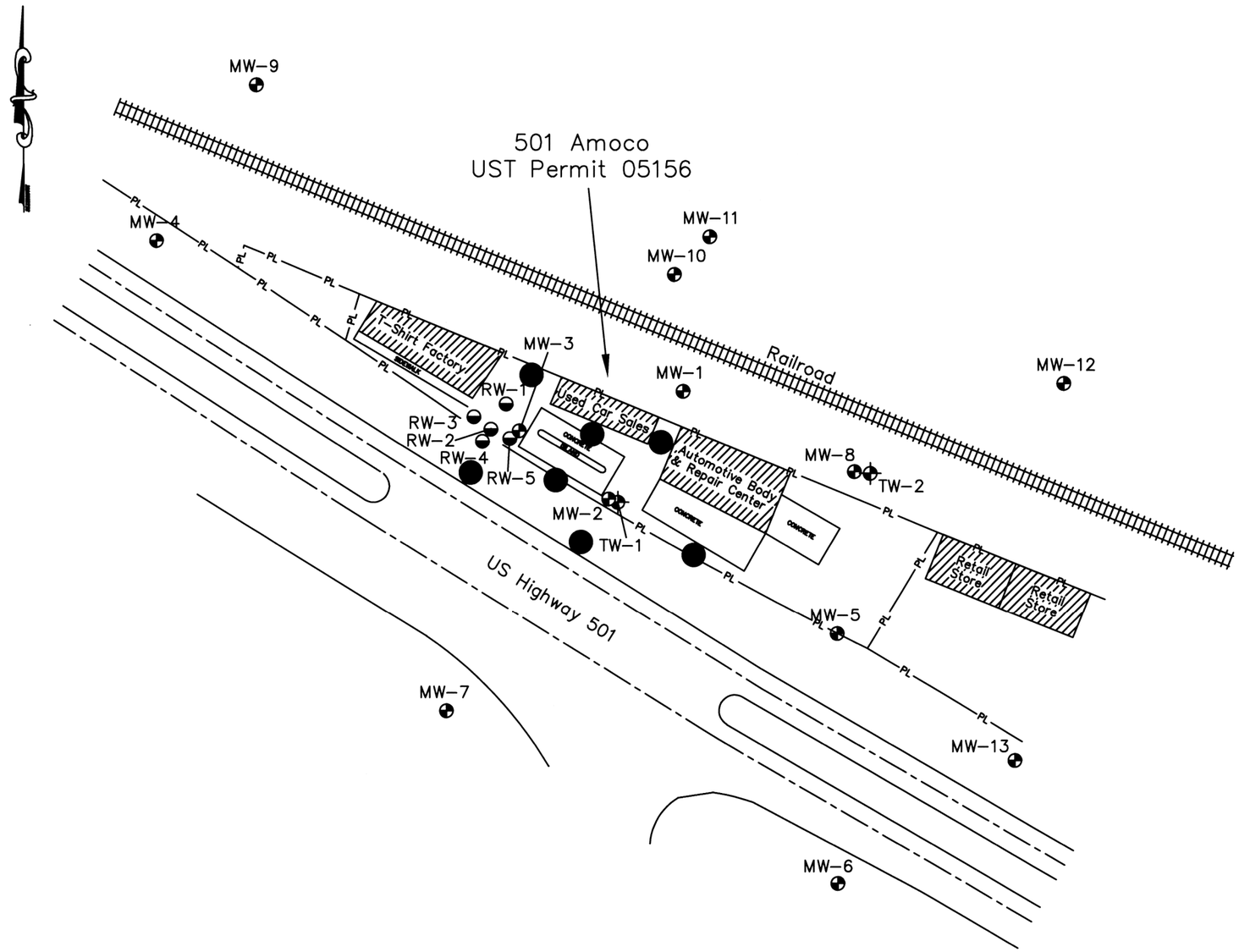
LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

SCALE
1 INCH = 80 FEET
0 80′ 160′

Map based Kleen Sites Geoservices Figure 4

PROJECT: 501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	DATE: 12/13/24	Figure 2 - Site Map
		EMERALD, INC. SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well
- Proposed Location of Shallow Monitoring Well

SCALE
1 INCH = 80 FEET
0 80′ 160′

Map based Kleen Sites Geoservices Figure 4

PROJECT: 501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	DATE: 12/13/24	Figure 3 - Proposed Drilling Locations
		EMERALD, INC. SUMTER, SOUTH CAROLINA

Appendix C

Proposed Costs

ASSESSMENT COMPONENT COST AGREEMENT

South Carolina Department of Health and Environmental Control
Underground Storage Tank Management Division
State Underground Petroleum Environmental Response Bank Account
August 9, 2023

Facility Name: 501 Amoco

UST Permit #: 05156 **Cost Agreement #:**

ITEM	QUANTITY	UNIT	UNIT PRICE		TOTAL
A. Plan Preparation					
1.2 Site-specific Work Plan	1	each	$183.22		$183.22
2.2 Tax Map		each	$85.50		$0.00
3.2 QAPP Contractor Addendum (App B)		each	$250.00		$0.00
B. Survey					
1.1 Receptor Survey		each	$673.06		$0.00
C. Survey					
1.2 Comprehensive Survey	1	each	$1,270.36		$1,270.36
5.1 Ground Penetrating Radar Survey (100 x 100)		each	$1,111.57		$0.00
D. Mob/Demob					
1.2 Equipment	1	each	$1,245.93		$1,245.93
2.2 Personnel	3	each	$516.69		$1,550.07
3.2 Adverse Terrain Vehicle		each	$610.75		$0.00
E. Soil Borings					
1.1 Soil Borings (hand auger)		foot	$21.80		$0.00
F. Soil Borings (requiring equipment, push technology, etc) or Field Screening (including sampling and analyst)					
1.2 Standard		per foot	$33.50		$0.00
2.2 Fractured Rock		per foot	$41.40		$0.00
G.					
H. Well Abandonment					
1.2 2" diameter or less		per foot	$3.79		$0.00
2.2 Greater than 2" to 6" diameter		per foot	$5.50		$0.00
3.2 Dug/Bored well (up to 6 feet diameter)		per foot	$18.32		$0.00
I. Well Installation (In accordance with R.61-71)					
1.2 Water Table (hand augered)		per foot	$31.40		$0.00
2.B Water Table (drill rig) 2" Diameter	105	per foot	$54.90		$5,764.50
2.2 Single-cased 2" Diameter Monitoring Well >50ft		per foot	$59.80		$0.00
3.2 Telescoping		per foot	$84.70		$0.00
4.2 Rock Drilling		per foot	$81.80		$0.00
5.2 2" Rock Coring		per foot	$88.50		$0.00
6.2 Multi-sampling ports/screens		per foot	$59.40		$0.00
7.2 Recovery Well (4" diameter)		per foot	$69.60		$0.00
9.2 Rotosonic (2" diameter)		per foot	$119.00		$0.00
10.2 Re-develop Existing Well		per foot	$13.44		$0.00
J. Groundwater Sample Collection / Gauging Depth to Water/Product					
1.2 Groundwater Purge	9	per well	$73.29		$659.61
2.2 Air or Vapors		sample	$14.66		$0.00

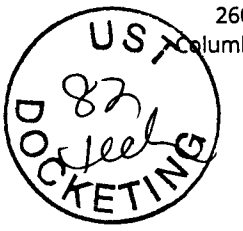
3.2 Water Supply Sample		sample	$26.87		$0.00
4.1A HydraSleeve		sample	$34.20		$0.00
4.2B No-purge Groundwater Sample/Surface wate	19	sample	$57.24		$1,087.56
5.2 Gauge Well only	3	sample	$8.55		$25.65
6.2 Sample Below Product		sample	$14.66		$0.00
7.2 Passive Diffusion Bag		sample	$31.75		$0.00
8.2 Field Duplicates (MWs & WSWs) and Field Bla	4	sample	$30.06		$120.24
9.2 Groundwater (low flow purge)		sample	$111.16		$0.00
10.2 Equipment Blank		sample	$30.06		$0.00
11.1 Sample Product		per well	$52.66		$0.00
K. Laboratory Analyses-Groundwater					
1.2 BTEXNM+Oxyg's+1,2 DCA+Eth(8260D)	34	per sample	$149.02		$5,066.68
2.2 Lead, Filtered		per sample	$16.85		$0.00
3.2 Rush EPA Method 8260B		per sample	$187.62		$0.00
4.2 Trimethal, Butyl, and Isopropyl Benzenes		per sample	$34.20		$0.00
5.2 PAH's		per sample	$74.02		$0.00
6.2 Lead		per sample	$19.54		$0.00
7.2 EDB by EPA 8011	32	per sample	$55.21		$1,766.72
8.2 EDB by EPA Method 8011 Rush		per sample	$83.31		$0.00
9.2 8 RCRA Metals		per sample	$77.45		$0.00
10.2 TPH (9070)		per sample	$50.09		$0.00
11.2 PH		per sample	$6.35		$0.00
12.2 BOD		per sample	$24.42		$0.00
13.2 Ethanol		per sample	$18.08		$0.00
K. Analyses-Drinking Water					
14.2 BTEXNM+1,2 DCA (524.2)		per sample	$151.52		$0.00
15.2 7-OXYGENATES & ETHANOL (8260D)		per sample	$112.07		$0.00
16.2 EDB (504.1)		per sample	$97.11		$0.00
17.2 RCRA METALS (200.8)		per sample	$122.15		$0.00
K. Analyses-Soil					
18.2 BTEX + Naphth.		per sample	$78.18		$0.00
19.2 PAH's		per sample	$78.22		$0.00
20.2 8 RCRA Metals		per sample	$68.89		$0.00
21.2 TPH-DRO (3550C/8015C)		per sample	$48.86		$0.00
22.2 TPH-GRO (5035B/8015C)		per sample	$43.92		$0.00
23.2 Grain size/hydrometer		per sample	$127.04		$0.00
24.2 Total Organic Carbon		per sample	$37.38		$0.00
K. Analyses-Air					
25.2 BTEX + Naphthalene		per sample	$263.84		$0.00
K. Hydrocarbon Fuel Identification					
27.1 C3-C44 Whole Oil (ASTM D3328)		per sample	$465.93		$0.00
28.1 Fuel Oxygenates (1624 Mod)		per sample	$398.39		$0.00
29.1 ALKYL Leads, EDB MMT (8080)		per sample	$398.39		$0.00
30.1 C8-C40 Full Scan (ASTM 5739)		per sample	$629.64		$0.00
31.1 Simulated Distillation (ASTM 2887)		per sample	$398.39		$0.00
32.1 Parent & Alk. PAH Com. (8270 SIM)		per sample	$723.63		$0.00
33.1 C3-C10 Piano (8260 MOD)		per sample	$599.88		$0.00

34.1 C10+Alkane Fingerprints		per sample	$599.88		$0.00
35.1 Expert Data Interpretation & Report		each	$595.30		$0.00
L. Aquifer Characterization					
1.2 Pumping Test		per hour	$28.09		$0.00
2.2 Slug Test		per test	$233.31		$0.00
3.2 Fractured Rock		per test	$122.15		$0.00
M. Free Product					
1.1 Free Product Recovery Rate Test		each	$46.42		$0.00
N.					
O. Risk Evaluation					
1.2 Tier I Risk Evaluation		each	$366.45		$0.00
2.2 Tier II Risk Evaluation		each	$122.15		$0.00
P. Survey					
1.1 Subsequent Survey		each	$297.65		$0.00
Q. Disposal (gallons or tons)					
1.2 Wastewater	500	gallon	$1.19		$595.00
2.2 Free Product		gallon	$1.63		$0.00
3.2 Soil Treatment/Disposal	5	ton	$156.25		$781.25
4.2 Drilling fluids		gallon	$1.25		$0.00
R. Miscellaneous (attach receipts)					
		each	$0.00		$0.00
		each	$0.00		$0.00
T. Tier I Assessment (Use DHEC 3665 form)					
1.2 Southeast Region		standard	$12,622.56		$0.00
2.2 All Other Counties		standard	$13,844.06		$0.00
U. IGWA (Use DHEC 3666 form)					
1.2 Southeast Region		standard	$4,353.67		$0.00
2.2 All Other Counties		standard	$4,720.01		$0.00
22. Active Correction Action		PFP	Bid Cost		$0.00
W. Aggressive Fluid & Vapor Recovery (AFVR)					
1.2 8-hour Event		per event	$1,787.40		$0.00
2.1 24-hour Event		per event	$4,407.78		$0.00
3.1 48-hour Event		per event	$7,242.29		$0.00
4.1 96-hour Event	1	per event	$14,482.28		$14,482.28
5.1 Off-gas Treatment 8 hour		per event	$141.17		$0.00
6.2 Off-gas Treatment 24 hour		per event	$294.30		$0.00
7.2 Off-gas Treatment 48 hour		per event	$386.10		$0.00
8.1 Off-gas Treatment 96 hour	1	per event	$898.84		$898.84
9.1 Off-gas Treatment 8 hour (w/chlorinated compounds)		per event	$464.40		$0.00
10.1 Off-gas Treatment 24 hour (w/chlorinated compounds)		per event	$540.00		$0.00
11.1 Off-gas Treatment 48 hour (w/chlorinated compounds)		per event	$1,080.00		$0.00
12.1 Off-gas Treatment 96 hour (w/chlorinated compounds)		per event	$2,160.00		$0.00
13.2 AFVR Effluent Disposal(w/chlorinated compounds)		gallon	$0.64		$0.00
14.2 AFVR Site Reconnaissance	1	each	$302.40		$302.40
15.1 Additional Hook-ups	3	each	$29.68		$89.04
16.2 AFVR Effluent Disposal	20,000	gallon	$0.53		$10,600.00
17.2 AFVR Mobilization/Demobilization	1	each	$777.60		$777.60

18.1 Mobilization for absorbents/skimmers		each	$516.69		$0.00
19.1 Well sock 2" ID well		each	$36.94		$0.00
20.1 Well sock 4" ID well		each	$49.03		$0.00
21.1 pad (per pad)		each	$49.95		$0.00
22.1 3" diameter x 10' length boom		each	$108.00		$0.00
23.1 5" diameter x 10' length boom		each	$132.84		$0.00
24.1 New FPP recovery skimmer (2" wells)		each	$791.10		$0.00
25.1 New FPP recovery skimmer (4" wells)		each	$1,247.40		$0.00
26.1 Refurbished FPP recovery skimmer (2" or 4" wells)		each	$760.32		$0.00
27.1 Disposal of Absorbents		pound	$4.10		$0.00
28.1 Disposal of product from skimmers		gallon	$0.50		$0.00
X. Granulated Activated Carbon (GAC) filter system installation & service:					
1.2 New GAC System Installation		each	$2,320.86		$0.00
2.2 Refurbished GAC Sys. Install		each	$1,099.35		$0.00
3.2 Filter replacement/removal		each	$427.53		$0.00
4.2 GAC System removal, cleaning, & refurbishment		each	$335.92		$0.00
5.2 GAC System housing		each	$305.38		$0.00
6.2 In-line particulate filter		each	$183.22		$0.00
7.2 Additional piping & fittings		foot	$1.84		$0.00
Y. Well Repair					
1.2 Additional Copies of the Report Delivered		each	$61.07		$0.00
2.2 Repair 2x2 MW pad		each	$61.07		$0.00
3.2 Repair 4x4 MW pad		each	$107.49		$0.00
4.2 Replace well vault		each	$144.14		$0.00
5.2 Replace well cover bolts		each	$3.18		$0.00
6.2 Replace locking well cap & lock		each	$18.32		$0.00
7.2 Replace/Repair stick-up		each	$163.68		$0.00
8.2 Convert Flush-mount to Stick-up		each	$183.22		$0.00
9.2 Convert Stick-up to Flush-mount		each	$158.79		$0.00
10.2 Replace missing/illegible well ID plate		each	$14.66		$0.00
11.1 Down-hole Camera		per foot	$29.25		$0.00
Z. High Resolution Site Characterization					
1.1 HRSC Screening Equipment Mobilization		each	$1,468.80		$0.00
2.1 HRSC Drilling Category 1		per foot	$31.32		$0.00
3.1 HRSC Drilling Category 2		per foot	$36.18		$0.00
4.1 HRSC Drilling Category 3		per foot	$29.16		$0.00
5.1 HRSC 3-D Model		each	$4,363.20		$0.00
S. Report Prep & Project Management	12%	percent	$47,266.95		$5,672.03
TOTAL					$52,938.98

SC DEPARTMENT *of*
ENVIRONMENTAL SERVICES

Ryan Kellett
Corrective Action & Field Support Section
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201



TODD INVESTMENT PROPERTIES LLC
220 RIVERVIEW RD
ATHENS GA 30606

JAN 08 2025

Re: **Monitoring Well Installation, Aggressive Fluid Vapor Recovery and Groundwater Sampling Notice to Proceed**
501 Amoco, 1432 Highway 501, Myrtle Beach, SC
UST Permit #05156; CA #69539
Release reported December 31, 1991
Site Specific Work Plan received December 17, 2024
Horry County

Dear Mr. Todd:

The Underground Storage Tank Management Division (UST Division) of the S.C. Department of Environmental Services (SCDES) has reviewed and approved the referenced Site Specific Work Plan (SSWP) submitted by your contractor. In accordance with Sections 280.64 and 280.65 of the S.C. UST Control Regulations R.61-92, the Aggressive Fluid Vapor Recovery (AFVR) should begin immediately upon receipt of this letter. All work must be conducted in compliance with the current revision of the UST Quality Assurance Program Plan (QAPP), your contractor's Annual Contractor Quality Assurance Plan and submitted SSWP, and all applicable regulations. The QAPP is available at des.sc.gov/programs/bureau-land-waste-management/underground-storage-tanks/ust-quality-assurance-program-plan-qapp. For the most updated AFVR procedures, refer to Section B1.IV.g of the QAPP. **Any variance from QAPP procedures will be approved on a site specific basis and should be submitted to the UST Division in writing.**

Pursuant to S.C. Code Ann. Section 44-2-40(D), "The SUPERB Account and the SUPERB Financial Responsibility Fund shall provide combined coverage for site rehabilitation and third party claims, respectively, not to exceed one million dollars per occurrence". **According to UST Division records, approximately $355,991.85 has been expended from the SUPERB Account to date.** This scope of work, as recommended by your contractor, is anticipated to cost approximately $52,938.98.

The contractor must provide notification to the UST Project Manager via email 4 days prior to initiation of any site rehabilitation activities. If there are any changes to the schedule, the UST Project Manager must be contacted within 24 hours of those changes.

Your contractor can submit an invoice for direct payment from the State Underground Petroleum Environmental Response Bank (SUPERB) Account for pre-approved costs. **The Monitoring Well Installation and AFVR Report, contractor checklist (QAPP Appendix K), and invoice should be submitted to the UST Division within one hundred-twenty (120) days of the date of this correspondence.** If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

If the report cannot be submitted by the required due date, an extension must be requested by submitting a written request, either via postal mail or email, to my attention prior to the due date. The Department will issue a Notice of Alleged Violation if the report is not submitted by the required due date.

In accordance with Section IV.A.4.c of the SUPERB Site Rehabilitation & Fund Access Regulation (R.61-98), the contractor shall be required to indemnify the property owner, underground storage tank owner/operator and the State of South Carolina from and against all claims, damages, losses and expenses arising out of or resulting from activity conducted by the contractor, its agents, employees or subcontractors.

Please note that sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that the SUPERB Account cannot compensate any costs that are not pre-approved. If for any reason additional tasks will be completed, these additional tasks, and the associated cost, must be pre-approved by the UST Division for the cost to be paid. The UST Division reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, the UST Division reserves the right to question and/or reject costs if deemed unreasonable and the right to audit project records at any time during the project or after completion of work. Per Section III.3.b of the SUPERB Site Rehabilitation and Fund Access Regulations (R.61-98), reimbursement for site rehabilitation activities shall in no event exceed the actual costs incurred.

Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Any site rehabilitation activity associated with the UST release must be performed by a SCDES-certified site rehabilitation contractor as required by the SUPERB Site Rehabilitation and Fund Access Regulation, R.61-98.

The UST Division grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the Chemical of Concern (CoC) concentrations based on laboratory analysis is below Risk-Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on-site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

The contractor will be responsible for keeping and preserving suitable records of hydrological and other site assessments, site plans, contracts, accounts, invoices, or other transactions related to the cleanup and rehabilitation and the records must be accessible to the department during regular business hours. In addition, this includes all subcontractor agreements, invoices, correspondence, plans, reports, records, including electronic and paper formats. All records must be maintained for 10 years after project completion.

On all correspondence concerning this site, please reference the UST Permit number above. Should you have any questions, please contact me by phone at (803) 898-2946, by fax at (803) 898-0673, or by email at ryan.kellett@des.sc.gov.

Sincerely,

Ryan Kellett

Ryan Kellett, Hydrogeologist

enc: Approved Cost Agreement
Monitoring Well Approval

cc: Emerald, Inc., P.O. Box 3050, Sumter, SC 29151 (w/ enc)
Technical file (w/ enc)

SC DEPARTMENT *of*
ENVIRONMENTAL SERVICES

Ryan Kellett
Corrective Action & Field Support Section
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201

Monitoring Well Approval

Approval is granted to: Emerald, Inc.
On behalf of: Todd Investment Properties, LLC
Facility: 501 Amoco, 1432 Highway 501, Myrtle Beach, SC
UST Permit: #05156
County: Horry

This approval is for the installation of seven shallow monitoring wells. The monitoring wells are to be installed in the approved locations. Monitoring wells are to be installed following the S.C. Well Standards, R.61-71, and the applicable guidance documents.

Please note that R.61-71 requires the following:

1. All wells shall be drilled, constructed, and abandoned by a S.C. certified well driller per R.61-71.D.1.
2. All monitoring wells shall be labeled as required by R.61-71.H.2.c.
3. A Water Well Record Form or other form provided or approved by the UST Division shall be completed and submitted to the UST Division within 30 days after well completion or abandonment unless another schedule has been approved by the UST Division. The form should contain the "as-built" construction details and all other information required by R.61-71.H.1.f
4. All analytical data and water levels obtained from each monitoring well shall be submitted to the UST Division within 30 days of receipt of laboratory results unless another schedule has been approved by the UST Division as required by R.61-71.H.1.d.
5. If any of the information provided to the UST Division changes, notification to Ryan Kellett, the project manager (phone: (803) 898-2946 or email: ryan.kellett@des.sc.gov.) shall be provided a minimum of twenty-four (24) hours prior to well construction as required by R.61-71.H.1.a.
6. All temporary monitoring wells shall be abandoned within 5 days of borehole completion using appropriate methods as required by R.61-71.H.4.c. All other wells shall be properly developed per R.61-71.H.2.d.
7. UST Division approval is required prior to abandonment of all monitoring wells as required by R.61-71.H.1.a.

This approval is pursuant to the provisions of Section 44-55-40 of the 1976 S.C. Code of Laws and R.61-71 of the S.C. Well Standards and Regulations, dated May 27, 2016. A copy of this approval should be on the site during well installation.

Date of Issuance: January 3, 2025 **Approval #: UMW-30023**

Ryan Kellett, Hydrogeologist

Approved Cost Agreement 69539

Facility: 05156 501 AMOCO
KELLETRD
PO Number:

Task / Description	Categories	Item Description	Qty / Pct	Unit Price	Amount
A PLAN PREPARATION					
		1.2 SITE SPECIFIC WORK PLAN	1.0000	$183.220	183.22
C SURVEY					
		1.2 COMPREHENSIVE SURVEY	1.0000	$1,270.360	1,270.36
D MOB/DEMOB					
		1.2 EQUIPMENT	1.0000	$1,245.930	1,245.93
		2.2 PERSONNEL	3.0000	$516.690	1,550.07
I WELL INSTALLATION					
		2.B WATER TABLE DRILL RIG 2" DIA	105.0000	$54.900	5,764.50
J SAMPLE COLLECTION					
		1.2 GROUND WATER PURGE	9.0000	$73.290	659.61
		4.2B NO-PURGE GROUNDWATER	19.0000	$57.240	1,087.56
		5.2 GAUGE WELL ONLY	3.0000	$8.550	25.65
		8.2 FIELD DUPL. (MWS & WSWS) & FB	4.0000	$30.060	120.24
K ANALYSES	GW GROUNDWATER				
		1.2 BTEXNM+OXYGS+1,2 DCA+ETH 8260D	34.0000	$149.020	5,066.68
		7.2 EDB BY EPA 8011	32.0000	$55.210	1,766.72
Q DISPOSAL					
		1.2 WASTEWATER	500.0000	$1.190	595.00
		3.2 SOIL TREATMENT DISPOSAL	5.0000	$156.250	781.25
S REPORT PROJECT MANAGEMENT					
		S REPORT PREP & PROJ. MANAGEMENT	0.1200	$47,266.950	5,672.03
W AFVR					
		14.2 AFVR SITE RECONNAISSANCE	1.0000	$302.400	302.40
		15.1 ADDITIONAL HOOK UPS	3.0000	$29.680	89.04
		16.2 AFVR EFFLUENT DISPOSAL	20,000.0000	$0.530	10,600.00
		17.2 AFVR MOB - DEMOB	1.0000	$777.600	777.60
		4.1 96 HOUR EVENT	1.0000	$14,482.280	14,482.28
		8.1 OFF GAS TREATMENT 96 HOUR	1.0000	$898.840	898.84
				Total Amount	52,938.98




emerald
NON POTABLE WATER
34
T-SHIRT


FALCO 300
VERCO
LEXINGTON, SC


golden corral
Buffet & Grill
Left at 2nd Light on Seaboard St.
VERCO
LEXINGTON, SC
34
NON POTABLE WATER
LBT Inc.
LBT Inc.


X6
Bridgecrest

dhec Healthy People. Healthy Communities.	AFVR Audit Form Underground Storage Tank Management Division	RESULT: BLANK

Printed: 4/7/2025 11:58 AM
Project Manager: Ryan D Kellett
DHEC Field Staff: EPPERSON ERIN
Site Number: 05156
Arrive/Depart Times: 12:15 PM-12:40 PM

Inspection Date: 2/6/2025
Contractor: Emerald
Contractor Field Staff:
Site Name: 501 Amoco
County: HORRY County
Weather: Sunny 63.0°F

RESULTS

Operator on site?	No
Proper safety devices employed (e.g. traffic cones, barriers, etc.)?	Yes
Correct extraction well(s) being used?	Yes
Vacuum gauge(s) installed on extraction well(s)?	Yes
Vacuum gauge(s) installed on adjacent monitoring well(s)?	Yes
AFVR unit connected to grounded metal object?	Yes
Stinger(s) set at target depth(s)?	
Other extraction and monitoring well(s) sealed?	Yes
Data recorded at appropriate time intervals?	
Last two recorded times?	
Off-gas treatment (if applicable)?	Yes
Stinger Depth	
Airflow Rate/Velocity	
Vacuum Readings for Extraction Well(s)	
Vacuum Readings for Adjacent Monitoring Well(s)	
Water Level Measurement for Adjacent Monitoring Well(s)	
Pre-treatment Vapor Concentration Measurements	
Post-treatment Vapor Concentration Measurements	
Result	

EPPERSON ERIN 4/7/2025

INSPECTOR COMMENTS
Emerald truck on site, but couldn't find employee.

Outlook

Fw: 501 Amoco (Permit 05156, CA 69539) Addendum

From Chad McClary <cmcclary@emeraldinc-us.com>
Date Mon 4/21/2025 11:14 AM
To Stephanie M. Briney <Stephanie.Briney@des.sc.gov>

1 attachment (83 KB)
501 Amoco Addendum 4-21-25.xlsx;



Good morning,

I didn't know Ryan was no longer with the UST program.....

I guess I need your help with this one.

From: Chad McClary
Sent: Monday, April 21, 2025 11:07 AM
To: Ryan D. Kellett
Cc: Robbin Boykin
Subject: 501 Amoco (Permit 05156, CA 69539) Addendum

Good morning,

Please find the attached addendum for the 501 Amoco.

If you have any questions, please let me know.

Thanks

William (Chad) McClary, P.G.
Emerald, Inc.
803-469-5454 (Office)
803-960-6039 (Cell)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

ASSESSMENT COMPONENT COST AGREEMENT

South Carolina Department of Health and Environmental Control
Underground Storage Tank Management Division
State Underground Petroleum Environmental Response Bank Account
August 9, 2023

Facility Name: 501 Amoco

UST Permit #: 05156 **Cost Agreement #:** 69539

ITEM	QUANTITY	UNIT	UNIT PRICE		TOTAL
A. Plan Preparation					
1.2 Site-specific Work Plan		each	$183.22		$0.00
2.2 Tax Map		each	$85.50		$0.00
3.2 QAPP Contractor Addendum (App B)		each	$250.00		$0.00
B. Survey					
1.1 Receptor Survey		each	$673.06		$0.00
C. Survey					
1.2 Comprehensive Survey	-1	each	$1,270.36		($1,270.36)
5.1 Ground Penetrating Radar Survey (100 x 100)		each	$1,111.57		$0.00
D. Mob/Demob					
1.2 Equipment		each	$1,245.93		$0.00
2.2 Personnel		each	$516.69		$0.00
3.2 Adverse Terrain Vehicle		each	$610.75		$0.00
E. Soil Borings					
1.1 Soil Borings (hand auger)		foot	$21.80		$0.00
F. Soil Borings (requiring equipment, push technology, etc) or Field Screening (including sampling and analyst)					
1.2 Standard		per foot	$33.50		$0.00
2.2 Fractured Rock		per foot	$41.40		$0.00
G.					
H. Well Abandonment					
1.2 2" diameter or less		per foot	$3.79		$0.00
2.2 Greater than 2" to 6" diameter		per foot	$5.50		$0.00
3.2 Dug/Bored well (up to 6 feet diameter)		per foot	$18.32		$0.00
I. Well Installation (In accordance with R.61-71)					
1.2 Water Table (hand augered)		per foot	$31.40		$0.00
2.B Water Table (drill rig) 2" Diameter	-27	per foot	$54.90		($1,482.30)
2.2 Single-cased 2" Diameter Monitoring Well >50ft		per foot	$59.80		$0.00
3.2 Telescoping		per foot	$84.70		$0.00
4.2 Rock Drilling		per foot	$81.80		$0.00
5.2 2" Rock Coring		per foot	$88.50		$0.00
6.2 Multi-sampling ports/screens		per foot	$59.40		$0.00
7.2 Recovery Well (4" diameter)		per foot	$69.60		$0.00
9.2 Rotosonic (2" diameter)		per foot	$119.00		$0.00
10.2 Re-develop Existing Well		per foot	$13.44		$0.00
J. Groundwater Sample Collection / Gauging Depth to Water/Product					
1.2 Groundwater Purge	-1	per well	$73.29		($73.29)
2.2 Air or Vapors		sample	$14.66		$0.00
3.2 Water Supply Sample		sample	$26.87		$0.00
4.1A HydraSleeve		sample	$34.20		$0.00
4.2B No-purge Groundwater Sample/Surface wate	-10	sample	$57.24		($572.40)
5.2 Gauge Well only	2	sample	$8.55		$17.10
6.2 Sample Below Product		sample	$14.66		$0.00
7.2 Passive Diffusion Bag		sample	$31.75		$0.00
8.2 Field Duplicates (MWs & WSWs) and Field Bla	-1	sample	$30.06		($30.06)
9.2 Groundwater (low flow purge)		sample	$111.16		$0.00
10.2 Equipment Blank		sample	$30.06		$0.00
11.1 Sample Product		per well	$52.66		$0.00
K. Laboratory Analyses-Groundwater					
1.2 BTEXNM+Oxyg's+1,2 DCA+Eth(8260D)	-12	per sample	$149.02		($1,788.24)
2.2 Lead, Filtered		per sample	$16.85		$0.00
3.2 Rush EPA Method 8260B		per sample	$187.62		$0.00
4.2 Trimethal, Butyl, and Isopropyl Benzenes		per sample	$34.20		$0.00
5.2 PAH's		per sample	$74.02		$0.00
6.2 Lead		per sample	$19.54		$0.00

Addendum

Previously Approved:	$52,938.98
Increase:	($16,323.94)
New Approved Total:	**$36,615.04**

Project Manager: _____

Section Manager: _____

Finance: _____

Date: _____

# of pages ___	
	From:
	UST/SCDHEC
fax # ( )	
Phone # ( )	

The SCDHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria.

7.2 EDB by EPA 8011	-11	per sample	$55.21		($607.31)
8.2 EDB by EPA Method 8011 Rush		per sample	$83.31		$0.00
9.2 8 RCRA Metals		per sample	$77.45		$0.00
10.2 TPH (9070)		per sample	$50.09		$0.00
11.2 PH		per sample	$6.35		$0.00
12.2 BOD		per sample	$24.42		$0.00
13.2 Ethanol		per sample	$18.08		$0.00
K. Analyses-Drinking Water					
14.2 BTEXNM+1,2 DCA (524.2)		per sample	$151.52		$0.00
15.2 7-OXYGENATES & ETHANOL (8260D)		per sample	$112.07		$0.00
16.2 EDB (504.1)		per sample	$97.11		$0.00
17.2 RCRA METALS (200.8)		per sample	$122.15		$0.00
K. Analyses-Soil					
18.2 BTEX + Naphth.		per sample	$78.18		$0.00
19.2 PAH's		per sample	$78.22		$0.00
20.2 8 RCRA Metals		per sample	$68.89		$0.00
21.2 TPH-DRO (3550C/8015C)		per sample	$48.86		$0.00
22.2 TPH-GRO (5035B/8015C)		per sample	$43.92		$0.00
23.2 Grain size/hydrometer		per sample	$127.04		$0.00
24.2 Total Organic Carbon		per sample	$37.38		$0.00
K. Analyses-Air					
25.2 BTEX + Naphthalene		per sample	$263.84		$0.00
K. Hydrocarbon Fuel Identification					
27.1 C3-C44 Whole Oil (ASTM D3328)		per sample	$465.93		$0.00
28.1 Fuel Oxygenates (1624 Mod)		per sample	$398.39		$0.00
29.1 ALKYL Leads, EDB MMT (8080)		per sample	$398.39		$0.00
30.1 C8-C40 Full Scan (ASTM 5739)		per sample	$629.64		$0.00
31.1 Simulated Distillation (ASTM 2887)		per sample	$398.39		$0.00
32.1 Parent & Alk. PAH Com. (8270 SIM)		per sample	$723.63		$0.00
33.1 C3-C10 Piano (8260 MOD)		per sample	$599.88		$0.00
34.1 C10+Alkane Fingerprints		per sample	$599.88		$0.00
35.1 Expert Data Interpretation & Report		each	$595.30		$0.00
L. Aquifer Characterization					
1.2 Pumping Test		per hour	$28.09		$0.00
2.2 Slug Test		per test	$233.31		$0.00
3.2 Fractured Rock		per test	$122.15		$0.00
M. Free Product					
1.1 Free Product Recovery Rate Test		each	$46.42		$0.00
N.					
O. Risk Evaluation					
1.2 Tier I Risk Evaluation		each	$366.45		$0.00
2.2 Tier II Risk Evaluation		each	$122.15		$0.00
P. Survey					
1.1 Subsequent Survey		each	$297.65		$0.00
Q. Disposal (gallons or tons)					
1.2 Wastewater	-380	gallon	$1.19		($452.20)
2.2 Free Product		gallon	$1.63		$0.00
3.2 Soil Treatment/Disposal	-3.4	ton	$156.25		($531.25)
4.2 Drilling fluids		gallon	$1.25		$0.00
R. Miscellaneous (attach receipts)					
		each	$0.00		$0.00
		each	$0.00		$0.00
		each	$0.00		$0.00
T. Tier I Assessment (Use DHEC 3665 form)					
1.2 Southeast Region		standard	$12,622.56		$0.00
2.2 All Other Counties		standard	$13,844.06		$0.00
U. IGWA (Use DHEC 3666 form)					
1.2 Southeast Region		standard	$4,353.67		$0.00
2.2 All Other Counties		standard	$4,720.01		$0.00
22. Active Correction Action		PFP	Bid Cost		$0.00
W. Aggressive Fluid & Vapor Recovery (AFVR)					
1.2 8-hour Event		per event	$1,787.40		$0.00
2.1 24-hour Event		per event	$4,407.78		$0.00
3.1 48-hour Event		per event	$7,242.29		$0.00
4.1 96-hour Event		per event	$14,482.28		$0.00
5.1 Off-gas Treatment 8 hour		per event	$141.17		$0.00
6.2 Off-gas Treatment 24 hour		per event	$294.30		$0.00
7.2 Off-gas Treatment 48 hour		per event	$386.10		$0.00

9.1 Off-gas Treatment 8 hour (w/chlorinated compounds)	per event	$464.40		$0.00

10.1 Off-gas Treatment 24 hour (w/chlorinated compounds)		per event	$540.00		$0.00
11.1 Off-gas Treatment 48 hour (w/chlorinated compounds)		per event	$1,080.00		$0.00
12.1 Off-gas Treatment 96 hour (w/chlorinated compounds)		per event	$2,160.00		$0.00
13.2 AFVR Effluent Disposal(w/chlorinated compounds)		gallon	$0.64		$0.00
14.2 AFVR Site Reconnaissance		each	$302.40		$0.00
15.1 Additional Hook-ups	-3	each	$29.68		($89.04)
16.2 AFVR Effluent Disposal	-14,520	gallon	$0.53		($7,695.60)
17.2 AFVR Mobilization/Demobilization		each	$777.60		$0.00
18.1 Mobilization for absorbents/skimmers		each	$516.69		$0.00
19.1 Well sock 2" ID well		each	$36.94		$0.00
20.1 Well sock 4" ID well		each	$49.03		$0.00
21.1 pad (per pad)		each	$49.95		$0.00
22.1 3" diameter x 10' length boom		each	$108.00		$0.00
23.1 5" diameter x 10' length boom		each	$132.84		$0.00
24.1 New FPP recovery skimmer (2" wells)		each	$791.10		$0.00
25.1 New FPP recovery skimmer (4" wells)		each	$1,247.40		$0.00
26.1 Refurbished FPP recovery skimmer (2" or 4" wells)		each	$760.32		$0.00
27.1 Disposal of Absorbents		pound	$4.10		$0.00
28.1 Disposal of product from skimmers		gallon	$0.50		$0.00
X. Granulated Activated Carbon (GAC) filter system installation & service:					
1.2 New GAC System Installation		each	$2,320.86		$0.00
2.2 Refurbished GAC Sys. Install		each	$1,099.35		$0.00
3.2 Filter replacement/removal		each	$427.53		$0.00
4.2 GAC System removal, cleaning, & refurbishment		each	$335.92		$0.00
5.2 GAC System housing		each	$305.38		$0.00
6.2 In-line particulate filter		each	$183.22		$0.00
7.2 Additional piping & fittings		foot	$1.84		$0.00
Y. Well Repair					
1.2 Additional Copies of the Report Delivered		each	$61.07		$0.00
2.2 Repair 2x2 MW pad		each	$61.07		$0.00
3.2 Repair 4x4 MW pad		each	$107.49		$0.00
4.2 Replace well vault		each	$144.14		$0.00
5.2 Replace well cover bolts		each	$3.18		$0.00
6.2 Replace locking well cap & lock		each	$18.32		$0.00
7.2 Replace/Repair stick-up		each	$163.68		$0.00
8.2 Convert Flush-mount to Stick-up		each	$183.22		$0.00
9.2 Convert Stick-up to Flush-mount		each	$158.79		$0.00
10.2 Replace missing/illegible well ID plate		each	$14.66		$0.00
11.1 Down-hole Camera		per foot	$29.25		$0.00
Z. High Resolution Site Characterization					
1.1 HRSC Screening Equipment Mobilization		each	$1,468.80		$0.00
2.1 HRSC Drilling Category 1		per foot	$31.32		$0.00
3.1 HRSC Drilling Category 2		per foot	$36.18		$0.00
4.1 HRSC Drilling Category 3		per foot	$29.16		$0.00
5.1 HRSC 3-D Model		each	$4,363.20		$0.00
S. Report Prep & Project Management	12%	percent	($14,574.95)		($1,748.99)
TOTAL					($16,323.94)

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REPORT OF WELL INSTALLATION, AGGRESSIVE FLUID VAPOR RECOVERY, AND GROUNDWATER SAMPLING
501 AMOCO
1432 US HIGHWAY 501
MYRTLE BEACH, SOUTH CAROLINA
UST PERMIT #05156
COST AGREEMENT #69539

UST
84
Tech
DOCKETING

Prepared For:

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April 18, 2025

Signature Page

This document entitled "Report of Well Installation, Aggressive Fluid Vapor Recovery, and Groundwater Sampling", has been prepared for the South Carolina Department of Environmental Services (DES) to describe investigative activities initiated at the 501 Amoco site located in Conway, South Carolina. It has been prepared under the direct supervision of William C. McClary, P.G. in accordance with the Underground Storage Tank (UST) Quality Assurance Division Plan Revision 4.0, Emerald, Inc. Annual Contractor Quality Assurance Plan, and the approved Site-Specific Work Plan (SSWP). All questions or comments concerning this report should be directed to Ronny L. Lowder or William C. McClary, P.G., Emerald, Inc., at 803-469-5454.

Emerald, Inc.

Ronny L. Lowder
President

Emerald, Inc.

William C. McClary, P.G.
South Carolina Registration #2386

Report of Well Installation, Aggressive Fluid Vapor Recovery, and Groundwater Sampling
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina

TABLE OF CONTENTS

Section		Page
1.0	**Introduction**	**1**
2.0	**Site Activities**	**1**
2.1	Monitoring Well Installation	2
2.2	AFVR Event	2
2.3	Static Water Level Measurement	4
2.4	Groundwater Sampling	4
2.5	Surface Water Sampling	6
2.6	Analytical Results	6
3.0	**Results, Conclusions, and Recommendations**	**6**

Tables

Table 1) - Groundwater Elevations and Field Measurements
Table 2) - Groundwater Analytical Data
Table 3) - Groundwater Analytical Data (Oxygenates)

Figures

Figure 1) - USGS Topographic Map
Figure 2) - Site Map
Figure 3) - Potentiometric Surface Map
Figure 4) - Groundwater CoC Map
Figure 4A) - Benzene Contour Map
Figure 4B) - Toluene Contour Map
Figure 4C) - Ethylbenzene Contour Map
Figure 4D) - Total Xylenes Contour Map
Figure 4E) - Naphthalene Contour Map
Figure 4F) - EDB Contour Map

Appendices

A) Well Logs, 1903 Forms, and Well Development
B) Aggressive Fluid Vapor Recovery Tables
C) Purge Logs
D) Analytical Data Sheets
E) Disposal Manifests
F) QAPP Contractor's Checklist

1.0 Introduction

The 501 Amoco site (UST Permit #05156) is located at 1432 US Highway 501 in Myrtle Beach, South Carolina. Figure 1 contains an USGS topographic map for the surrounding area. The subject property is currently occupied by a used car lot. According to Horry County tax records, the site is currently owned by Todd Investment Properties LLC (220 Riverview Road, Athens, GA 30606).

The subject site formerly maintained 2-4,000 gallon gasoline USTs and 1-6,000 gallon gasoline UST. These USTs were abandoned by filling with concrete in October 1999. A release of petroleum product was reported in August 1991 and confirmed in March 1992. The responsible party for this release is Todd Investment Properties LLC (220 Riverview Road, Athens, GA 30606).

From 1991 through 2023, assessment work, groundwater sampling, and abatement activities were conducted by Southeastern Environmental and Kleen Sites Geoservices. This work included monitoring well installation, groundwater sampling and aggressive fluid vapor recovery (AFVR) events.

In December 2024, SCDES requested a site-specific work plan (SSWP) for additional assessment to better define the source area, an aggressive fluid vapor recovery event (AFVR), a comprehensive groundwater sampling event. This report documents the findings of this work effort.

2.0 Site Activities

Emerald, Inc. personnel conducted monitoring well installation, Aggressive Fluid Vapor Recovery, and groundwater sampling event at the 501 Amoco site to better assess the source area. Source area assessment was followed by an AFVR event and groundwater sampling. Field activities required to generate site-specific information for the site are described in detail within

this section. Figure 2 contains a site map presenting monitoring wells, receptors, relevant structures, and utilities.

2.1 Monitoring Well Installation

On January 28, 2025, six watertable bracketing wells (MW-14 through MW-19) were installed at the site. These monitoring wells were installed to better define the extent of free product. Each 2-inch diameter monitoring well was installed using 8-inch diameter hollow stem augers to construct the borehole. These wells were drilled to a depth of 13.0 feet and screened from 3.0 to 13.0 feet. Well drilling was conducted by personnel from Versatile Environmental Resource Company (VERCO) of Lexington, SC (Jason Chiorazzi B 01790) under the supervision of Emerald, Inc. personnel.

The descriptions of the soil along with the PID readings were entered into the Monitoring Well Installation Log as found in Appendix A. A total of 1.60 tons of soil cuttings were containerized and transported to TK Tank Services in Sumter, SC, for proper disposal. Approximately 30 gallons of development water was treated on-site using an activated carbon drum. Each newly installed well was developed on January 29, 2025, using a surge block and submersible well pump. See Appendix E for copies of the disposal manifests and Appendix A for soil descriptions, DHEC 1903 forms, and well development logs.

2.2 AFVR Event

From February 3 through 7, 2025, VERCO personnel performed a 96-hour AFVR event utilizing MW-3, RW-2, RW-3, RW-4, and RW-5 as the extraction locations. This AFVR event was conducted to aid in removing free product detected at the site.

The following table documents free product detected in extraction wells prior to and at the conclusion of this event.

Monitoring Well	Product Thickness Prior to Event (ft.)	Product Thickness After to Event (ft.)
05156 MW-3	0.71	Sheen
05156 RW-2	4.32	None
05156 RW-3	4.41	0.02
05156 RW-4	1.19	None
05156 RW-5	4.40	0.02

Appendix B presents tables documenting data recorded during this event, which includes off gas concentrations (by PID), post treatment off-gas concentrations, off-gas velocities, knockout tank vacuum, off gas velocities, water level measurements and magnehelic readings for selected nearby monitoring wells. Field personnel normally collect data at thirty-minute intervals for the first eight hours of the event, then at one-hour intervals from hours nine through twenty-four and at two-hour intervals from twenty-four through ninety-six hours of the event. During the hours of midnight to 8 AM event monitoring was suspended. Off-gas treatment was utilized at the site during the event to limit exposure of the off-gas produced to the general public using a catalytic oxidizer.

According to the calculations as presented on the tables, a total of 7,284 pounds of hydrocarbons as vapor and 1,182 equivalent gallons of hydrocarbons were removed during this event. A total of 5,480 gallons of petroleum contaminated groundwater was transported to the City of Manning Wastewater Treatment Plant in Manning, SC, for proper disposal. Approximately 0.37 feet of product was detected in the tanker at the conclusion of the event. Based on gauging of the tanker, approximately 823 gallons of free product was recovered. Appendix E contains a copy of the disposal manifests and pictures of the meter obtained during this event.

2.3 Static Water Level Measurement

Prior to well purging, sample collection, or gauging of the monitoring wells, water levels were recorded to the nearest 0.01 foot using a graduated electronic interface probe. Measurable free product was encountered in five monitoring wells. Six monitoring wells contained at least one constituent exceeding solubility limits, indicating free product may be present in the well.

The following table documents free product detected during the sampling event:

Monitoring Well	Product Thickness
05156 MW-2	Exceeds Solubility Limits
05156 MW-3	0.40 ft.
05156 MW-15	Exceeds Solubility Limits
05156 MW-16	Exceeds Solubility Limits
05156 MW-17	Exceeds Solubility Limits
05156 MW-18	Exceeds Solubility Limits
05156 MW-19	Exceeds Solubility Limits
05156 RW-2	2.30 ft.
05156 RW-3	2.07 ft.
05156 RW-4	0.11 ft.
05156 RW-5	0.47 ft.

Measurements were recorded from the surveyed top of the well casing so they could be referenced to a common datum. Water levels and groundwater elevations are summarized in Table 1. Based upon the groundwater elevations recorded during this work effort, groundwater flow in the shallow aquifer is to the east and northeast. Figure 3 presents a potentiometric surface map for the shallow aquifer.

2.4 Groundwater Sampling

On March 3 and 4, 2025, groundwater samples were collected from sixteen (16) monitoring wells (MW-2, MW-6, MW-7, MW-8, MW-11 through MW-19, TW-1, TW-2, and RW-1) at the subject site. MW-3, RW-2 through RW-5 contained free product and were not sampled. MW-1 has a bent standpipe and could not be sampled using a bailer or peristaltic pump. MW-4, MW-9, and MW-10 could not be located. MW-5 could not be accessed due to an immobile car

covering it. In addition to these groundwater samples, two duplicate samples (MW-18 and RW-1), two field blanks, and a trip blank were also collected. One trip blank was included in each cooler shipped to the laboratory. Each sample collected at the site was documented as to the cooler in which it was placed, and a dedicated trip blank was included in each cooler for quality control purposes.

Pre-existing wells that bracketed the watertable were not purged prior to sampling. Newly installed wells and wells that did not bracket the watertable were purged. Pre-existing wells were purged until the dissolved oxygen, pH, conductivity, temperature readings were within 5%, and turbidity readings reached 10 ntu's or within 5%. A maximum of five well volumes were removed from each well. If the well went dry during purging, it was allowed to recharge for a minimum of three hours or 80% of the original water level before a sample was collected. Newly installed wells were purged until five well volumes were removed or dryness. Field data obtained during the purging of each well is presented in Appendix C.

Field equipment was properly calibrated prior to collecting data at the site. Following well purging or gauging, a groundwater sample was collected from each well using a disposable bailer. Downhole sampling equipment was properly decontaminated between each sampling location. Approximately 90.0 gallons of purge water was treated on-site using an activated carbon drum (See Appendix E for a copy of the disposal manifest). To ensure proper treatment of wastewater, a wastewater composite sample was collected.

Samples were immediately packed in crushed ice in the field ice chest and shipped to Pace Analytical, Inc. of Huntersville, NC (SC Certification #99006001) for laboratory analysis. Each sample was analyzed for BTEX, Naphthalene, MTBE, 1, 2 DCA, 8 Oxygenates (EPA Method 8260D), and EDB (EPA Method 8011). Analytical results for the groundwater samples are presented on Tables 2 and 3 with the laboratory reports in Appendix D.

2.5 Surface Water Sampling

On December 30, 2024, one surface water sample (SW-1) was collected from Crooked Creek (33.699221, -78.897183). This creek is located approximately 655 feet northeast of MW-3. The sample was collected by lowering laboratory supplied sample containers into the surface water body to collect the sample.

The sample was immediately packed in crushed ice inside the field ice chest and shipped to Pace Analytical, Inc. of Huntersville, NC (SC Certification #99006001) for laboratory analysis. Each sample was analyzed for BTEX, Naphthalene, MTBE, 1-2 DCA, 8 Oxygenates (EPA Method 8260D), and EDB (EPA Method 8011). Analytical results for the surface water sample are presented on Tables 2 and 3, with the complete laboratory reports found in Appendix D.

2.6 Analytical Results

Tables 2 and 3 summarize the groundwater analytical results at the subject site and Appendix D contains a copy of the laboratory reports. Laboratory analytical reports indicate that the concentrations of chemicals of concern (CoC) have decreased since the last sampling event. Measurable free product was encountered in MW-3 (0.40 ft.), RW-2 (2.30 ft.), RW-3 (2.07 ft.), RW-4 (0.11 ft.), and RW-5 (0.47 ft.). During the August 2024 sampling event, a total of 8.63 ft. of free product was detected in monitoring wells at the site. During this sampling evnt 5.35 ft. of free product were detected in the wells, this is a 38% reduction. Groundwater analytical results from MW-2 and MW-15 through MW-19 exceeded solubility limits but did not contain measurable free product. Figure 4 presents a Groundwater CoC Map for the site. Figures 4A through 4F present iso-concentration maps for CoC's exceeding risk based screening levels (RBSLs).

3.0 Results, Conclusions, and Recommendations

During this work effort, six (6) additional monitoring wells were installed to better define free product in the source area. A 96-hour AFVR event was then performed to remove free product previously detected at the site. Approximately 30 days after the AFVR event, a

comprehensive groundwater sampling event was performed. Analytical results from this sampling event indicate levels of petroleum CoCs have decreased since the last sampling event. Measurable free product was detected in five monitoring wells during the sampling event, but analytical data from six additional monitoring wells exceeded solubility limits, indicating the true extent of free product may be larger. Data from this sampling event indicates the direction of groundwater flow in the shallow aquifer is to the east and northeast.

Given the above findings during this Report of Groundwater Sampling at the site, Emerald, Inc. recommends additional long duration AFVR events to remove free product. The limited extent of free product and elevated dissolved CoC concentrations would appear to make AFVR an effective abatement technique. Once site-specific target levels are determined, a targeted scope remedial action may be required to remove free product.

TABLES

TABLE 1
GROUNDWATER ELEVATIONS
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156

Well Number	Sample Date	Screened Interval (Ft)	Depth to Product (Ft)	Depth to Water (Ft)	Product Thickness (Ft)	Well Head Elevation (Ft)	Groundwater Elevation (Ft)
05156 MW-1	6/1/21	3-13	---	8.86	---	20.87	12.01
	8/22/24		Bent Standpipe				
	3/3/25		Bent Standpipe				
05156 MW-2	6/1/21	3-13	---	8.99	---	21.44	12.45
	8/22/24		---	6.80	---	21.44	14.64
	3/3/25		---	9.15	---	21.44	12.29
05156 MW-3	6/1/21	3-13	8.13	8.65	0.52	21.44	13.17
	8/22/24		4.91	5.90	0.99	21.44	16.27
	3/3/25		8.07	8.47	0.40	21.44	13.27
05156 MW-4	6/1/21	4-14	Not Located				
	8/22/24		Not Located				
	3/3/25		Not Located				
05156 MW-5	6/1/21	5-15	No Access				
	8/22/24		No Access				
	3/3/25		No Access				
05156 MW-6	6/1/21	5-15	---	8.76	---	20.95	12.19
	8/23/24		---	5.26	---	20.95	15.69
	3/4/25		---	8.73	---	20.95	12.22
05156 MW-7	6/1/21	5-15	---	8.69	---	22.16	13.47
	8/22/24		---	5.71	---	22.16	16.45
	3/4/25		---	8.80	---	22.16	13.36
05156 MW-8	6/1/21	5-15	---	8.94	---	20.99	12.05
	8/22/24		---	6.77	---	20.99	14.22
	3/4/25		---	8.70	---	20.99	12.29
05156 MW-9	6/1/21	5-15	Not Located				
	8/22/24		Not Located				
	3/4/25		Not Located				
05156 MW-10	6/1/21	5-15	Not Located				
	8/22/24		Not Located				
	3/4/25		Not Located				
05156 MW-11	6/1/21	6-16	---	7.42	---	19.70	12.28
	8/22/24		---	7.82	---	19.70	11.88
	3/4/25		---	8.96	---	19.70	10.74
05156 MW-12	6/1/21	4-14	---	7.52	---	18.49	10.97
	8/23/24		---	6.47	---	18.49	12.02
	3/4/25		---	7.41	---	18.49	11.08
05156 MW-13	6/1/21	4-14	---	7.88	---	20.13	12.25
	8/23/24		---	7.90	---	20.13	12.23
	3/3/25		---	7.88	---	20.13	12.25
05156 MW-14	3/3/25	3-13	---	7.93	---		
05156 MW-15	3/3/25	3-13	---	8.70	---		
05156 MW-16	3/3/25	3-13	---	8.69	---		
05156 MW-17	3/3/25	3-13	---	7.54	---		
05156 MW-18	3/3/25	3-13	---	7.65	---		
05156 MW-19	3/3/25	3-13	---	8.32	---		
05156 TW-1	6/1/21	38-43	---	8.63	---	21.10	12.47
	8/22/24		---	8.33	---	21.10	12.77
	3/3/25		---	8.49	---	21.10	12.61
05156 TW-2	6/1/21	33-40	---	8.76	---	20.85	12.09
	8/23/24		---	7.82	---	20.85	13.03
	3/4/25		---	8.74	---	20.85	12.11
05156 RW-1	6/1/21	3-13	---	2.62	---	21.15	18.53
	8/22/24		No Access				
	3/3/25		---	3.14	---	21.15	18.01
05156 RW-2	6/1/21	3-13	6.65	13.08	6.43	21.17	12.85
	8/22/24		4.74	11.11	6.37	21.17	14.77
	3/3/25		7.30	9.60	2.30	21.17	13.27
05156 RW-3	12/2/21	3-13	---	8.20	---	21.13	12.93
	8/22/24		---	4.15	---	21.13	16.98
	3/3/25		7.10	9.17	2.07	21.13	13.49
05156 RW-4	12/2/21	3-13	---	7.95	---	21.15	13.20
	8/22/24		5.67	5.70	0.03	21.15	15.47
	3/3/25		7.84	7.95	0.11	21.15	13.28
05156 RW-5	12/2/21	3-13	8.11	8.17	0.06	21.28	13.15
	8/22/24		4.81	6.05	1.24	21.28	16.15
	3/3/25		7.90	8.37	0.47	21.28	13.26

Notes:

1. Groundwater depths were measured from the top of the PVC riser pipe
2. Data Prior to August 2024 from SCDES Files
3. Groundwater Elevations corrected for free product using a specific gravity of 0.74 for fuel

TABLE 2
GROUNDWATER ANALYTICAL DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156
PAGE 1 OF 2

Well Number	Sample Date	CoC RBSL units	Benzene 5 (ug/l)	Toluene 1,000 (ug/l)	Ethylbenzene 700 (ug/l)	Total Xylenes 10,000 (ug/l)	MTBE 40 (ug/l)	Naphthalene 25 (ug/l)	1,2 DCA 5 (ug/l)	EDB 0.05 (ug/l)
05156 MW-1	8/3/04		Not Sampled							
	12/19/14		3.3	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	8/26/19		Not Sampled							
	6/1/21		Not Sampled							
	8/22/24		Bent Standpipe							
	3/3/25		Bent Standpipe							
05156 MW-2	8/3/04		**10,500**	**99,300**	**1,430**	**7,430**	**4.66**	**704**	NT	**1.96**
	12/19/14		**5,100**	**75,000**	BDL	**5,400**	BDL	BDL	NT	**0.650**
	8/26/19		**6.91**	**151**	**2.74**	**14.6**	<2.50	<2.50	<2.50	**0.477**
	6/1/21		**3,800**	**86,000**	**1,400**	**8,000**	<1,000	**420J**	<1,000	NT
	8/22/24		**2,690**	**66,800**	**1,420**	**7,070**	<500	**551**	<500	<0.021
	3/3/25		**2,960**	**78,200**	**1,530**	**8,040**	<500	**661**	<500	**0.34**
05156 DUP-1 (MW-2)	8/22/24		**2,420**	**59,300**	**1,300**	**6,430**	<500	**622**	<500	<0.020
05156 MW-3	8/3/04		**10,500**	**67,500**	**1,260**	**4,930**	**900**	713	NT	**0.413**
	12/19/14		1.14 ft. of Free Product							
	8/26/19		0.05 ft. of Free Product							
	6/1/21		0.52 ft. of Free Product							
	8/22/24		0.99 ft. of Free Product							
	3/3/25		0.40 ft. of Free Product							
05156 MW-4	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		Not Located							
	6/1/21		Not Located							
	8/22/24		Not Located							
	3/3/25		Not Located							
05156 MW-5	8/3/04		**3.5**	**8.48**	**1.53**	**175**	BDL	BDL	NT	BDL
	12/19/14		**130**	**410**	**11**	**200**	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		No Access							
	8/22/24		No Access							
	3/3/25		No Access							
05156 MW-6	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	8/3/04		BDL	BDL	BDL	BDL	**6.22**	BDL	NT	BDL
	12/19/14		**180**	**220**	**10**	**290**	BDL	**15**	NT	BDL
	8/26/19		22.2	<2.50	**6.74**	**2.54**	**7.52**	**8.48**	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	**6.9**	**8.4**	<1.0	NT
	8/22/24		**5.2**	<1.0	**1.1**	**2.1**	**1.3**	**10.7**	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-8	8/3/04		**3,070**	**91.7**	**78.7**	**1,661**	**1.19**	**8.20**	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	**5.4**	<1.0	**1.5**	<1.0	**1.3**	<1.0	NT
	8/22/24		**0.42J**	**28.4**	**1.7**	**9.4**	<1.0	**2.1**	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		Not Located							
	6/1/21		Not Located							
	8/22/24		Not Located							
	3/4/25		Not Located							
05156 MW-10	8/3/04		**107**	**1.59**	BDL	**5.51**	**5.0**	**13.0**	NT	NT
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	**4.07**	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
	6/1/21		Not Located							
	8/22/24		Not Located							
	3/4/25		Not Located							
05156 MW-11	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	<0.020
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	**42.9**	<2.50	**9.13**	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	**0.80J**	<1.0	<1.0	<1.0	<1.0	<2.50	NT
	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020

Notes:

1. ug/l = micrograms per liter
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3. RBSL = Risk Based Screening Levels for Groundwater (SCDES Prgrammatic QAPP Revision 4.0)
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5. NT = Not Tested
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TABLE 2
GROUNDWATER ANALYTICAL DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156
PAGE 2 OF 2

Well Number	Sample Date	CoC RBSL units	Benzene 5 (ug/l)	Toluene 1,000 (ug/l)	Ethylbenzene 700 (ug/l)	Total Xylenes 10,000 (ug/l)	MTBE 40 (ug/l)	Naphthalene 25 (ug/l)	1,2 DCA 5 (ug/l)	EDB 0.05 (ug/l)
05156 MW-12	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	<0.020
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	<0.020
	12/19/14		**20**	**550**	**12**	**59**	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/3/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-14	3/3/25		**0.36J**	**1.7**	**0.74J**	**3.6**	<1.0	<1.0	<1.0	<0.021
05156 MW-15	3/3/25		**1,530**	**47,500**	**872**	**5,780**	<400	**326J**	<400	<0.020
05156 MW-16	3/3/25		**11,600**	**112,000**	**1,760**	**9,380**	<1,000	<1,000	<1,000	**1.2**
05156 MW-17	3/3/25		**1,570**	**43,700**	**1,670**	**11,200**	<400	**560**	<400	<0.020
05156 MW-18	3/3/25		**736**	**41,700**	**1,750**	**9,190**	<400	**468**	<400	<0.020
05156 MW-18 DUP	3/3/25		**843**	**45,500**	**1,810**	**9,800**	<250	**395**	<250	**0.077**
05156 MW-19	3/3/25		**8,930**	**103,000**	**2,070**	**10,100**	<1,000	**823J**	<1,000	<0.020
05156 TW-1	8/3/04		**1.64**	**39.5**	**1.29**	**9.21**	BDL	BDL	NT	BDL
	12/19/14		**47**	**1,100**	BDL	**78**	BDL	BDL	NT	BDL
	8/26/19		<2.50	**32.3**	<2.50	**11.4**	<2.50	<2.50	<2.50	<0.0075
	6/1/21		**1.2**	**27**	**2.9**	**15**	<1.0	**5.8**	<1.0	NT
	8/22/24		<1.0	**2.0**	**0.46J**	**2.2**	<1.0	<1.0	<1.0	<0.020
	3/3/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	8/26/19		0.02 ft of Free Product							
	6/1/21		**1,200**	**2,200**	**1,300**	**3,300**	<50	**1,200**	<50	NT
	8/22/24		No Access							
	3/3/25		**377**	**24.8**	**620**	**70.6**	<5.0	**519**	<5.0	<0.020
05156 RW-1 DUP	6/1/21		**1,200**	**2,400**	**1,300**	**3,300**	<50	**1,200**	<50	NT
	3/3/25		**378**	**26.7**	**584**	**70.4**	<4.0	**483**	<4.0	<0.020
05156 RW-2	8/26/19		5.81 ft of Free Product							
	6/1/21		6.43 ft of Free Product							
	8/22/24		6.37 ft. of Free Product							
	3/3/25		2.30 ft. of Free Product							
05156 RW-3	8/22/24		**781**	**45.8**	**789**	**214**	<5.0	**703**	<5.0	<0.020
	3/3/25		2.07 ft. of Free Product							
05156 RW-4	8/22/24		0.03 ft of Free Product							
	3/3/25		0.11 ft. of Free Product							
05156 RW-5	12/2/21		0.06 ft of Free Product							
	8/22/24		1.24 ft. of Free Product							
	3/3/25		0.47 ft. of Free Product							
05156 SW-1	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 FIELD BLANK	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/3/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 FIELD BLANK 2	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TRIP BLANK	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
05156 TRIP BLANK 2	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
Wastewater Composte	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020

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TABLE 3
GROUNDWATER ANALYTICAL DATA (OXYGENATES)
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156
PAGE 1 OF 3

Well Number	Sample Date	t-Amyl Alcohol (µg/l)	Tert-Amyl Methyl Ether (µg/l)	3,3-Dimethyl-1-Butanol (µg/l)	Tertiary Butyl Alcohol (µg/l)	tert-Butyl Formate (µg/l)	Diisopropyl Ether (µg/l)	Ethanol (µg/l)	Ethyl-tert-butyl Ether (µg/l)
05156 MW-1	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	Not Sampled							
	6/1/21	Not Sampled							
	8/22/24	Bent Standpipe							
	3/3/25	Bent Standpipe							
05156 MW-2	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20,000	<10,000	<20,000	**2,800J**	<5,000	<1,000	<100,000	<1,000
	8/22/24	<50,000	<5,000	<50,000	<50,000	<25,000	<500	<100,000	<5,000
	3/3/25	<50,000	<5,000	<50,000	**21,900J**	<25,000	<500	<100,000	<5,000
DUP-1 (MW-2)	8/22/24	<50,000	<5,000	<50,000	<50,000	<25,000	<500	<100,000	<5,000
05156 MW-3	8/3/04	Not Tested							
	12/19/14	1.14 ft. of Free Product							
	8/26/19	0.05 ft. of Free Product							
	6/1/21	0.52 ft. of Free Product							
	8/22/24	0.99 ft. of Free Product							
	3/3/25	0.40 ft. of Free Product							
05156 MW-4	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	Not Located							
	6/1/21	Not Located							
	8/22/24	Not Located							
	3/3/25	Not Located							
05156 MW-5	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	No Access							
	8/22/24	No Access							
	3/3/25	No Access							
05156 MW-6	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-7	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	**31.0**	<2.50	<37.6	**100**	<2.50	<2.50	<125	<2.50
	6/1/21	**45**	<10	<20	**84**	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-8	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0

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TABLE 3
GROUNDWATER ANALYTICAL DATA (OXYGENATES)
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156
PAGE 2 OF 3

Well Number	Sample Date	t-Amyl Alcohol (ug/l)	Tert-Amyl Methyl Ether (ug/l)	3,3-Dimethyl-1-Butanol (ug/l)	Tertiary Butyl Alcohol (ug/l)	tert-Butyl Formate (ug/l)	Diisopropyl Ether (ug/l)	Ethanol (ug/l)	Ethyl-tert-butyl Ether (ug/l)
05156 MW-9	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	Not Tested							
	6/1/21	Not Tested							
	8/22/24	Not Located							
	3/4/25	Not Located							
05156 MW-10	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	Not Tested							
	8/22/24	Not Located							
	3/4/25	Not Located							
05156 MW-11	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-12	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-13	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/3/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-14	3/3/25	<100	<10.0	<100	**51.1J**	<50.0	<1.0	<200	<10.0
05156 MW-15	3/3/25	<40,000	<4,000	<40,000	<40,000	<20,000	<400	<80,000	<4,000
05156 MW-16	3/3/25	**247,000**	<10,000	<100,000	**170,000**	<50,000	<1,000	<200,000	<10,000
05156 MW-17	3/3/25	<40,000	<4,000	<40,000	<40,000	<20,000	<400	<80,000	<4,000
05156 MW-18	3/3/25	<40,000	<4,000	<40,000	<40,000	<20,000	<400	<80,000	<4,000
05156 MW-18 DUP	3/3/25	<25,000	<2,500	<25,000	<25,000	<12,500	<250	<50,000	<2,500

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TABLE 3
GROUNDWATER ANALYTICAL DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156
PAGE 3 OF 3

Well Number	Sample Date	t-Amyl Alcohol (ug/l)	Tert-Amyl Methyl Ether (ug/l)	3,3-Dimethyl-1-Butanol (ug/l)	Tertiary Butyl Alcohol (ug/l)	tert-Butyl Formate (ug/l)	Diisopropyl Ether (ug/l)	Ethanol (ug/l)	Ethyl-tert-butyl Ether (ug/l)
05156 MW-19	3/3/25	<100,000	<10,000	<100,000	<100,000	<50,000	<1,000	<200,000	<10,000
05156 TW-1	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	**1.9J**	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/3/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 TW-2	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 RW-1	8/26/19	0.02 ft. of Free Product							
	6/1/21	**470J**	<500	<1,000	**1,200**	<250	<50	<5,000	<50
	8/22/24	No Access							
	3/3/25	**411J**	<50.0	<500	**1,020**	<250	<5.0	<1,000	<50.0
05156 RW-1 DUP	6/1/21	**470J**	<500	<1,000	**1,200**	<250	<50	<5,000	<50
	3/3/25	**403**	<40.0	<400	**837**	<200	<4.0	<800	<40.0
05156 RW-2	8/26/19	5.81 ft. of Free Product							
	6/1/21	6.43 ft. of Free Product							
	8/22/24	6.37 ft. of Free Product							
	3/3/25	2.30 ft. of Free Product							
05156 RW-3	8/22/24	<500	<50.0	<500	**1,130**	<250	<5.0	<1,000	<50.0
	3/3/25	2.07 ft. of Free Product							
05156 RW-4	8/22/24	0.03 ft. of Free Product							
	3/3/25	0.11 ft. of Free Product							
05156 RW-5	12/2/21	0.06 ft. of Free Product							
	8/22/24	1.24 ft. of Free Product							
	3/3/25	0.47 ft. of Free Product							
05156 SW-1	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
FIELD BLANK	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/3/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
FIELD BLANK 2	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
TRIP BLANK	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
TRIP BLANK 2	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
Wastewater	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0

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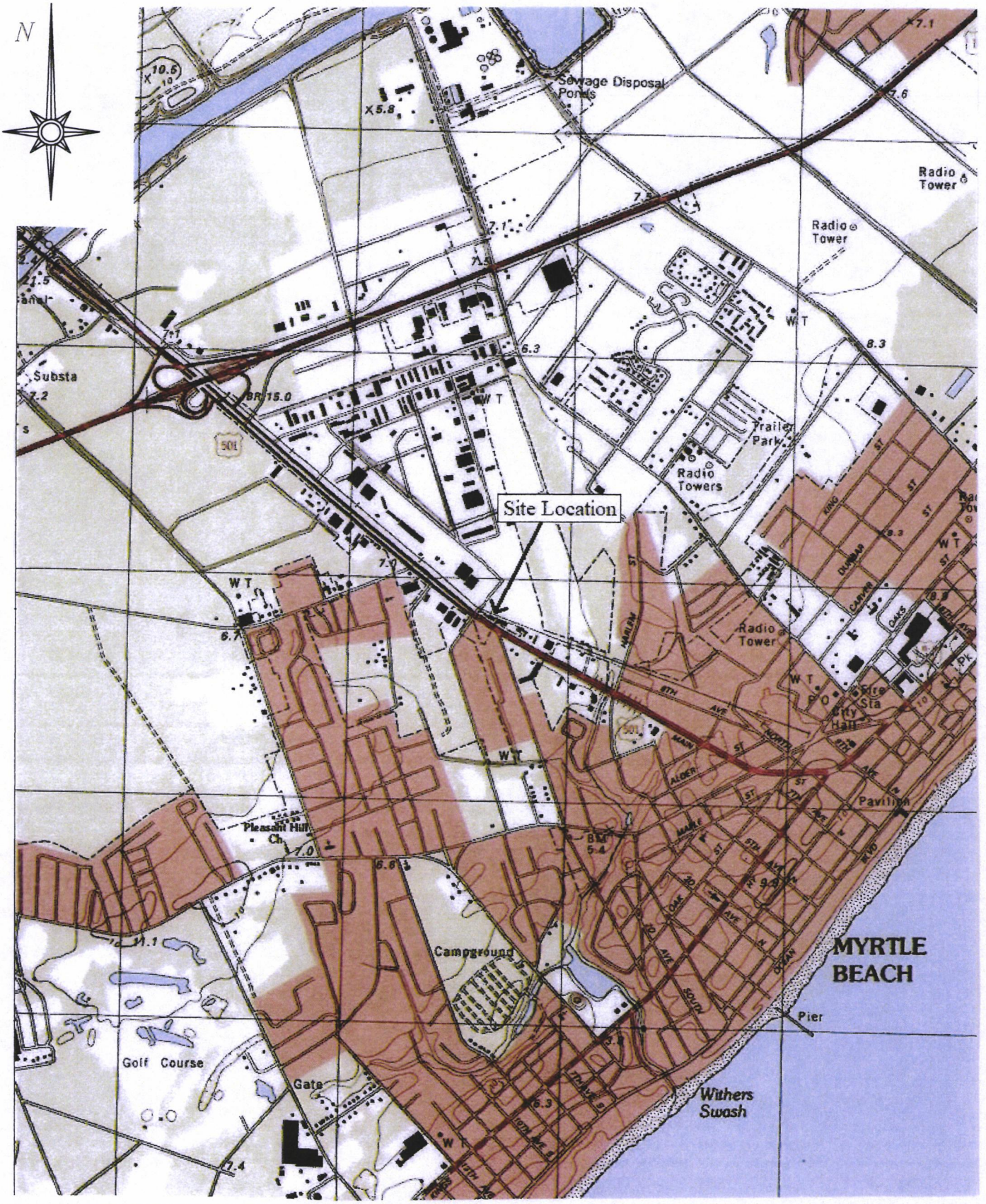
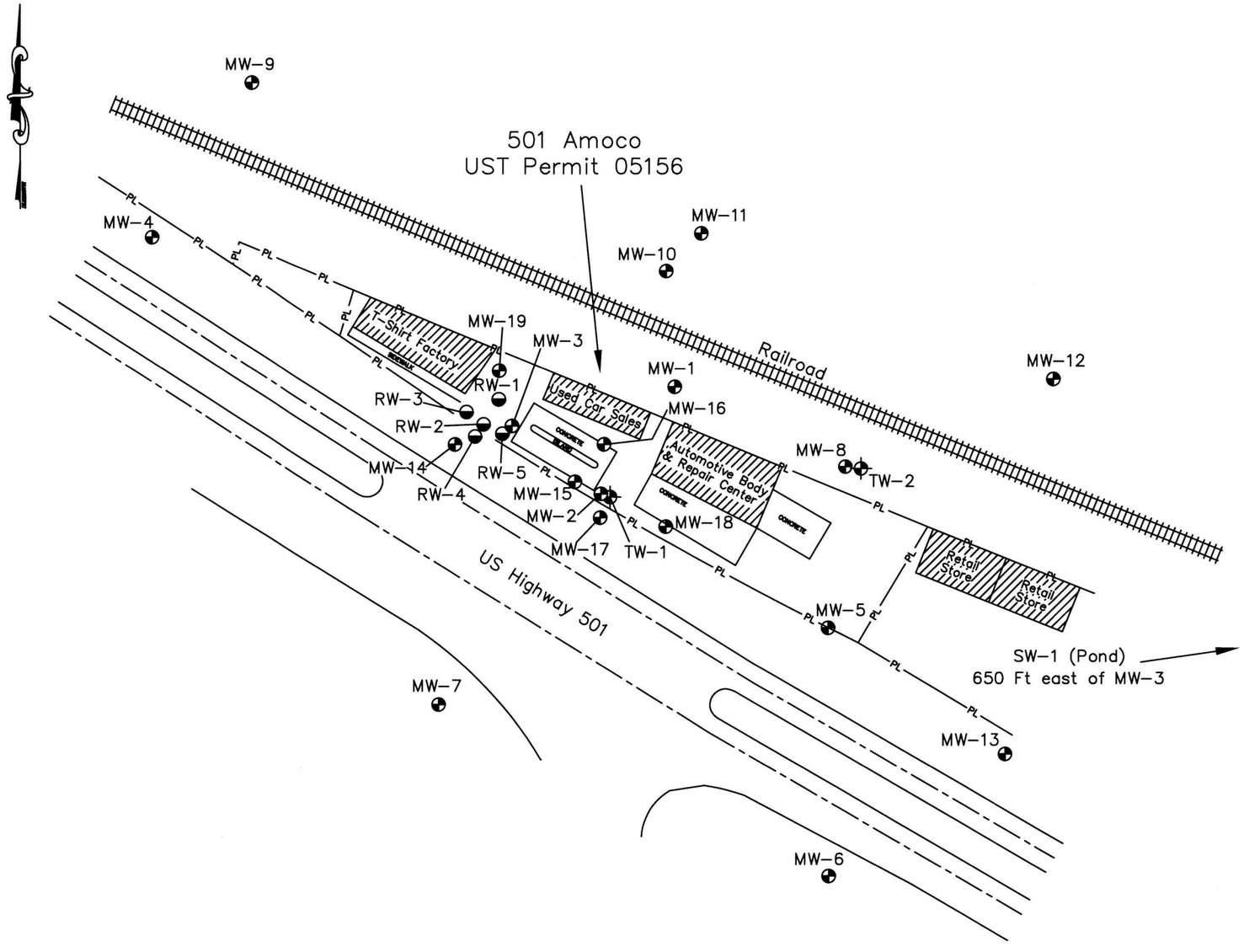
FIGURES



PROJECT:	SHEET TITLE:	
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST Permit# 05156	Figure 1 USGS Topographic Map 7.5 Minute Series 'Myrtle Beach, SC' Quadrangle Scale: 1 to 2,000 Contour Interval = 2 meters	EMERALD, INC. Sumter, SC



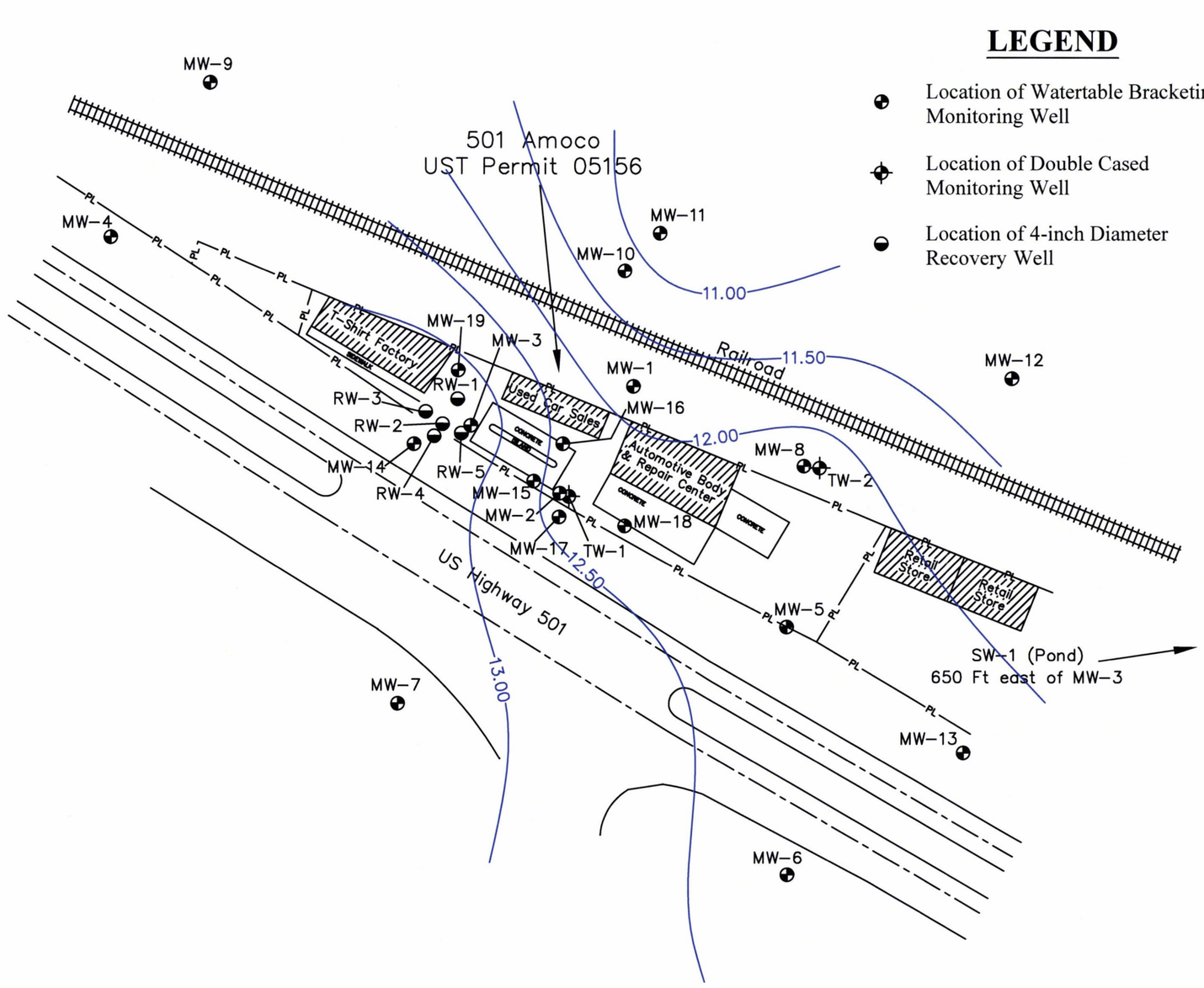
LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

SCALE
1 INCH = 80 FEET
0 80′ 160′

Map based Kleen Sites Geoservices Figure 4

PROJECT: 501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	DATE: 4/18/25	Figure 2 - Site Map
		EMERALD, INC. SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

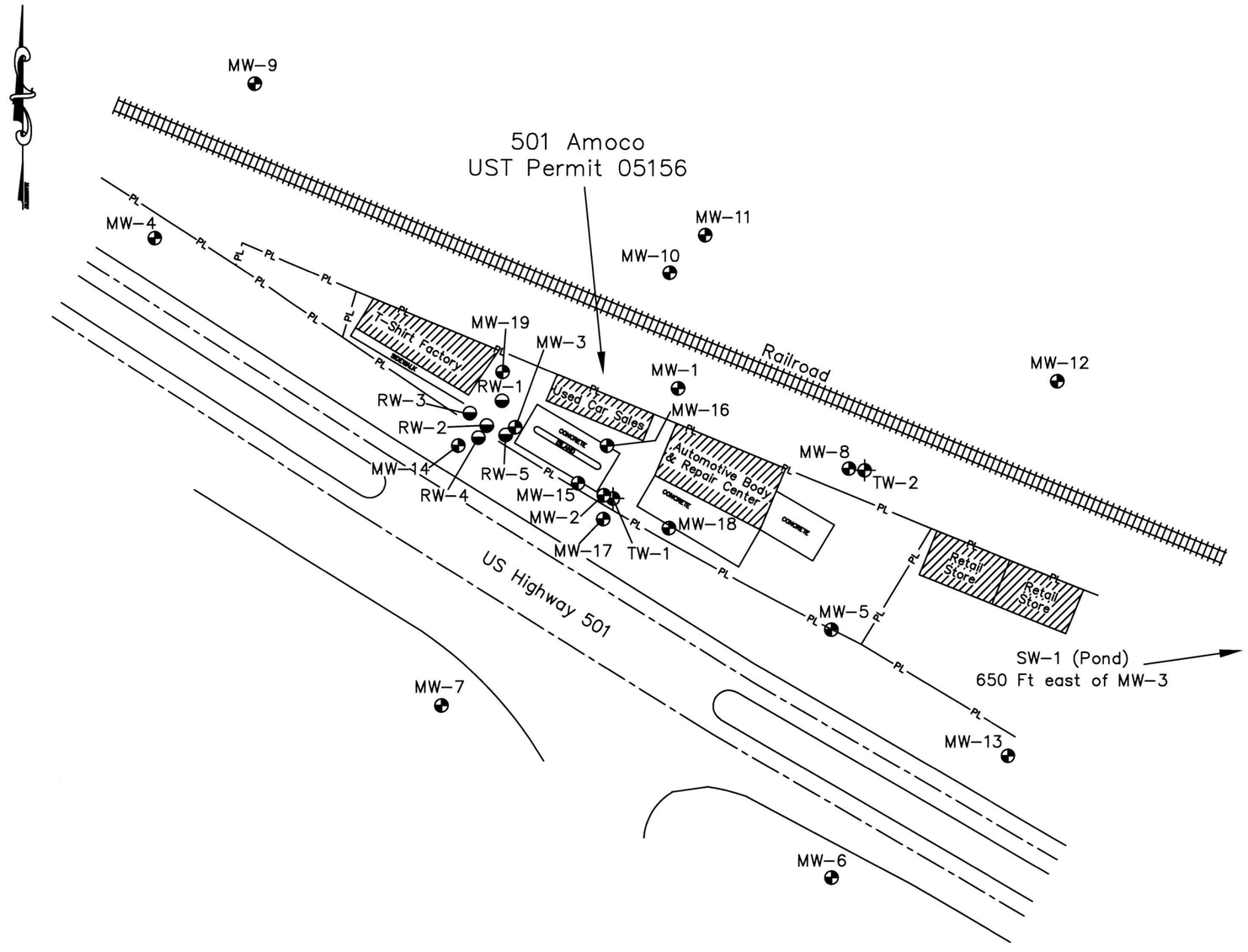
Well Number	Screened Interval (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Top of Casing Elevation (ft)	Groundwater Elevation (ft)
05156 MW-1	3-13	NS	NS	NS	20.87	NS
05156 MW-2	3-13	---	9.15	---	21.44	12.29
05156 MW-3	3-13	8.07	8.47	0.40	21.44	13.27
05156 MW-4	4-14	NL	NL	NL	21.32	NL
05156 MW-5	5-15	NL	NL	NL	20.15	NL
05156 MW-6	5-15	---	8.73	---	20.95	12.22
05156 MW-7	5-15	---	8.80	---	22.16	13.36
05156 MW-8	5-15	---	8.70	---	20.99	12.29
05156 MW-9	5-15	NL	NL	NL	19.62	NL
05156 MW-10	5-15	NL	NL	NL	19.09	NL
05156 MW-11	6-16	---	8.96	---	19.70	10.74
05156 MW-12	4-14	---	7.41	---	18.49	11.08
05156 MW-13	4-14	---	7.88	---	20.13	12.25
05156 MW-14	3-13	---	7.93	---	---	---
05156 MW-15	3-13	---	8.70	---	---	---
05156 MW-16	3-13	---	8.69	---	---	---
05156 MW-17	3-13	---	7.54	---	---	---
05156 MW-18	3-13	---	7.65	---	---	---
05156 MW-19	3-13	---	8.32	---	---	---
05156 TW-1	38-43	---	8.49	---	21.10	12.61
05156 TW-2	33-40	---	8.74	---	20.85	12.11
05156 RW-1	3-13	---	3.14	---	21.15	18.01
05156 RW-2	3-13	7.30	9.60	2.30	21.17	13.27
05156 RW-3	3-13	7.10	9.17	2.07	21.13	13.49
05156 RW-4	3-13	7.84	7.95	0.11	21.15	13.28
05156 RW-5	3-13	7.90	8.37	0.47	21.28	13.26

Notes:
Contour Interval = 0.50 Feet
Depth to Water measured March 3 and 4, 2025
Shallow wells used in contouring
RW-1 not used in contouring
Groundwater Contours Produced using Surfer by Golden Graphics with modifications By Emerald, Inc. Personnel.
NS = Not Sampled
NL = Not Located

SCALE
1 INCH = 80 FEET
0 80' 160'

Map based Kleen Sites Geoservices Figure 4

PROJECT:	DATE:	Figure 3 - Potentiometric Surface Map
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	4/18/25	EMERALD, INC. SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW–1	Bent Standpipe							
05156 MW–2	2,960	78,200	1,530	8,040	<500	661	<500	0.34
05156 MW–3	0.40 ft. of Free Product							
05156 MW–4	Not Located							
05156 MW–5	No Access							
05156 MW–6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW–7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW–8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW–9	Not Located							
05156 MW–10	Not Located							
05156 MW–11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW–12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW–13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW–14	0.36J	1.7	0.74J	3.6	<1.0	<1.0	<1.0	<0.021
05156 MW–15	1,530	47,500	872	5,780	<400	326J	<400	<0.020
05156 MW–16	11,600	112,000	1,760	9,380	<1,000	<1,000	<1,000	1.2
05156 MW–17	1,570	43,700	1,670	11,200	<400	560	<400	<0.020
05156 MW–18	736	41,700	1,750	9,190	<400	468	<400	<0.020
MW–18 DUP	843	45,500	1,810	9,800	<250	395	<250	0.077
05156 MW–19	8,930	103,000	2,070	10,100	<1,000	823J	<1,000	<0.020
05156 TW–1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW–2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW–1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW–1	377	24.8	620	70.6	<5.0	519	<5.0	<0.020
RW–1 DUP	378	26.7	584	70.4	<4.0	483	<4.0	<0.020
05156 RW–2	2.30 ft. of Free Product							
05156 RW–3	2.07 ft. of Free Product							
05156 RW–4	0.11 ft. of Free Product							
05156 RW–5	0.47 ft. of Free Product							

Notes: Samples Collected on March 3 and 4, 2025

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

SCALE
1 INCH = 80 FEET
0 80′ 160′

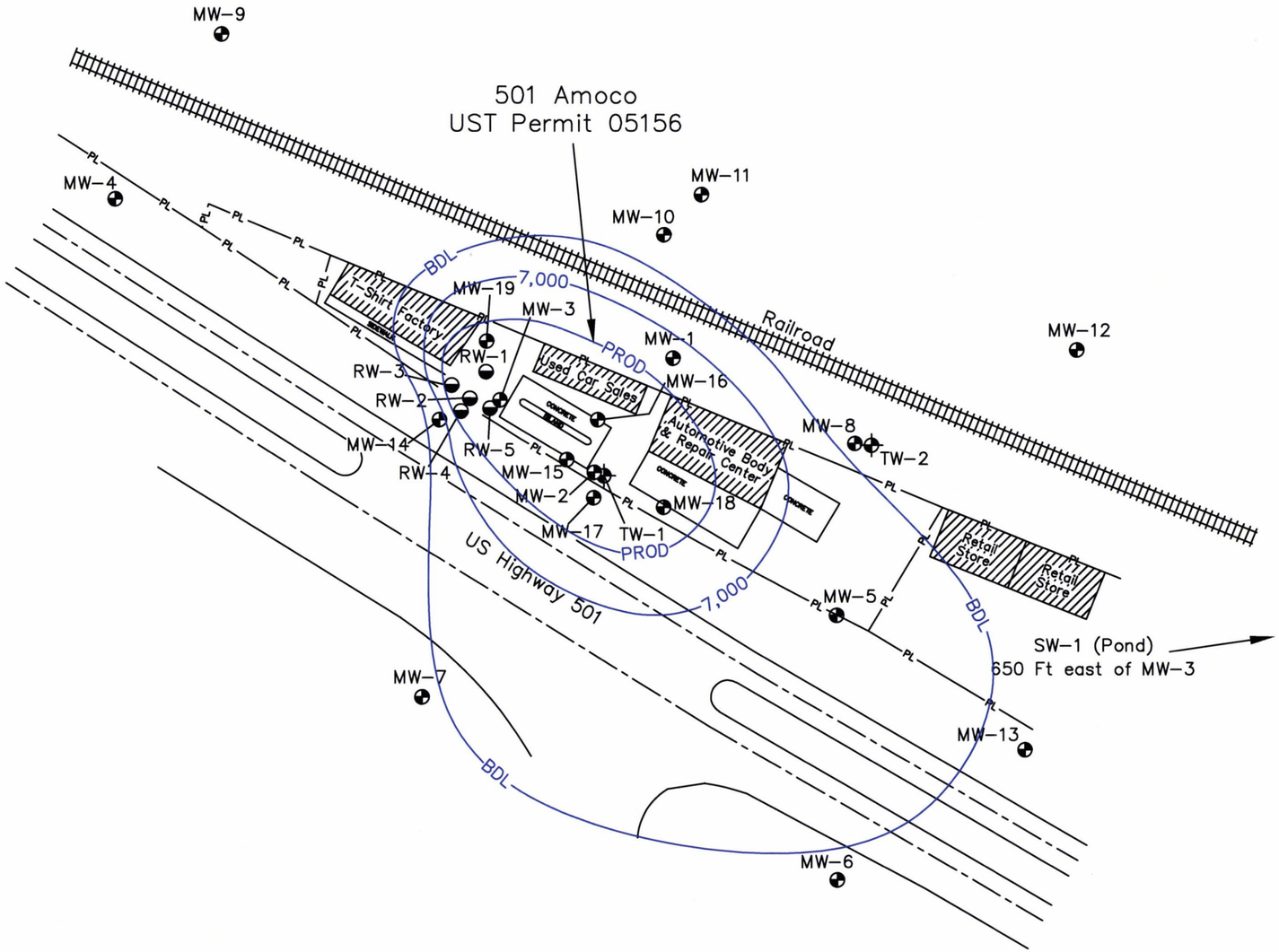
Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
4/18/25

Figure 4 - Groundwater CoC Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,960	78,200	1,530	8,040	<500	661	<500	0.34
05156 MW-3	0.40 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-14	0.36J	1.7	0.74J	3.6	<1.0	<1.0	<1.0	<0.021
05156 MW-15	1,530	47,500	872	5,780	<400	326J	<400	<0.020
05156 MW-16	11,600	112,000	1,760	9,380	<1,000	<1,000	<1,000	1.2
05156 MW-17	1,570	43,700	1,670	11,200	<400	560	<400	<0.020
05156 MW-18	736	41,700	1,750	9,190	<400	468	<400	<0.020
MW-18 DUP	843	45,500	1,810	9,800	<250	395	<250	0.077
05156 MW-19	8,930	103,000	2,070	10,100	<1,000	823J	<1,000	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	377	24.8	620	70.6	<5.0	519	<5.0	<0.020
RW-1 DUP	378	26.7	584	70.4	<4.0	483	<4.0	<0.020
05156 RW-2	2.30 ft. of Free Product							
05156 RW-3	2.07 ft. of Free Product							
05156 RW-4	0.11 ft. of Free Product							
05156 RW-5	0.47 ft. of Free Product							

Notes: Samples Collected on March 3 and 4, 2025

Contour Interval = 7,000 ug/l

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

RW-1 not used in contouring

SCALE
1 INCH = 80 FEET
0 80′ 160′

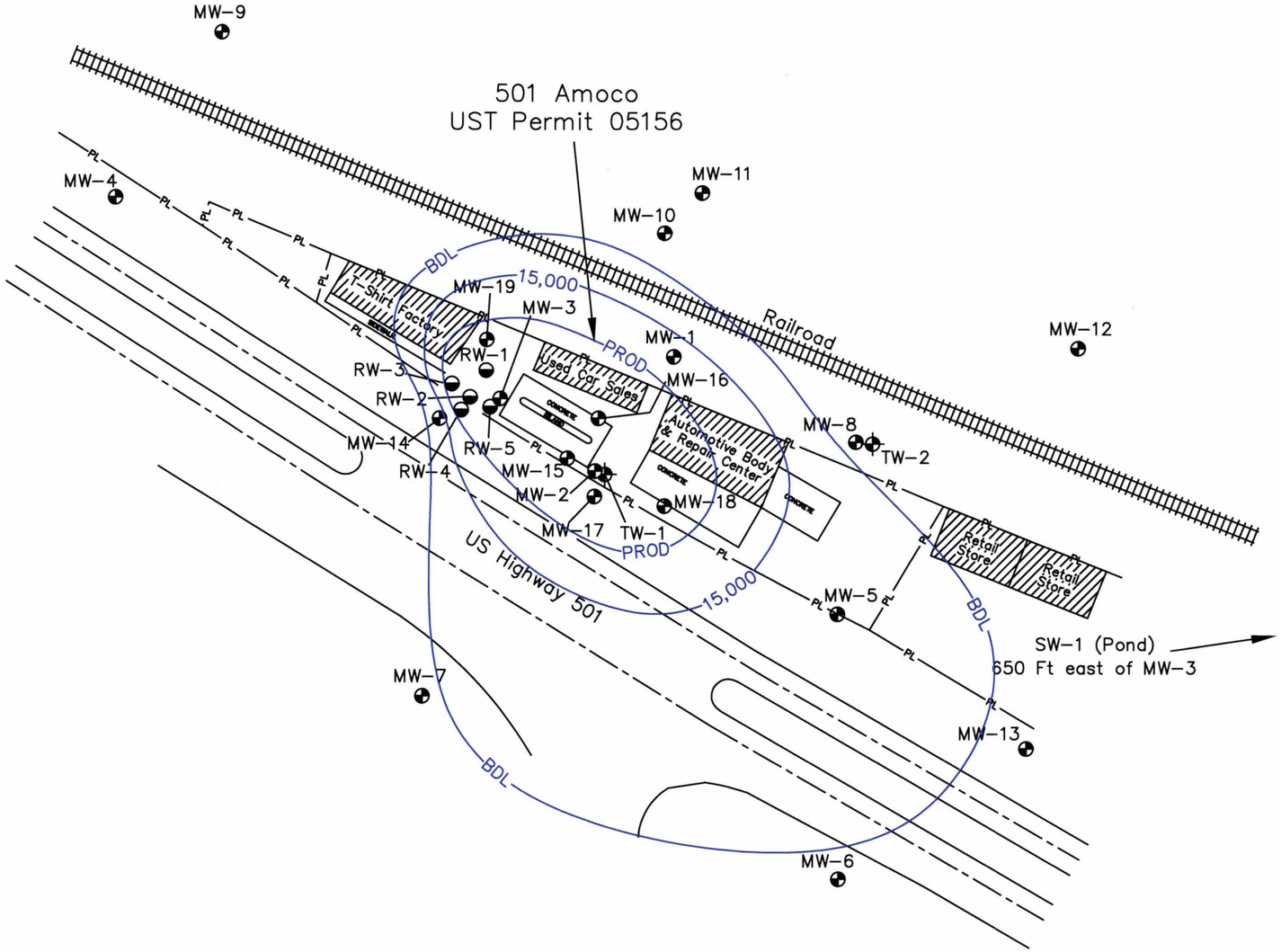
Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
4/18/25

Figure 4A - Benzene Contour Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,960	78,200	1,530	8,040	<500	661	<500	0.34
05156 MW-3	0.40 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-14	0.36J	1.7	0.74J	3.6	<1.0	<1.0	<1.0	<0.021
05156 MW-15	1,530	47,500	872	5,780	<400	326J	<400	<0.020
05156 MW-16	11,600	112,000	1,760	9,380	<1,000	<1,000	<1,000	1.2
05156 MW-17	1,570	43,700	1,670	11,200	<400	560	<400	<0.020
05156 MW-18	736	41,700	1,750	9,190	<400	468	<400	<0.020
MW-18 DUP	843	45,500	1,810	9,800	<250	395	<250	0.077
05156 MW-19	8,930	103,000	2,070	10,100	<1,000	823J	<1,000	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	377	24.8	620	70.6	<5.0	519	<5.0	<0.020
RW-1 DUP	378	26.7	584	70.4	<4.0	483	<4.0	<0.020
05156 RW-2	2.30 ft. of Free Product							
05156 RW-3	2.07 ft. of Free Product							
05156 RW-4	0.11 ft. of Free Product							
05156 RW-5	0.47 ft. of Free Product							

Notes: Samples Collected on March 3 and 4, 2025

Contour Interval = 15,000 ug/l

ug/l = micrograms per liter

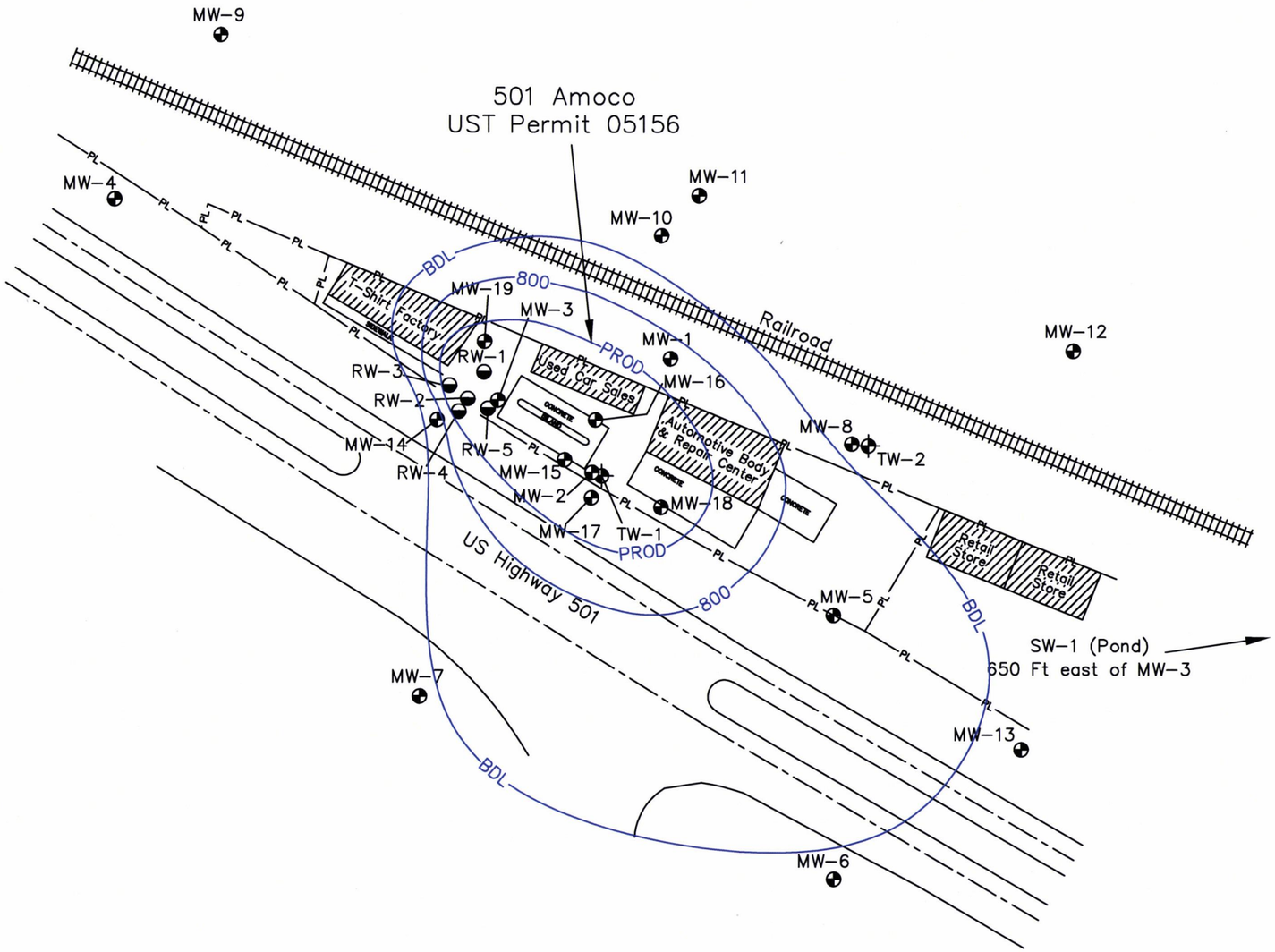
"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

RW-1 not used in contouring

SCALE
1 INCH = 80 FEET
0 80' 160'

Map based Kleen Sites Geoservices Figure 4

PROJECT:	DATE:	Figure 4B - Toluene Contour Map
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	4/18/25	EMERALD, INC. SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,960	78,200	1,530	8,040	<500	661	<500	0.34
05156 MW-3	0.40 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-14	0.36J	1.7	0.74J	3.6	<1.0	<1.0	<1.0	<0.021
05156 MW-15	1,530	47,500	872	5,780	<400	326J	<400	<0.020
05156 MW-16	11,600	112,000	1,760	9,380	<1,000	<1,000	<1,000	1.2
05156 MW-17	1,570	43,700	1,670	11,200	<400	560	<400	<0.020
05156 MW-18	736	41,700	1,750	9,190	<400	468	<400	<0.020
MW-18 DUP	843	45,500	1,810	9,800	<250	395	<250	0.077
05156 MW-19	8,930	103,000	2,070	10,100	<1,000	823J	<1,000	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	377	24.8	620	70.6	<5.0	519	<5.0	<0.020
RW-1 DUP	378	26.7	584	70.4	<4.0	483	<4.0	<0.020
05156 RW-2	2.30 ft. of Free Product							
05156 RW-3	2.07 ft. of Free Product							
05156 RW-4	0.11 ft. of Free Product							
05156 RW-5	0.47 ft. of Free Product							

Notes: Samples Collected on March 3 and 4, 2025

Contour Interval = 800 ug/l

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

RW-1 not used in contouring

SCALE
1 INCH = 80 FEET
0 80' 160'

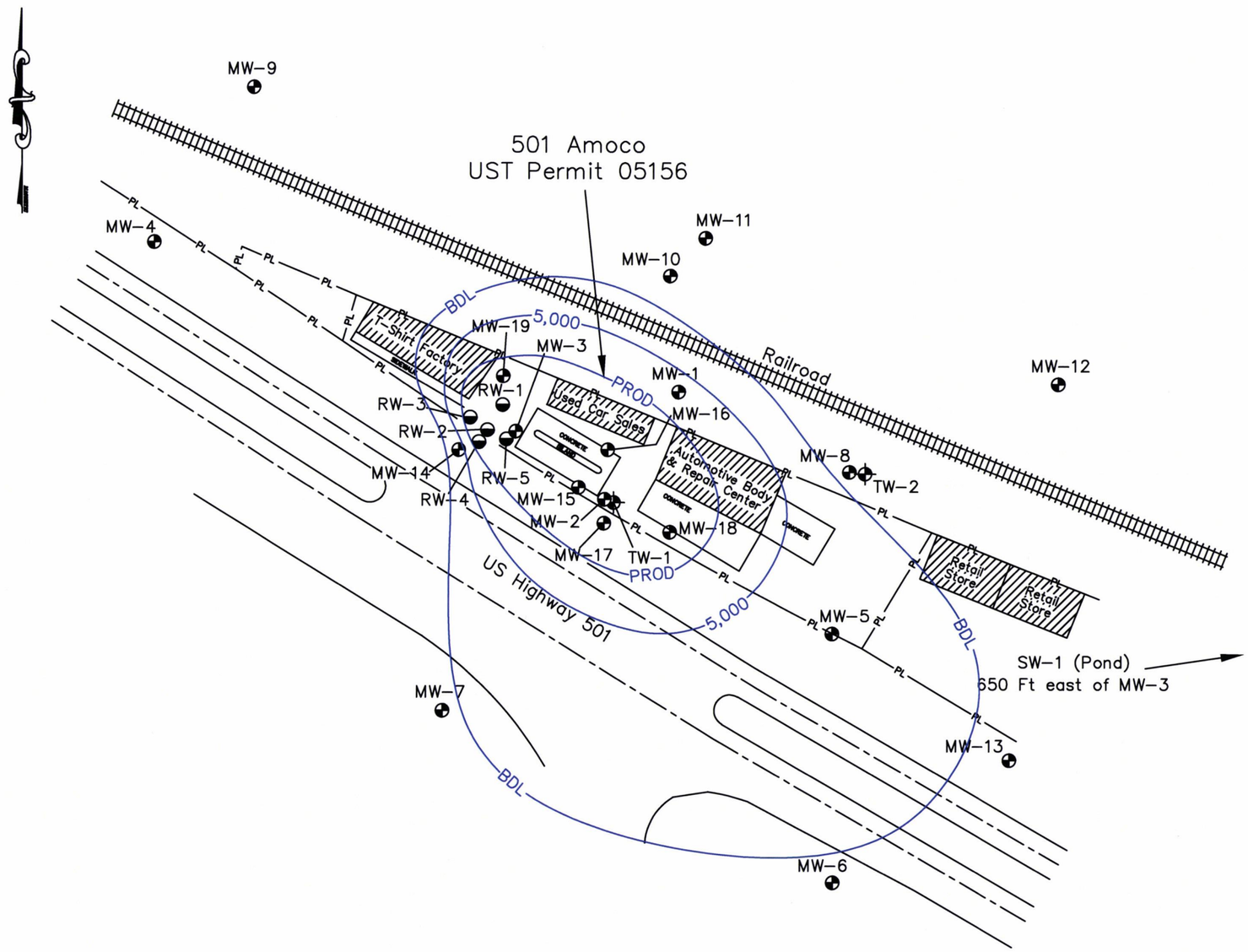
Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
4/18/25

Figure 4C - Ethylbenzene Contour Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,960	78,200	1,530	8,040	<500	661	<500	0.34
05156 MW-3	0.40 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-14	0.36J	1.7	0.74J	3.6	<1.0	<1.0	<1.0	<0.021
05156 MW-15	1,530	47,500	872	5,780	<400	326J	<400	<0.020
05156 MW-16	11,600	112,000	1,760	9,380	<1,000	<1,000	<1,000	1.2
05156 MW-17	1,570	43,700	1,670	11,200	<400	560	<400	<0.020
05156 MW-18	736	41,700	1,750	9,190	<400	468	<400	<0.020
MW-18 DUP	843	45,500	1,810	9,800	<250	395	<250	0.077
05156 MW-19	8,930	103,000	2,070	10,100	<1,000	823J	<1,000	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	377	24.8	620	70.6	<5.0	519	<5.0	<0.020
RW-1 DUP	378	26.7	584	70.4	<4.0	483	<4.0	<0.020
05156 RW-2	2.30 ft. of Free Product							
05156 RW-3	2.07 ft. of Free Product							
05156 RW-4	0.11 ft. of Free Product							
05156 RW-5	0.47 ft. of Free Product							

Notes: Samples Collected on March 3 and 4, 2025

Contour Interval = 5,000 ug/l

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

RW-1 not used in contouring

SCALE
1 INCH = 80 FEET
0 80' 160'

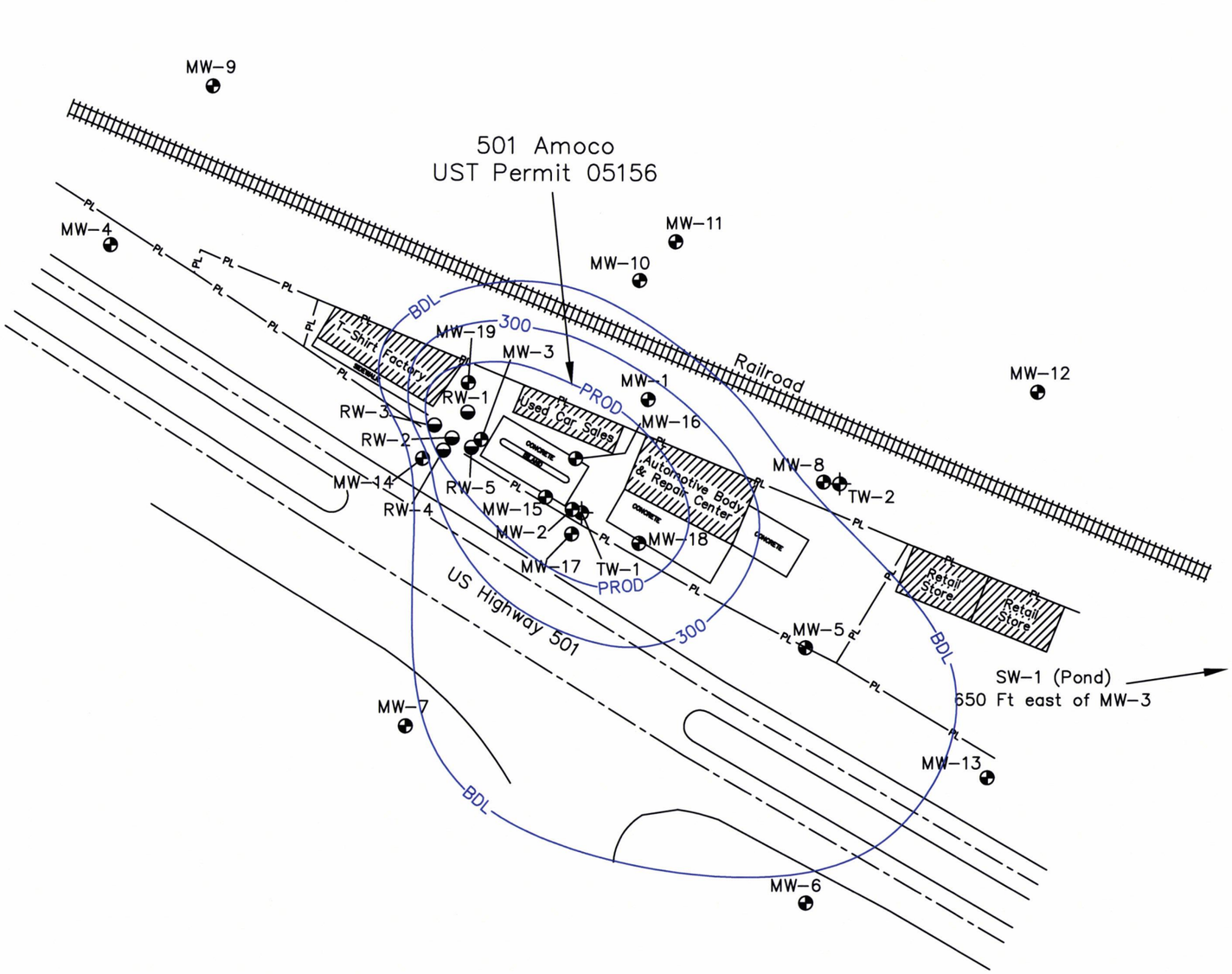
Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
4/18/25

Figure 4D - Total Xylenes Contour Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,960	78,200	1,530	8,040	<500	661	<500	0.34
05156 MW-3	0.40 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-14	0.36J	1.7	0.74J	3.6	<1.0	<1.0	<1.0	<0.021
05156 MW-15	1,530	47,500	872	5,780	<400	326J	<400	<0.020
05156 MW-16	11,600	112,000	1,760	9,380	<1,000	<1,000	<1,000	1.2
05156 MW-17	1,570	43,700	1,670	11,200	<400	560	<400	<0.020
05156 MW-18	736	41,700	1,750	9,190	<400	468	<400	<0.020
MW-18 DUP	843	45,500	1,810	9,800	<250	395	<250	0.077
05156 MW-19	8,930	103,000	2,070	10,100	<1,000	823J	<1,000	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	377	24.8	620	70.6	<5.0	519	<5.0	<0.020
RW-1 DUP	378	26.7	584	70.4	<4.0	483	<4.0	<0.020
05156 RW-2	2.30 ft. of Free Product							
05156 RW-3	2.07 ft. of Free Product							
05156 RW-4	0.11 ft. of Free Product							
05156 RW-5	0.47 ft. of Free Product							

Notes: Samples Collected on March 3 and 4, 2025

Contour Interval = 300 ug/l

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

RW-1 not used in contouring

SCALE
1 INCH = 80 FEET
0 80' 160'

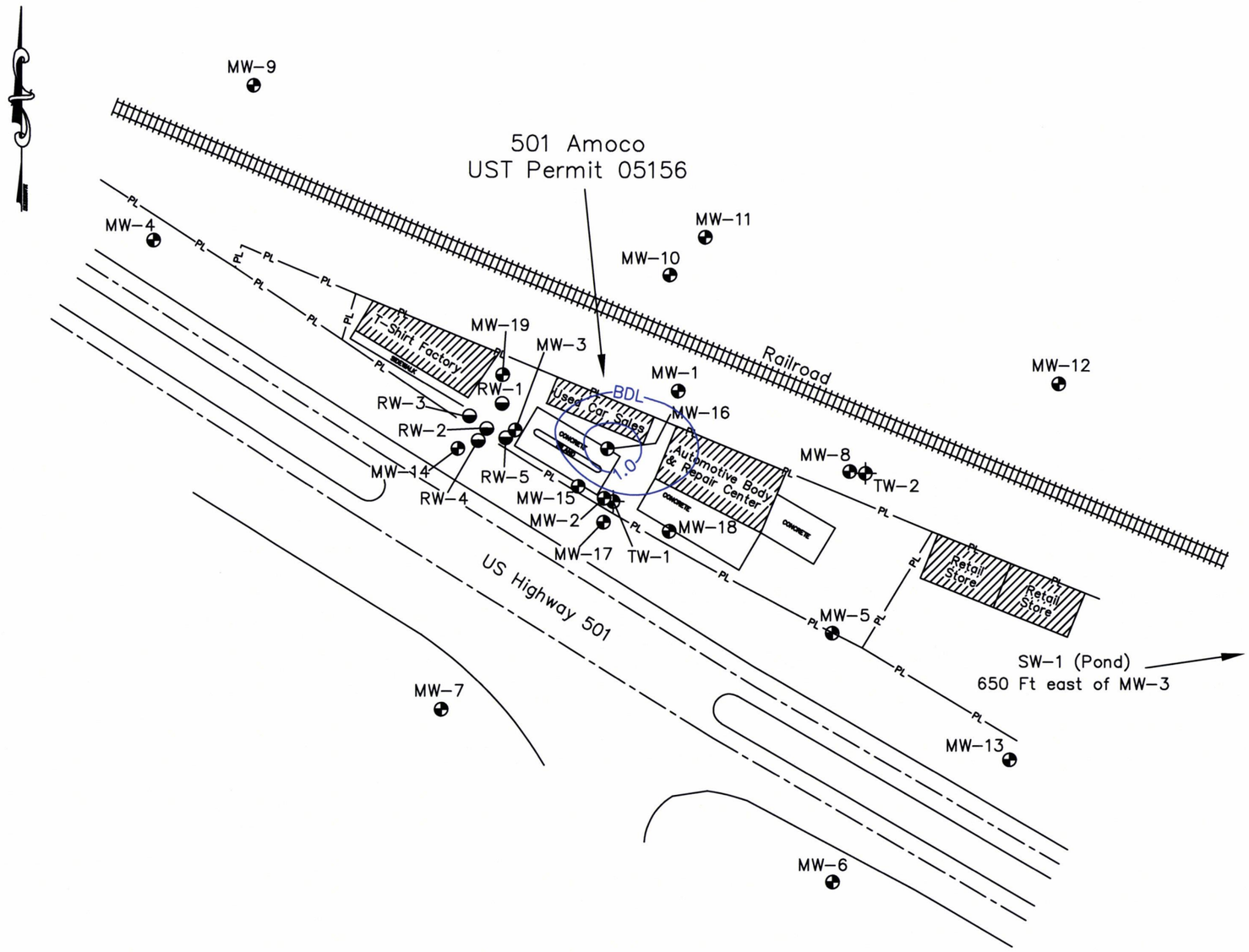
Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
4/18/25

Figure 4E - Naphthalene Contour Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,960	78,200	1,530	8,040	<500	661	<500	0.34
05156 MW-3	0.40 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-14	0.36J	1.7	0.74J	3.6	<1.0	<1.0	<1.0	<0.021
05156 MW-15	1,530	47,500	872	5,780	<400	326J	<400	<0.020
05156 MW-16	11,600	112,000	1,760	9,380	<1,000	<1,000	<1,000	1.2
05156 MW-17	1,570	43,700	1,670	11,200	<400	560	<400	<0.020
05156 MW-18	736	41,700	1,750	9,190	<400	468	<400	<0.020
MW-18 DUP	843	45,500	1,810	9,800	<250	395	<250	0.077
05156 MW-19	8,930	103,000	2,070	10,100	<1,000	823J	<1,000	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	377	24.8	620	70.6	<5.0	519	<5.0	<0.020
RW-1 DUP	378	26.7	584	70.4	<4.0	483	<4.0	<0.020
05156 RW-2	2.30 ft. of Free Product							
05156 RW-3	2.07 ft. of Free Product							
05156 RW-4	0.11 ft. of Free Product							
05156 RW-5	0.47 ft. of Free Product							

Notes: Samples Collected on March 3 and 4, 2025

Contour Interval = 1.000 ug/l

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

RW-1 not used in contouring

SCALE
1 INCH = 80 FEET
0 80' 160'

Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
4/18/25

Figure 4F - EDB Contour Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA

APPENDIX A

WELL LOGS, 1903 FORMS
AND
WELL DEVELOPMENT

EMERALD, INC.

FIELD ACTIVITY LOG – MONITORING WELL INSTALLATION

Site: 501 Amoco
Date: 1/28/25
Emerald Personnel: Chad McClary
Driller: VERCO-J. Chiorazzi B01790

LOCATION	DEPTH	PID	SOIL DESCRIPTION	MOISTURE CONTENT	COMMENTS
MW-14	0'-5'	5.1	Brown, Fine to Medium Sandy CLAY	Wet	Asphalt at surface. No Petroleum Odor
	5'-10'	521	Brown, Fine to Medium Sandy CLAY	Wet	Petroleum Odor
	10'-13'	12.2	Brown, Fine to Medium Sandy SILT	Wet	Petroleum Odor
			Well drilled to 13.0 ft and completed with 10.0 ft screen		
MW-15	0'-5'	212	Brown, Silty Fine to Medium Sandy CLAY	Wet	Asphalt at surface. Petroleum Odor
	5'-10'	123	Brown, Fine to Medium Sandy CLAY	Wet	Petroleum Odor
	10'-13'	1,277	Brown, Fine to Medium Sandy SILT	Wet	Strong Petroleum Odor
			Well drilled to 13.0 ft and completed with 10.0 ft screen		
MW-16	0'-5'	909	Brown, Silty Fine to Medium Sandy CLAY	Wet	Asphalt at surface. Petroleum Odor
	5'-10'	2,406	Brown, Fine to Medium Sandy CLAY	Wet	Strong Petroleum Odor
	10'-13'	1,638	Brown, Fine to Medium Sandy CLAY	Wet	Strong Petroleum Odor
			Well drilled to 13.0 ft and completed with 10.0 ft screen		

EMERALD, INC.

FIELD ACTIVITY LOG – MONITORING WELL INSTALLATION

Site: 501 Amoco
Date: 1/28/25
Emerald Personnel: Chad McClary
Driller: VERCO-J. Chiorazzi B01790

LOCATION	DEPTH	PID	SOIL DESCRIPTION	MOISTURE CONTENT	COMMENTS
MW-17	0'-5'	1,530	Brown, Fine to Medium Sandy CLAY	Damp	Asphalt at surface. Strong Petroleum Odor
	5'-10'	1,450	Brown, Fine to Medium Sandy CLAY	Damp	Strong Petroleum Odor
	10'-13'	86	Brown, Fine to Medium Sandy SILT	Wet	Petroleum Odor
			Well drilled to 13.0 ft and completed with 10.0 ft screen		
MW-18	0'-5'	122	Brown, Fine to Medium Sandy CLAY	Moist	Asphalt at surface. Petroleum Odor
	5'-10'	775.6	Brown, Fine to Medium Sandy CLAY	Damp	Petroleum Odor
	10'-13'	65	Brown, Silty CLAY	Wet	Petroleum Odor
			Well drilled to 13.0 ft and completed with 10.0 ft screen		
MW-19	0'-5'	219.1	Brown, Silty Fine to Medium Sandy CLAY	Wet	Asphalt at surface. Petroleum Odor
	5'-10'	1,918	Brown, Fine to Medium Sandy SILT	Wet	Strong Petroleum Odor
	10'-13'	1,839	Brown, Fine to Medium Sandy SILT	Wet	Strong Petroleum Odor
			Well drilled to 13.0 ft and completed with 10.0 ft screen		

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Todd Investment Properties LLC (last) (first)
Address: 1121 Simonton Dr
City: Watkinsville State: GA Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** Horry
Name: 501 Amoco
Street Address: 1432 Hwy 501
City: Myrtle Beach Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 05156 **PUBLIC SYSTEM NUMBER:** MW-14

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
See Geologist's Log	13	13
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UST#05156, UMW Permit 30023

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 13 ft. Date Started: 1/28/25 Date Completed: 1/28/25

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 3 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: 0.010 Length: 10'
Set Between: 3 ft. and 13 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 2 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi **CERT. NO.:** 1790
Address: (Print) 2047 Industrial Blvd, Lexington, SC 29072
Level: A B C D (circle one) ✓
Telephone No.: 8034295001 Fax No.:

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: _____ (Well Driller) Date: 2/24/25

If D Level Driller, provide supervising driller's name:

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Todd Investment Properties LLC (last) (first)
Address: 1121 Simonton Dr
City: Watkinsville State: GA Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** Horry
Name: 501 Amoco
Street Address: 1432 Hwy 501
City: Myrtle Beach Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 05156 **PUBLIC SYSTEM NUMBER:** MW-15

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
See Geologist's Log	13	13
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UST#05156, UMW Permit 30023

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 13 ft. Date Started: 1/28/25 Date Completed: 1/28/25

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 3 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: 0.010 Length: 10'
Set Between: 3 ft. and 13 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 2 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe _____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi **CERT. NO.:** 1790
Address: (Print) 2047 Industrial Blvd, Lexington, SC 29072
Level: A B C D (circle one) ✓
Telephone No.: 8034295001 Fax No.:

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: _____ (Well Driller) Date: 2/24/25

If D Level Driller, provide supervising driller's name:

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Todd Investment Properties LLC (last) (first)
Address: 1121 Simonton Dr
City: Watkinsville State: GA Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: COUNTY: Horry
Name: 501 Amoco
Street Address: 1432 Hwy 501
City: Myrtle Beach Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 05156 **PUBLIC SYSTEM NUMBER:** MW-16

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
See Geologist's Log	13	13
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UST#05156, UMW Permit 30023

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 13 ft. Date Started: 1/28/25 Date Completed: 1/28/25

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 3 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: 0.010 Length: 10'
Set Between: 3 ft. and 13 ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 2 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi **CERT. NO.:** 1790
Address: (Print) 2047 Industrial Blvd, Lexington, SC 29072
Level: A B ✓ C D (circle one)
Telephone No.: 8034295001 Fax No.:

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: _____ (Well Driller) Date: 2/24/25

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Todd Investment Properties LLC (last) (first)
Address: 1121 Simonton Dr
City: Watkinsville State: GA Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** Horry
Name: 501 Amoco
Street Address: 1432 Hwy 501
City: Myrtle Beach Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 05156 **PUBLIC SYSTEM NUMBER:** MW-17

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
See Geologist's Log	13	13
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UST#05156, UMW Permit 30023

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 13 ft. Date Started: 1/28/25 Date Completed: 1/28/25

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 3 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: 0.010 Length: 10'
Set Between: 3 ft. and 13 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 2 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi **CERT. NO.:** 1790
Address: (Print) 2047 Industrial Blvd, Lexington, SC 29072
Level: A B ✓ C D (circle one)
Telephone No.: 8034295001 Fax No.:

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: _____ Well Driller Date: 2/24/25

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Todd Investment Properties LLC (last) (first)
Address: 1121 Simonton Dr
City: Watkinsville State: GA Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** Horry
Name: 501 Amoco
Street Address: 1432 Hwy 501
City: Myrtle Beach Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 05156 **PUBLIC SYSTEM NUMBER:** MW-18

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
See Geologist's Log	13	13
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UST#05156, UMW Permit 30023

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 13 ft. Date Started: 1/28/25 Date Completed: 1/28/25

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 3 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: 0.010 Length: 10'
Set Between: 3 ft. and 13 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 2 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi **CERT. NO.:** 1790
Address: (Print) 2047 Industrial Blvd, Lexington, SC 29072
Level: A B ✔ C D (circle one)
Telephone No.: 8034295001 Fax No.:

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: _____ (Well Driller) Date: 2/24/25

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: Todd Investment Properties LLC (last) (first)
Address: 1121 Simonton Dr
City: Watkinsville State: GA Zip:
Telephone: Work: Home:

2. LOCATION OF WELL: **COUNTY:** Horry
Name: 501 Amoco
Street Address: 1432 Hwy 501
City: Myrtle Beach Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: 05156 **PUBLIC SYSTEM NUMBER:** MW-19

4. ABANDONMENT: ☐ Yes ☑ No
Give Details Below
Grouted Depth: from _____ ft. to _____ ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
See Geologist's Log	13	13
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)		

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☐ Bored ☐ Dug ☐ Air Rotary ☐ Driven ☐ Cable tool ☐ Other

7. PERMIT NUMBER: UST#05156, UMW Permit 30023

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☐ Test Well ☑ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 13 ft. Date Started: 1/28/25 Date Completed: 1/28/25

10. CASING: ☑ Threaded ☐ Welded
Diam.: 2"
Type: ☑ PVC ☐ Galvanized ☐ Steel ☐ Other
2 in. to 3 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: PVC Diam.: 2"
Slot/Gauge: 0.010 Length: 10'
Set Between: 3 ft. and 13 ft. **NOTE: MULTIPLE SCREENS**
_____ ft. and _____ ft. **USE SECOND SHEET**
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL _____ ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☐ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☐ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☑ Yes ☐ No
Installed from 13 ft. to 2 ft.
Effective size #2 Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 1 ft. to 0 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date installed: _____ Not installed ☐
Mfr. Name: _____ Model No.: _____
H.P._____ Volts_____ Length of drop pipe_____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine ☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: Jason Chiorazzi **CERT. NO.:** 1790
Address: (Print) 2047 Industrial Blvd, Lexington, SC 29072
Level: A B ✓ C D (circle one)
Telephone No.: 8034295001 Fax No.:

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: _____ Well Driller Date: 2/24/25

If D Level Driller, provide supervising driller's name:

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Well Development Data Verification Form
Underground Storage Tank Management Division

Facility Name: 501 Amoco | Site ID#: 05156

Date: 1/29/25 | Field Personnel: B. Snowden

Drilling Company: VERCO | Driller's Name: Jason Chiorazzi

Driller's Certification Number: B 01790 | Weather Conditions: Sunny, 66-74 °F

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.	12B100627	serial no.	12B100627	serial no.	02-0586	serial no.	201309052
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# MW-14 | Well Casing Diameter 2 inches | Borehole Diameter 8 inches

Depth to Ground Water (DGW) 7.45 ft. | Screen Length/Slot Size 10.0 ft./ 0.010 in.

Total Well Depth (TWD) 13.00 ft. | Screen Interval 3.0 ft. to 13.0 ft.

Length of water column (LWC=TWD-D 5.55 ft. | Type of Drilling Fluids used: N/A

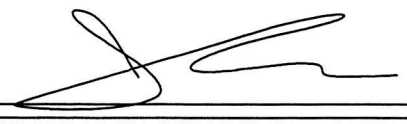
Total Gallons of Water Removed: 5 gals. | Drilling Fluids recovered N/A gals.

Time (military)	1030	1040	1050	1053	1056		
pH (s.u.)*	6.25	6.32	6.30	6.29	6.29		
Specific Conductivity (mmhos/cm)*	134.9	147.0	145.2	147.3	147.2		
Water Temperature (C)*	21.0	20.3	20.6	20.5	20.5		
Turbidity (NTU) *	>1,111	>1,111	622	487	311.0		
Physical Characteristics (color/odor)	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy		
Water Level Measurement (ft) from TOC	7.45	Dry	Dry	Dry	Dry		
Total Well Depth (ft) from TOC	13	13	13	13	13		
Cumulative Gallons Removed	0	1	3	4	5		

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process:

Well went dry numerous times. Very slow to recharge. Surged prior to development.

Driller Signature:  Date: 1/29/25

Well Development Data Verification Form
Underground Storage Tank Management Division

Facility Name: 501 Amoco | Site ID#: 05156

Date: 1/29/25 | Field Personnel: B. Snowden

Drilling Company: VERCO | Driller's Name: Jason Chiorazzi

Driller's Certification Number: B 01790 | Weather Conditions: Sunny, 66-74 °F

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.	12B100627	serial no.	12B100627	serial no.	02-0586	serial no.	201309052
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# MW-15 | Well Casing Diameter 2 inches | Borehole Diameter 8 inches

Depth to Ground Water (DGW) 8.24 ft. | Screen Length/Slot Size 10.0 ft./ 0.010 in.

Total Well Depth (TWD) 13.00 ft. | Screen Interval 3.0 ft. to 13.0 ft.

Length of water column (LWC=TWD-D 4.76 ft. | Type of Drilling Fluids used: N/A

Total Gallons of Water Removed: 5 gals. | Drilling Fluids recovered N/A gals.

Time (military)	1110	1115	1120	1123	1128		
pH (s.u.)*	6.03	6.00	5.88	5.89	5.88		
Specific Conductivity (mmhos/cm)*	134.5	130.2	129.7	128.8	128.6		
Water Temperature (C)*	21.0	20.3	20.6	20.5	20.5		
Turbidity (NTU) *	>1,111	>1,111	>1,111	852.4	536.7		
Physical Characteristics (color/odor)	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy		
Water Level Measurement (ft) from TOC	8.24	Dry	Dry	Dry	Dry		
Total Well Depth (ft) from TOC	13	13	13	13	13		
Cumulative Gallons Removed	0	1	3	4	5		

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process:
Well went dry numerous times. Very slow to recharge. Surged prior to development.

Driller Signature:  Date: 1/29/25

Well Development Data Verification Form
Underground Storage Tank Management Division

Facility Name: 501 Amoco | Site ID#: 05156

Date: 1/29/25 | Field Personnel: B. Snowden

Drilling Company: VERCO | Driller's Name: Jason Chiorazzi

Driller's Certification Number: B 01790 | Weather Conditions: Sunny, 66-74 °F

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.	12B100627	serial no.	12B100627	serial no.	02-0586	serial no.	201309052
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# MW-16 | Well Casing Diameter 2 inches | Borehole Diameter 8 inches

Depth to Ground Water (DGW) 8.15 ft. | Screen Length/Slot Size 10.0 ft./ 0.010 in.

Total Well Depth (TWD) 13.00 ft. | Screen Interval 3.0 ft. to 13.0 ft.

Length of water column (LWC=TWD-D 4.85 ft. | Type of Drilling Fluids used: N/A

Total Gallons of Water Removed: 5 gals. | Drilling Fluids recovered N/A gals.

Time (military)	1135	1140	1145	1150	1200		
pH (s.u.)*	5.89	5.92	5.90	5.91	5.93		
Specific Conductivity (mmhos/cm)*	104.4	104.0	103.8	103.7	103.9		
Water Temperature (C)*	19.6	19.6	19.8	19.7	19.8		
Turbidity (NTU) *	>1,111	>1,111	952.2	657.8	433.7		
Physical Characteristics (color/odor)	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy		
Water Level Measurement (ft) from TOC	8.15	Dry	Dry	Dry	Dry		
Total Well Depth (ft) from TOC	13	13	13	13	13		
Cumulative Gallons Removed	0	1	3	4	5		

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process:

Well went dry numerous times. Very slow to recharge. Surged prior to development.

Driller Signature:  Date: 1/29/25

Well Development Data Verification Form
Underground Storage Tank Management Division

Facility Name: 501 Amoco | Site ID#: 05156

Date: 1/29/25 | Field Personnel: B. Snowden

Drilling Company: VERCO | Driller's Name: Jason Chiorazzi

Driller's Certification Number: B 01790 | Weather Conditions: Sunny, 66-74 °F

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.	12B100627	serial no.	12B100627	serial no.	02-0586	serial no.	201309052
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# MW-17 | Well Casing Diameter 2 inches | Borehole Diameter 8 inches

Depth to Ground Water (DGW) 7.12 ft. | Screen Length/Slot Size 10.0 ft./ 0.010 in.

Total Well Depth (TWD) 13.00 ft. | Screen Interval 3.0 ft. to 13.0 ft.

Length of water column (LWC=TWD-D 5.88 ft. | Type of Drilling Fluids used: N/A

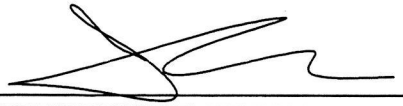
Total Gallons of Water Removed: 4 gals. | Drilling Fluids recovered N/A gals.

Time (military)	1250	1255	1330	1335			
pH (s.u.)*	6.02	5.99	5.97	5.94			
Specific Conductivity (mmhos/cm)*	127.1	124.5	122.1	119.8			
Water Temperature (C)*	23.8	21.1	21.4	20.8			
Turbidity (NTU) *	>1,111	>1,111	874.1	558.8			
Physical Characteristics (color/odor)	Cloudy	Cloudy	Cloudy	Cloudy			
Water Level Measurement (ft) from TOC	7.12	Dry	Dry	Dry			
Total Well Depth (ft) from TOC	13	13	13	13			
Cumulative Gallons Removed	0	1	3	4			

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process:

Well went dry numerous times. Very slow to recharge. Surged prior to development.

Driller Signature:  Date: 1/29/25

Well Development Data Verification Form
Underground Storage Tank Management Division

Facility Name: 501 Amoco | Site ID#: 05156

Date: 1/29/25 | Field Personnel: B. Snowden

Drilling Company: VERCO | Driller's Name: Jason Chiorazzi

Driller's Certification Number: B 01790 | Weather Conditions: Sunny, 66-74 °F

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.	12B100627	serial no.	12B100627	serial no.	02-0586	serial no.	201309052
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# MW-18 | Well Casing Diameter 2 inches | Borehole Diameter 8 inches

Depth to Ground Water (DGW) 7.12 ft. | Screen Length/Slot Size 10.0 ft./ 0.010 in.

Total Well Depth (TWD) 13.00 ft. | Screen Interval 3.0 ft. to 13.0 ft.

Length of water column (LWC=TWD-D 5.88 ft. | Type of Drilling Fluids used: N/A

Total Gallons of Water Removed: 6 gals. | Drilling Fluids recovered N/A gals.

Time (military)	1400	1405	1410	1415	1420	1425	
pH (s.u.)*	6.09	6.07	6.01	5.92	5.93	5.92	
Specific Conductivity (mmhos/cm)*	145.1	140.8	137.7	135.9	135.1	134.1	
Water Temperature (C)*	21.2	21.1	20.8	20.8	20.6	20.5	
Turbidity (NTU) *	>1,111	>1,111	>1,111	847.9	667.1	411.8	
Physical Characteristics (color/odor)	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	
Water Level Measurement (ft) from TOC	7.12	Dry	Dry	Dry	Dry	Dry	
Total Well Depth (ft) from TOC	13	13	13	13	13	13	
Cumulative Gallons Removed	0	1	3	4	5	6	

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process:

Well went dry numerous times. Very slow to recharge. Surged prior to development.

Driller Signature:  Date: 1/29/25

Well Development Data Verification Form
Underground Storage Tank Management Division

Facility Name: 501 Amoco | Site ID#: 05156

Date: 1/29/25 | Field Personnel: B. Snowden

Drilling Company: VERCO | Driller's Name: Jason Chiorazzi

Driller's Certification Number: B 01790 | Weather Conditions: Sunny, 66-74 °F

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.	12B100627	serial no.	12B100627	serial no.	02-0586	serial no.	201309052
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# MW-19 | Well Casing Diameter 2 inches | Borehole Diameter 8 inches

Depth to Ground Water (DGW) 7.85 ft. | Screen Length/Slot Size 10.0 ft./ 0.010 in.

Total Well Depth (TWD) 13.00 ft. | Screen Interval 3.0 ft. to 13.0 ft.

Length of water column (LWC=TWD-D 5.15 ft. | Type of Drilling Fluids used: N/A

Total Gallons of Water Removed: 5 gals. | Drilling Fluids recovered N/A gals.

Time (military)	1500	1505	1510	1515	1525		
pH (s.u.)*	6.12	6.10	6.09	6.08	6.06		
Specific Conductivity (mmhos/cm)*	124.6	155.7	162.1	168.4	167.8		
Water Temperature (C)*	19.6	19.5	19.5	19.7	19.8		
Turbidity (NTU) *	>1,111	>1,111	>1,111	558.7	684.9		
Physical Characteristics (color/odor)	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy		
Water Level Measurement (ft) from TOC	7.85	Dry	Dry	Dry	Dry		
Total Well Depth (ft) from TOC	13	13	13	13	13		
Cumulative Gallons Removed	0	1	3	4	5		

* Development is completed once groundwater turbidity is ≤ 10 NTU and all parameters are ± 10%.

Detailed description of Well Development process:

Well went dry numerous times. Very slow to recharge. Surged prior to development.

Driller Signature:  Date: 1/29/25

APPENDIX B

AGGRESSIVE FLUID VAPOR RECOVERY TABLES

AFVR MONITORING DATA
SITE NAME: Former 501 Amoco
SITE LOCATION: 1432 Hwy 501, Myrtle Beach, SC
SCDHEC SITE ID # 05156
DATES: 2/3/2025 – 2/7/2025

Date	Time (hh:mm)	Extraction Well Head Vacuum (in. Hg)					MMPE Unit Exhaust						
		RW-2	RW-4	RW-5	MW-3	RW-3	Relative Humidity	Temp (°F)	Pretreatment Conc. (PPM)	Post Treatment Conc. (PPM)	Offgas Velocity Ft/Min	Water Vapor (%)	Flow Rate (DSCFM)
02/03/2025	12:00	15.0	13.0	16.0	7.0								
	12:30	15.0	13.0	16.0	7.0		12.1	150	15000.0	10500.0	200	0.02	169.65
	13:00	15.0	13.0	16.0	7.0		12.0	153	15000.0	10420.0	200	0.02	168.82
	13:30	15.0	13.0	16.0	7.0		11.9	154	15000.0	10381.0	200	0.02	168.55
	14:00	15.0	13.0	16.0	7.0		11.8	156	15000.0	10308.0	200	0.02	168.00
	14:30	15.0	13.0	16.0	7.0		11.6	158	15000.0	10210.0	200	0.03	165.75
	15:00	15.0	13.0	17.0	7.0		11.0	165	15000.0	10123.0	200	0.03	163.89
	15:30	15.0	13.0	17.0	7.0		10.6	170	15000.0	9873.0	200	0.03	162.59
	16:00	15.0	13.0	17.0	8.0		10.2	175	15000.0	9649.0	200	0.03	161.31
	16:30	15.0	15.0	17.0	8.0		9.7	182	15000.0	9599.0	200	0.04	157.91
	17:00	15.0	15.0	17.0	8.0		9.3	190	15000.0	9501.0	200	0.04	155.96
	17:30	15.0	15.0	17.0	8.0		8.7	196	15000.0	9422.0	200	0.04	154.54
	18:00	15.0	15.0	17.0	8.0		8.0	204	15000.0	9388.0	200	0.04	152.67
	18:30	15.0	15.0	17.0	8.0		7.8	210	15000.0	9301.0	200	0.05	149.73
	19:00	15.0	15.0	17.0	8.0		7.7	213	15000.0	9189.0	200	0.05	149.06
	19:30	15.0	15.0	17.0	8.0		7.5	215	15000.0	8623.0	200	0.05	148.62
	20:00	15.0	15.0	17.0	8.0		7.4	217	6900.0	1165.0	200	0.06	146.62
	21:00	15.0	15.0	17.0	8.0		7.1	222	9600.0	1176.0	200	0.06	145.55
	22:00	15.0	15.0	17.0	8.0		6.9	225	8100.0	1145.0	200	0.06	144.91
	23:00	15.0	15.0	17.0	8.0		6.8	228	7760.0	993.1	200	0.06	144.28
02/04/2025	0:00	15.0	15.0	17.0	8.0		7.0	220	6200.0	811.3	200	0.06	145.98
	8:00	15.0	15.0	18.0	7.0		9.0	190	4800.0	324.9	200	0.04	155.96
	9:00	15.0	15.0	18.0	7.0		8.6	196	4389.0	254.6	200	0.04	154.54
	10:00	15.0	15.0	18.0	7.0		8.3	201	4519.0	231.2	200	0.05	151.77
	11:00	16.0	15.0	18.0	8.0		8.1	205	4195.0	209.6	200	0.05	150.86
	12:00	16.0	15.0	18.0	8.0		7.9	210	3787.0	184.2	200	0.05	149.73
	14:00	16.0	15.0	18.0	8.0		7.3	216	3426.0	99.3	200	0.05	148.40
	16:00	16.0	16.0	18.0	8.0		7.0	220	3074.0	82.1	200	0.06	145.98
	18:00	16.0	16.0	18.0	7.0		6.6	223	2649.0	62.4	200	0.06	145.34
	20:00	16.0	16.0	18.0	7.0		6.4	225	2934.0	56.3	200	0.06	144.91
	22:00	16.0	16.0	18.0	7.0		6.2	228	2844.0	50.9	200	0.06	144.28
02/05/2025	0:00	16.0	16.0	18.0	7.0		6.1	229	2790.0	48.3	200	0.06	144.07
	8:00	17.0	16.0	18.0	7.0		8.9	190	1778.0	31.9	200	0.04	155.96
	10:00	17.0	16.0	18.0	7.0		8.4	197	1595.0	20.3	200	0.04	154.30
	12:00	17.0	16.0	18.0	7.0		8.1	203	1386.0	17.3	200	0.05	151.31
	14:00	17.0	16.0	18.0	8.0		7.8	207	1467.0	15.6	200	0.05	150.40
	16:00	17.0	16.0	18.0	8.0		7.3	214	1495.0	14.3	200	0.05	148.84
	18:00	17.0	16.0	18.0	8.0		7.0	220	1208.0	12.1	200	0.06	145.98
	20:00	17.0	16.0	18.0	8.0	16.0	6.8	224	15000.0	5223.0	200	0.06	145.12
	22:00	17.0	16.0	18.0	8.0	16.0	6.7	228	15000.0	4321.0	200	0.06	144.28
02/06/2025	0:00	17.0	16.0	18.0	8.0	16.0	7.0	219	15000.0	3674.0	200	0.06	146.19
	8:00	17.0	16.0	18.0	9.0	14.0	9.6	185	8431.0	1003.0	200	0.04	157.17
	10:00	17.0	16.0	18.0	9.0		8.8	192	1096.0	9.9	200	0.04	155.48
	12:00	17.0	16.0	18.0	9.0		8.5	196	883.7	0.0	200	0.04	154.54
	14:00	17.0	16.0	18.0	9.0		8.2	202	965.4	0.0	200	0.05	151.54
	16:00	17.0	16.0	17.0	8.0		7.9	206	731.1	0.0	200	0.05	150.63
	18:00	17.0	16.0	17.0	8.0		7.5	212	707.1	0.0	200	0.05	149.29
	20:00	17.0	16.0	17.0	8.0	14.0	7.3	217	15000.0	3998.0	200	0.05	148.18
	22:00	17.0	16.0	17.0	8.0	14.0	7.4	218	15000.0	2987.0	200	0.06	146.41
02/07/2025	0:00	17.0	16.0	17.0	8.0	14.0	7.1	219	15000.0	2013.0	200	0.06	146.19
	8:00	17.0	16.0	17.0	8.0	14.0	8.8	190	9319.0	998.2	200	0.04	155.96
	10:00	17.0	16.0	17.0	8.0		8.5	195	632.5	0.0	200	0.04	154.77
	12:00	17.0	16.0	17.0	8.0		8.2	200	571.0	0.0	200	0.05	152.00

Well Gauging Data:

Well No.	Diameter (in)	Total Depth (ft)	Target Stinger Depth (ft)	Before AFVR Event					
				Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)
RW-2	4.00			6.78	11.10	4.32	0.00	8.97	0.00
RW-4	4.00			7.15	8.34	1.19	0.00	9.00	0.00
RW-5	4.00			6.71	11.11	4.40	8.57	8.59	0.02
MW-3	2.00			7.60	8.31	0.71	8.65	8.65	Sheen
RW-3	4.00			6.49	10.90	4.41	9.12	9.14	0.02

AFVR Information	
Client	Emerald
Equipment Operator:	CJ
Blower Discharge I.D.	4 inches

Notes: Pipe ID - The inside diameter of the blower discharge piping (from MMPE Unit)
Velocity - The rate at which air flows is measured at the blower discharge piping
Temperature - The temperature of the air stream exiting the blower discharge piping
Relative humidity - The relative humidity of the air stream exiting the blower discharge piping
Water Vapor in % - Pounds of water per pound of dry air (derived from a Psychrometric chart of temp. vs relative humidity)
Flow rate = (1 - water vapor)(velocity)(528°R/Temp + 460)

Total Gallons Extracted
5,480

EMISSION CALCULATION
SITE NAME: Former 501 Amoco
SITE LOCATION: 1432 Hwy 501, Myrtle Beach, SC
SCDHEC SITE ID # 05156
DATES: 2/3/2025 - 2/7/2025

Date/Time	Elapsed Time (hr)	Flow Rate (DSCFM)	Concentration (ppm)	K (#C - gas)	PPMg (ppm)	Cg:m (mg/dsm^3)	Cg (lbs/dscf)	PMRg (lb/hr)	PMR (lb)
2/3/2025 – 12:00	0.0								
12:30	0.5	169.65	15000.0	4	60000	319200	0.019927656	202.8465506	101.4232753
13:00	1.0	168.82	15000.0	4	60000	319200	0.019927656	201.8538268	100.9269134
13:30	1.5	168.55	15000.0	4	60000	319200	0.019927656	201.5250747	100.7625373
14:00	2.0	168.00	15000.0	4	60000	319200	0.019927656	200.8707725	100.4353862
14:30	2.5	165.75	15000.0	4	60000	319200	0.019927656	198.1776368	99.08881842
15:00	3.0	163.89	15000.0	4	60000	319200	0.019927656	195.9580473	97.97902365
15:30	3.5	162.59	15000.0	4	60000	319200	0.019927656	194.4028247	97.20141235
16:00	4.0	161.31	15000.0	4	60000	319200	0.019927656	192.8720938	96.4360469
16:30	4.5	157.91	15000.0	4	60000	319200	0.019927656	188.802435	94.40121751
17:00	5.0	155.96	15000.0	4	60000	319200	0.019927656	186.4787127	93.23935637
17:30	5.5	154.54	15000.0	4	60000	319200	0.019927656	184.7731148	92.38655738
18:00	6.0	152.67	15000.0	4	60000	319200	0.019927656	182.5469326	91.27346632
18:30	6.5	149.73	15000.0	4	60000	319200	0.019927656	179.0276821	89.51384104
19:00	7.0	149.06	15000.0	4	60000	319200	0.019927656	178.2296389	89.11481946
19:30	7.5	148.62	15000.0	4	60000	319200	0.019927656	177.7015511	88.85077555
20:00	8.0	146.62	6900.0	4	27600	146832	0.009166722	80.64332072	40.32166036
21:00	9.0	145.55	9600.0	4	38400	204288	0.0127537	111.3768265	111.3768265
22:00	10.0	144.91	8100.0	4	32400	172368	0.010760934	93.56263151	93.56263151
23:00	11.0	144.28	7760.0	4	31040	165132.8	0.010309241	89.24445953	89.24445953
2/4/2025 – 0:00	12.0	145.98	6200.0	4	24800	131936	0.008236764	72.14242847	72.14242847
8:00	20.0	155.96	4800.0	4	19200	102144	0.00637685	59.67318808	477.3855046
9:00	21.0	154.54	4389.0	4	17556	93397.92	0.005830832	54.06461338	54.06461338
10:00	22.0	151.77	4519.0	4	18076	96164.32	0.006003538	54.66943862	54.66943862
11:00	23.0	150.86	4195.0	4	16780	89269.6	0.005573101	50.44452678	50.44452678
12:00	24.0	149.73	3787.0	4	15148	80587.36	0.005031069	45.19852214	45.19852214
14:00	26.0	148.40	3426.0	4	13704	72905.28	0.004551477	40.52699428	81.05398856
16:00	28.0	145.98	3074.0	4	12296	65414.72	0.004083841	35.76868147	71.53736294
18:00	30.0	145.34	2649.0	4	10596	56370.72	0.003519224	30.68804592	61.37609184
20:00	32.0	144.91	2934.0	4	11736	62435.52	0.00389785	33.8904643	67.7809286
22:00	34.0	144.28	2844.0	4	11376	60520.32	0.003778284	32.70763439	65.41526879
2/5/2025 – 0:00	36.0	144.07	2790.0	4	11160	59371.2	0.003706544	32.04003354	64.08006709
8:00	44.0	155.96	1778.0	4	7112	37835.84	0.002362091	22.10394342	176.8315473
10:00	46.0	154.30	1595.0	4	6380	33941.6	0.002118974	19.61763627	39.23527254
12:00	48.0	151.31	1386.0	4	5544	29494.08	0.001841315	16.71681107	33.43362215
14:00	50.0	150.40	1467.0	4	5868	31217.76	0.001948925	17.58765802	35.17531603
16:00	52.0	148.84	1495.0	4	5980	31813.6	0.001986123	17.73719859	35.47439718
18:00	54.0	145.98	1208.0	4	4832	25706.24	0.001604841	14.05613768	28.11227535
20:00	56.0	145.12	15000.0	4	60000	319200	0.019927656	173.5174426	347.0348851
22:00	58.0	144.28	15000.0	4	60000	319200	0.019927656	172.5086202	345.0172404
2/6/2025 - 0:00	60.0	146.19	15000.0	4	60000	319200	0.019927656	174.7951851	349.5903703
8:00	68.0	157.17	8431.0	4	33724	179411.68	0.011200671	105.625976	845.0078078
10:00	70.0	155.48	1096.0	4	4384	23322.88	0.001456047	13.58358231	27.16716461
12:00	72.0	154.54	883.7	4	3534.8	18805.136	0.001174005	10.8856001	21.7712002
14:00	74.0	151.54	965.4	4	3861.6	20543.712	0.001282544	11.66146297	23.32292594
16:00	76.0	150.63	731.1	4	2924.4	15557.808	0.000971274	8.778216487	17.55643297
18:00	78.0	149.29	707.1	4	2828.4	15047.088	0.00093939	8.414247776	16.82849555
20:00	80.0	148.18	15000.0	4	60000	319200	0.019927656	177.1765834	354.3531669
22:00	82.0	146.41	15000.0	4	60000	319200	0.019927656	175.0529951	350.1059903
2/7/2025 - 0:00	84.0	146.19	15000.0	4	60000	319200	0.019927656	174.7951851	349.5903703
8:00	92.0	155.96	9319.0	4	37276	198308.32	0.012380388	115.8530083	926.8240661
10:00	94.0	154.77	632.5	4	2530	13459.6	0.000840283	7.803161402	15.6063228
12:00	96.0	152.00	571.0	4	2284	12150.88	0.000758579	6.918244478	13.83648896
						Total Emissions in pounds			7284.563126
						Equivalent Gallons (vapor)			1182.558949

DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
Site Name: Former 501 Amoco
Site Location: 1432 Hwy 501, Myrtle Beach, SC
SCDHEC UST Permit # 05156
Dates: 2/3/2025 – 2/7/2025

DIFFERENTIAL PRESSURE DATA

READINGS DONE EVERY 2 HOURS		Well Designation: RW-3	MW-14	MW-17	
Date / Time	Elapsed Time	Differential Pressure Readings (inches of water)			
2/3/2025 – 14:00	2.0	0.38	0.49	0.00	
16:00	4.0	0.42	0.51	0.00	
18:00	6.0	0.49	0.58	0.01	
20:00	8.0	0.52	0.65	0.00	
22:00	10.0	0.54	0.74	0.00	
2/4/2025 – 0:00	12.0	0.51	0.70	0.00	
8:00	20.0	0.53	0.68	0.00	
10:00	22.0	0.55	0.71	0.00	
12:00	24.0	0.56	0.73	0.00	
14:00	26.0	0.58	0.77	0.00	
16:00	28.0	0.57	0.79	0.00	
18:00	30.0	0.60	0.78	0.00	
20:00	32.0	0.56	0.75	0.00	
22:00	34.0	0.53	0.72	0.00	
2/5/2025 – 0:00	36.0	0.55	0.74	0.00	
8:00	44.0	0.56	0.73	0.00	
10:00	46.0	0.51	0.76	0.00	
12:00	48.0	0.53	0.78	0.00	
14:00	50.0	0.52	0.79	0.00	
16:00	52.0	0.49	0.74	0.00	
18:00	54.0	0.50	0.75	0.00	
20:00	56.0		0.77	0.00	

GROUNDWATER DRAWDOWN DATA

		Well Designation: RW-3	MW-14	MW-17	
Time	Elapsed Time	Depth to Liquid (feet below of casing):			
Prior to AFVR		6.49 – 10.90	7.69	7.99	
2/3/2025 – 20:00	8.0	6.88 – 11.33	8.33 w/sheen	8.43 w/sheen	
2/4/2025 - 0:00	12.0	7.11 – 11.20	8.55 w/sheen	8.70 w/sheen	
2/4/20254 - 8:00	20.0	7.15 – 11.10	8.67 w/sheen	8.63 w/sheen	
2/4/2025 - 16:00	28.0	7.75 – 11.80	8.72	8.69	
2/5/2025 - 0:00	36.0	7.91 – 11.99	8.79	8.75	
2/5/2025 - 8:00	44.0	7.86 – 11.90	8.82	9.79	
2/5/2025 - 16:00	52.0	7.90 – 11.92	8.87	8.86	
2/6/2025 - 0:00	60.0		8.93	8.91	
2/6/2025 - 8:00	68.0	7.80 – 8.25	8.97	8.95	
2/6/2025 - 16:00	76.0	9.45 – 9.90	9.01	8.90	
2/7/2025 - 0:00	84.0		9.03	8.94	
2/7/2025 - 8:00	92.0	9.11 – 9.12	9.07	9.02	
2/7/2025 – 12:00	96.0	9.12 – 9.14	9.08	9.02	
Maximum Change:		**2.63 – (1.76)**	**1.39**	**1.03**	

DIFFERENTIAL PRESSURE AND GROUNDWATER DRAWDOWN DATA
Site Name: Former 501 Amoco
Site Location: 1432 Hwy 501, Myrtle Beach, SC
SCDHEC UST Permit # 05156
Dates: 2/3/2025 – 2/7/2025

DIFFERENTIAL PRESSURE DATA

READINGS DONE EVERY 2 HOURS		Well Designation:			
		RW-3	MW-14	MW-17	
Date / Time	**Elapsed Time**	**Differential Pressure Readings (inches of water)**			
2/5/2025 – 22:00	58.0		0.79	0.00	
2/6/2025 - 0:00	60.0		0.81	0.00	
8:00	68.0		0.80	0.00	
10:00	70.0	0.46	0.78	0.00	
12:00	72.0	0.42	0.73	0.00	
14:00	74.0	0.45	0.75	0.00	
16:00	76.0	0.47	0.76	0.00	
18:00	78.0	0.49	0.74	0.00	
20:00	80.0	0.48	0.78	0.00	
22:00	82.0		0.80	0.00	
2/7/2025 – 0:00	84.0		0.77	0.00	
8:00	92.0		0.79	0.00	
10:00	94.0	0.40	0.76	0.00	
12:00	96.0	0.41	0.78	0.00	

GROUNDWATER DRAWDOWN DATA

		Well Designation:			
Time	**Elapsed Time**	**Depth to Liquid (feet below of casing):**			

EMISSION CALCULATION
SITE NAME: Former 501 Amoco
SITE LOCATION: 1432 Hwy 501, Myrtle Beach, SC
SCDHEC SITE ID # 05156
DATES: 2/3/2025 - 2/7/2025

Date/Time	Elapsed Time (hr)	Flow Rate (DSCFM)	Concentration (ppm)	K (#C - gas)	PPMg (ppm)	Cg:m (mg/dsm^3)	Cg (lbs/dscf)	PMRg (lb/hr)	PMR (lb)
2/3/2025 – 12:00	0.0								
12:30	0.5	169.65	15000.0	4	60000	319200	0.019927656	202.8465506	101.4232753
13:00	1.0	168.82	15000.0	4	60000	319200	0.019927656	201.8538268	100.9269134
13:30	1.5	168.55	15000.0	4	60000	319200	0.019927656	201.5250747	100.7625373
14:00	2.0	168.00	15000.0	4	60000	319200	0.019927656	200.8707725	100.4353862
14:30	2.5	165.75	15000.0	4	60000	319200	0.019927656	198.1776368	99.08881842
15:00	3.0	163.89	15000.0	4	60000	319200	0.019927656	195.9580473	97.97902365
15:30	3.5	162.59	15000.0	4	60000	319200	0.019927656	194.4028247	97.20141235
16:00	4.0	161.31	15000.0	4	60000	319200	0.019927656	192.8720938	96.4360469
16:30	4.5	157.91	15000.0	4	60000	319200	0.019927656	188.802435	94.40121751
17:00	5.0	155.96	15000.0	4	60000	319200	0.019927656	186.4787127	93.23935637
17:30	5.5	154.54	15000.0	4	60000	319200	0.019927656	184.7731148	92.38655738
18:00	6.0	152.67	15000.0	4	60000	319200	0.019927656	182.5469326	91.27346632
18:30	6.5	149.73	15000.0	4	60000	319200	0.019927656	179.0276821	89.51384104
19:00	7.0	149.06	15000.0	4	60000	319200	0.019927656	178.2296389	89.11481946
19:30	7.5	148.62	15000.0	4	60000	319200	0.019927656	177.7015511	88.85077555
20:00	8.0	146.62	6900.0	4	27600	146832	0.009166722	80.64332072	40.32166036
21:00	9.0	145.55	9600.0	4	38400	204288	0.0127537	111.3768265	111.3768265
22:00	10.0	144.91	8100.0	4	32400	172368	0.010760934	93.56263151	93.56263151
23:00	11.0	144.28	7760.0	4	31040	165132.8	0.010309241	89.24445953	89.24445953
2/4/2025 – 0:00	12.0	145.98	6200.0	4	24800	131936	0.008236764	72.14242847	72.14242847
8:00	20.0	155.96	4800.0	4	19200	102144	0.00637685	59.67318808	477.3855046
9:00	21.0	154.54	4389.0	4	17556	93397.92	0.005830832	54.06461338	54.06461338
10:00	22.0	151.77	4519.0	4	18076	96164.32	0.006003538	54.66943862	54.66943862
11:00	23.0	150.86	4195.0	4	16780	89269.6	0.005573101	50.44452678	50.44452678
12:00	24.0	149.73	3787.0	4	15148	80587.36	0.005031069	45.19852214	45.19852214
14:00	26.0	148.40	3426.0	4	13704	72905.28	0.004551477	40.52699428	81.05398856
16:00	28.0	145.98	3074.0	4	12296	65414.72	0.004083841	35.76868147	71.53736294
18:00	30.0	145.34	2649.0	4	10596	56370.72	0.003519224	30.68804592	61.37609184
20:00	32.0	144.91	2934.0	4	11736	62435.52	0.00389785	33.8904643	67.7809286
22:00	34.0	144.28	2844.0	4	11376	60520.32	0.003778284	32.70763439	65.41526879
2/5/2025 – 0:00	36.0	144.07	2790.0	4	11160	59371.2	0.003706544	32.04003354	64.08006709
8:00	44.0	155.96	1778.0	4	7112	37835.84	0.002362091	22.10394342	176.8315473
10:00	46.0	154.30	1595.0	4	6380	33941.6	0.002118974	19.61763627	39.23527254
12:00	48.0	151.31	1386.0	4	5544	29494.08	0.001841315	16.71681107	33.43362215
14:00	50.0	150.40	1467.0	4	5868	31217.76	0.001948925	17.58765802	35.17531603
16:00	52.0	148.84	1495.0	4	5980	31813.6	0.001986123	17.73719859	35.47439718
18:00	54.0	145.98	1208.0	4	4832	25706.24	0.001604841	14.05613768	28.11227535
20:00	56.0	145.12	15000.0	4	60000	319200	0.019927656	173.5174426	347.0348851
22:00	58.0	144.28	15000.0	4	60000	319200	0.019927656	172.5086202	345.0172404
2/6/2025 - 0:00	60.0	146.19	15000.0	4	60000	319200	0.019927656	174.7951851	349.5903703
8:00	68.0	157.17	8431.0	4	33724	179411.68	0.011200671	105.625976	845.0078078
10:00	70.0	155.48	1096.0	4	4384	23322.88	0.001456047	13.58358231	27.16716461
12:00	72.0	154.54	883.7	4	3534.8	18805.136	0.001174005	10.8856001	21.7712002
14:00	74.0	151.54	965.4	4	3861.6	20543.712	0.001282544	11.66146297	23.32292594
16:00	76.0	150.63	731.1	4	2924.4	15557.808	0.000971274	8.778216487	17.55643297
18:00	78.0	149.29	707.1	4	2828.4	15047.088	0.00093939	8.414247776	16.82849555
20:00	80.0	148.18	15000.0	4	60000	319200	0.019927656	177.1765834	354.3531669
22:00	82.0	146.41	15000.0	4	60000	319200	0.019927656	175.0529951	350.1059903
2/7/2025 - 0:00	84.0	146.19	15000.0	4	60000	319200	0.019927656	174.7951851	349.5903703
8:00	92.0	155.96	9319.0	4	37276	198308.32	0.012380388	115.8530083	926.8240661
10:00	94.0	154.77	632.5	4	2530	13459.6	0.000840283	7.803161402	15.6063228
12:00	96.0	152.00	571.0	4	2284	12150.88	0.000758579	6.918244478	13.83648896
						Total Emissions in pounds			7284.563126
						Equivalent Gallons (vapor)			1182.558949

STINGER DEPTHS
Site Name: Former 501 Amoco
Site Location: 1432 Hwy 501, Myrtle Beach, SC
SCDHEC UST Permit # 05156
Dates: 2/3/2025 – 2/7/2025

		Well Designation:			
		RW-2	RW-4	RW-5	MW-3 / RW-3
Time	Elapsed Time				
2/3/2025 – 12:00	0.0	6.5	7.0	6.5	7.5
12:30	0.5	6.5	7.0	6.5	7.5
13:00	1.0	7.0	7.5	7.0	8.0
13:30	1.5	7.5	8.0	7.5	8.5
14:00	2.0	8.0	8.5	8.0	9.0
14:30	2.5	8.5	9.0	8.5	9.5
15:00	3.0	9.0	9.5	9.0	10.0
15:30	3.5	9.5	10.0	9.5	10.5
16:00	4.0	10.0	10.5	10.0	11.0
16:30	4.5	10.5	11.0	10.5	11.5
17:00	5.0	11.0	11.5	11.0	12.0
17:30	5.5	11.5	12.0	11.5	12.0
18:00	6.0	12.0	12.0	12.0	12.0
18:30	6.5	12.0	12.0	12.0	12.0
19:00	7.0	12.0	12.0	12.0	12.0
19:30	7.5	12.0	11.0	12.0	11.0
12:00	8.0	11.0	10.0	11.0	10.0
21:00	9.0	10.0	10.0	10.0	10.0
22:00	10.0	10.0	10.0	10.0	10.0
23:00	11.0	10.0	10.0	10.0	10.0
2/4/2025 - 0:00	12.0	10.0	10.0	10.0	10.0
8:00	20.0	10.0	10.0	10.0	10.0
9:00	21.0	10.0	10.0	10.0	10.0
10:00	22.0	10.0	10.0	10.0	10.0
11:00	23.0	10.0	10.0	10.0	10.0
12:00	24.0	10.0	10.0	10.0	10.0
14:00	26.0	10.0	10.0	10.0	10.0
16:00	28.0	10.0	10.0	10.0	10.0
18:00	30.0	10.0	10.0	10.0	10.0
20:00	32.0	10.0	10.0	10.0	10.0
22:00	34.0	10.0	10.0	10.0	10.0
2/5/2025 – 0:00	36.0	10.0	10.0	10.0	10.0
8:00	44.0	10.0	10.0	10.0	10.0
10:00	46.0	10.0	10.0	10.0	10.0
12:00	48.0	10.0	10.0	10.0	10.0
14:00	50.0	10.0	10.0	10.0	10.0
16:00	52.0	10.0	10.0	10.0	10.0
18:00	54.0	10.0	10.0	10.0	10.0 / 7.0
20:00	56.0	10.0	10.0	10.0	10.0 / 8.00
22:00	58.0	10.0	10.0	10.0	10.0 / 8.00
2/6/2025 – 0:00	60.0	10.0	10.0	10.0	10.0 / 8.00
8:00	68.0	10.0	10.0	10.0	10.0
10:00	70.0	10.0	10.0	10.0	10.0
12:00	72.0	10.0	10.0	10.0	10.0
14:00	74.0	10.0	10.0	10.0	10.0
16:00	76.0	10.0	10.0	10.0	10.0
18:00	78.0	10.0	10.0	10.0	10.0

STINGER DEPTHS
Site Name: Former 501 Amoco
Site Location: 1432 Hwy 501, Myrtle Beach, SC
SCDHEC UST Permit # 05156
Dates: 2/3/2025 – 2/7/2025

		Well Designation:			
		RW-2	RW-4	RW-5	MW-3 / RW-3
Time	Elapsed Time				
2/6/2025 – 20:00	80.0	10.0	10.0	10.0	10.0 / 9.0
22:00	82.0	10.0	10.0	10.0	10.0 / 10.0
2/7/2025 – 0:00	84.0	10.0	10.0	10.0	10.0 / 10.0
8:00	92.0	10.0	10.0	10.0	10.0 / 9.0
10:00	94.0	10.0	10.0	10.0	10.0
12:00	96.0	10.0	10.0	10.0	10.0

APPENDIX C

PURGE LOGS

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-1

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 13.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.119 x 5 = 10.6 Gallons
$V = (0.02)\ (Dw^2)\ (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/3/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Sampled
3rd						Bent Standpipe - Could not get bailer or tubing past bend
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-2

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 9.15 Ft.

WATER HEIGHT (Hw): 3.85 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.628 x 5 = 3.1 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/3/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	0.85	19.6	6.55	114.8	275.8	Slightly Cloudy, Petroleum Odor
1st						
2nd						No Purge Sample
3rd						
4th						
5th						
Sample collected at 1415						
Duplicate colleced at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-3

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

DATE: 3/3/25

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 13.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.119 x 5 = 10.6 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Depth to Product - 8.07 ft.
3rd						Depth to Water - 8.47 ft.
4th						0.40 ft. of Product
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-4

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 4-14 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 14.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.282 x 5 = 11.4 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/3/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Located
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-5

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 15.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.445 x 5 = 12.2 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/3/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

		Serial Number		Serial Number		Serial Number
Interface Probe		02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter		12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Well under broken down car
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 00808 MW-6

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: 8.23 Ft.

WATER HEIGHT (Hw): 6.77 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.104 x 5 = 5.5 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/4/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.97	20.9	5.21	124.0	219.7	Slightly Cloudy, No Petroleum Odor
1st						
2nd						No Purge Sample
3rd						
4th						
5th						
Sample collected at 1110						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-7

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: 8.80 Ft.

WATER HEIGHT (Hw): 6.20 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.011 x 5 = 5.1 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/4/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Partly Cloudy, 73-90°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	2.63	20.5	6.90	218.7	275.3	Slightly Cloudy, No Petroluem Odor
1st						
2nd						No Purge Sample
3rd						
4th						
5th						
Sample collected at 1030						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-8

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

DATE: 3/4/25

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: 8.70 Ft.

WATER HEIGHT (Hw): 6.30 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.027 x 5 = 5.1 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.27	19.9	6.93	235.1	284.4	Slightly Cloudy, No Petroleum Odor
1st						
2nd						No Purge Sample
3rd						
4th						
5th						
Sample collected at 1135						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-9

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 15.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.445 x 5 = 12.2 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/4/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Located
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-10

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 15.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.445 x 5 = 12.2 Gallons
$V = (0.02)\ (Dw^2)\ (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/4/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

		Serial Number		Serial Number		Serial Number
Interface Probe		02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter		12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Located
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-11

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	6-16 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	8.96 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	7.04 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.148 x 5 = 5.7 Gallons
		PURGE VOLUME:	0.0 Gallons
DATE:	3/4/25	**EMERALD, INC. PERSONNEL:**	S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	0.94	21.1	3.97	193.2	218.9	Slightly Cloudy, No Petroleum Odor
1st						
2nd						No Purge Sample
3rd						
4th						
5th						
Sample collected at 1250						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-12

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	4-14 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	7.41 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	6.59 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.074 x 5 = 5.4 Gallons
		PURGE VOLUME:	0.0 Gallons
DATE:	3/4/25	**EMERALD, INC. PERSONNEL:**	S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.31	19.6	5.68	232.0	224.9	Slightly Cloudy, No Petroleum Odor
1st						
2nd						No Purge Sample
3rd						
4th						
5th						
Sample collected at 1320						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-13

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	4-14 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	7.88 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	6.12 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)\ (Dw^2)\ (Hw)$	0.998 x 5 = 5.0 Gallons
		PURGE VOLUME:	0.0 Gallons
DATE:	3/3/25	**EMERALD, INC. PERSONNEL:**	S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.18	20.8	5.65	77.3	479.8	Slightly Cloudy, No Petroleum Odor
1st						
2nd						No Purge Sample
3rd						
4th						
5th						
Sample collected at 1045						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-14

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 7.93 Ft.

WATER HEIGHT (Hw): 5.07 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.826 x 5 = 4.1 Gallons
$V = (0.02)\ (Dw^2)\ (Hw)$

PURGE VOLUME: 5.0 Gallons

DATE: 3/3/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

		Serial Number		Serial Number		Serial Number
Interface Probe		02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter		12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	0.89	20.8	5.93	134.7	247.7	Slightly Cloudy, No Petroleum Odor
1st	1.03	20.9	5.96	165.5	356.4	Cloudy, No Petroleum Odor
2nd	0.95	20.9	5.99	161.0	525.0	Cloudy, No Petroleum Odor
3rd	0.94	20.7	6.03	163.2	633.0	Cloudy, No Petroleum Odor
4th	0.88	20.7	6.01	163.8	663.7	Cloudy, No Petroleum Odor
5th	0.75	20.6	5.95	164.0	807.8	Cloudy, No Petroleum Odor
Sample collected at 1145						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-15

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	8.70 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	4.30 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	0.701 x 5 = 3.5 Gallons
		PURGE VOLUME:	5.0 Gallons
DATE:	3/3/25	**EMERALD, INC. PERSONNEL:**	S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	0.79	20.4	5.82	122.3	113.8	Clear, No Petroleum Odor
1st	0.62	20.5	5.85	123.3	255.7	Slightly Cloudy, No Petroleum Odor
2nd	0.65	20.5	5.86	124.0	286.3	Slightly Cloudy, No Petroleum Odor
3rd	0.61	20.4	5.88	124.5	300.1	Slightly Cloudy, No Petroleum Odor
4th	0.57	20.6	5.87	123.5	889.7	Slightly Cloudy, No Petroleum Odor
5th	0.58	20.7	5.87	122.9	>1,111	Slightly Cloudy, No Petroleum Odor
Sample collected at 1100						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-16

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	8.69 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	4.31 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	0.703 x 5 = 3.5 Gallons
		PURGE VOLUME:	5.0 Gallons
DATE:	3/3/25	**EMERALD, INC. PERSONNEL:**	S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.09	19.7	6.00	105.6	293.6	Slightly Cloudy, No Petroleum Odor
1st	1.07	19.9	5.98	107.2	345.2	Slightly Cloudy, No Petroleum Odor
2nd	0.98	20.1	5.96	107.6	369.9	Slightly Cloudy, No Petroleum Odor
3rd	0.96	20.3	5.97	106.9	733.5	Slightly Cloudy, No Petroleum Odor
4th	0.97	20.3	5.94	106.4	>1,111	Slightly Cloudy, No Petroleum Odor
5th	0.93	20.3	5.95	106.0	>1,111	Cloudy, No Petroleum Odor
Sample collected at 1115						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-17

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

DATE: 3/3/25

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 7.54 Ft.

WATER HEIGHT (Hw): 5.46 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.89 x 5 = 4.4 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 5.0 Gallons

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.08	20.2	5.93	114.0	288.2	Slightly Cloudy, No Petroleum Odor
1st	0.98	20.2	5.89	117.3	389.0	Slightly Cloudy, No Petroleum Odor
2nd	0.96	19.9	5.87	116.9	566.9	Cloudy, No Petroleum Odor
3rd	0.91	19.9	5.87	117.5	687.7	Cloudy, No Petroleum Odor
4th	0.89	19.7	5.89	118.2	777.1	Cloudy, No Petroleum Odor
5th	0.93	19.6	5.91	117.9	>1,111	Cloudy, No Petroleum Odor
Sample collected at 1115						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-18

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 7.65 Ft.

WATER HEIGHT (Hw): 5.35 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.872 x 5 = 4.4 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 5.0 Gallons

DATE: 3/3/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	0.88	20.4	5.94	132.0	131.9	Clear, No Petroleum Odor
1st	0.80	20.4	5.99	133.6	354.2	Cloudy, No Petroleum Odor
2nd	0.72	20.4	5.97	134.0	625.4	Cloudy, No Petroleum Odor
3rd	0.66	20.0	6.00	133.8	977.4	Cloudy, No Petroleum Odor
4th	0.64	20.1	5.93	133.6	>1,111	Cloudy, No Petroleum Odor
5th	0.66	20.1	5.93	132.0	>1,111	Cloudy, No Petroleum Odor
Sample collected at 1115						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-19

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 8.32 Ft.

WATER HEIGHT (Hw): 4.68 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.763 x 5 = 3.8 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 5.0 Gallons

DATE: 3/3/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	0.84	18.9	6.06	174.3	107.9	Clear, No Petroleum Odor
1st	0.80	19.2	6.00	175.0	500.4	Cloudy, No Petroleum Odor
2nd	0.79	19.3	5.99	175.6	678.8	Cloudy, No Petroleum Odor
3rd	0.74	19.3	5.99	175.7	725.5	Cloudy, No Petroleum Odor
4th	0.82	19.3	5.96	175.5	>1,111	Cloudy, No Petroleum Odor
5th	91.0	19.6	5.96	173.3	>1,111	Cloudy, No Petroleum Odor
Sample collected at 1115						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 TW-1

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	38-43 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	8.49 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	34.51 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	5.625 x 5 = 28.1 Gallons
		PURGE VOLUME:	30.0 Gallons
DATE:	3/3/25	**EMERALD, INC. PERSONNEL:**	S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.39	22.4	5.94	123.7	138.6	Clear, No Petroleum Odor
1st	1.24	22.2	6.23	122.3	119.4	Clear, No Petroleum Odor
2nd	1.97	22.2	6.49	111.8	109.6	Clear, No Petroleum Odor
3rd	2.04	22.3	6.78	109.4	89.3	Clear, No Petroleum Odor
4th	1.85	22.5	6.84	127.9	221.4	Slightly Cloudy, No Petroleum Odor
5th	1.69	22.7	6.97	133.2	333.5	Slightly Cloudy, No Petroleum Odor
Sample collected at 1445						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 TW-2

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

DATE: 3/4/25

SCREENED INTERVAL 35-40 Ft.

STATIC WATER LEVEL: 8.24 Ft.

WATER HEIGHT (Hw): 31.76 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 5.177 x 5 = 25.9 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 30.0 Gallons

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.11	21.2	2.13	240.1	129.3	Clear, No Petroleum Odor
1st	1.07	21.3	2.19	242.5	141.7	Clear, No Petroleum Odor
2nd	1.72	21.3	2.31	239.2	113.6	Clear, No Petroleum Odor
3rd	1.96	21.4	2.48	231.4	105.6	Clear, No Petroleum Odor
4th	2.18	21.3	2.31	235.8	86.33	Clear, No Petroleum Odor
5th	2.31	21.5	2.46	224.7	22.41	Clear, No Petroleum Odor
Sample collected at 1210						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-1

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	3.14 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	9.86 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.607 x 5 = 8.0 Gallons
		PURGE VOLUME:	0.0 Gallons
DATE:	3/3/25	**EMERALD, INC. PERSONNEL:**	S. Brown/M. Elvington

Field Equipment

		Serial Number		Serial Number		Serial Number
Interface Probe		02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter		12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	0.72	17.5	6.26	150.5	57.50	Clear, Petroleum Odor
1st						
2nd						
3rd						
4th						
5th						
Sample collected at 1400						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-2

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	9.60 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	3.40 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	0.554 x 5 = 2.8 Gallons
		PURGE VOLUME:	0.0 Gallons
DATE:	3/3/25	**EMERALD, INC. PERSONNEL:**	S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						Depth to Product - 7.30 ft.
2nd						Depth to Water - 9.60 ft.
3rd						2.30 ft. of Product
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-3

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

DATE: 3/3/25

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 9.17 Ft.

WATER HEIGHT (Hw): 3.83 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.501 x 5 = 12.5 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						Depth to Product - 7.10 ft.
2nd						Depth to Water - 9.17 ft.
3rd						2.07 ft. of Product
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-4

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	7.95 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	5.05 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	0.823 x 5 = 4.1 Gallons
		PURGE VOLUME:	0.0 Gallons
DATE:	3/3/25	**EMERALD, INC. PERSONNEL:**	S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						Depth to Product - 7.84 ft.
2nd						Depth to Water - 7.95 ft.
3rd						0.11 ft. of Product
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-5

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 8.37 Ft.

WATER HEIGHT (Hw): 4.63 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.755 x 5 = 3.8 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/3/25

EMERALD, INC. PERSONNEL: S. Brown/M. Elvington

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						Depth to Product - 7.90 ft.
2nd						Depth to Water - 8.37 ft.
3rd						0.47 ft. of Product
4th						
5th						
Sample collected at						

APPENDIX D

ANALYTICAL DATA SHEETS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 11, 2025

Ms. Robbin Boykin
Emerald, Inc.
2520 Tahoe Drive
Sumter, SC 29150

RE: Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Dear Ms. Boykin:

Enclosed are the analytical results for sample(s) received by the laboratory on March 05, 2025. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Charlotte

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Blake Hilton

Blake Hilton
blake.hilton@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Dan Alexander, Emerald
Chad McClary, Emerald, Inc.
Dalton Reames, Emerald, Inc.
Alex Skoler, Emerald, Inc.

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92783288001	**05156 MW-2**	Water	03/03/25 14:15	03/05/25 14:15
92783288002	**05156 MW-6**	Water	03/04/25 11:10	03/05/25 14:15
92783288003	**05156 MW-7**	Water	03/04/25 10:30	03/05/25 14:15
92783288004	**05156 MW-8**	Water	03/04/25 11:35	03/05/25 14:15
92783288005	**05156 MW-11**	Water	03/04/25 12:50	03/05/25 14:15
92783288006	**05156 MW-12**	Water	03/04/25 13:20	03/05/25 14:15
92783288007	**05156 MW-13**	Water	03/03/25 10:45	03/05/25 14:15
92783288008	**05156 MW-19**	Water	03/03/25 13:15	03/05/25 14:15
92783288009	**05156 MW-14**	Water	03/03/25 11:45	03/05/25 14:15
92783288010	**05156 MW-15**	Water	03/03/25 11:00	03/05/25 14:15
92783288011	**05156 MW-16**	Water	03/03/25 11:15	03/05/25 14:15
92783288012	**05156 MW-17**	Water	03/03/25 11:30	03/05/25 14:15
92783288013	**05156 MW-18**	Water	03/03/25 12:00	03/05/25 14:15
92783288014	**05156 TW-1**	Water	03/03/25 14:45	03/05/25 14:15
92783288015	**05156 TW-2**	Water	03/04/25 12:10	03/05/25 14:15
92783288016	**05156 RW-1**	Water	03/03/25 14:00	03/05/25 14:15
92783288017	**05156 SW-1**	Water	03/04/25 13:50	03/05/25 14:15
92783288018	**05156 MW-18 DUP**	Water	03/03/25 00:00	03/05/25 14:15
92783288019	**05156 RW-1 DUP**	Water	03/03/25 00:00	03/05/25 14:15
92783288020	**05156 WWC**	Water	03/04/25 14:40	03/05/25 14:15
92783288021	**05156 FB1**	Water	03/03/25 10:40	03/05/25 14:15
92783288022	**05156 FB2**	Water	03/04/25 10:20	03/05/25 14:15
92783288023	**05156 TB1**	Water	03/04/25 00:00	03/05/25 14:15

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SAMPLE ANALYTE COUNT

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92783288001	**05156 MW-2**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288002	**05156 MW-6**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288003	**05156 MW-7**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288004	**05156 MW-8**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288005	**05156 MW-11**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288006	**05156 MW-12**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288007	**05156 MW-13**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288008	**05156 MW-19**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288009	**05156 MW-14**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288010	**05156 MW-15**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	JN	20	PASI-C
92783288011	**05156 MW-16**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288012	**05156 MW-17**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288013	**05156 MW-18**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288014	**05156 TW-1**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288015	**05156 TW-2**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288016	**05156 RW-1**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288017	**05156 SW-1**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288018	**05156 MW-18 DUP**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	JN	20	PASI-C
92783288019	**05156 RW-1 DUP**	EPA 8011	SMS1	2	PASI-C

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SAMPLE ANALYTE COUNT

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8260D	JN	20	PASI-C
92783288020	**05156 WWC**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288021	**05156 FB1**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288022	**05156 FB2**	EPA 8011	SMS1	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92783288023	**05156 TB1**	EPA 8260D	LMB	20	PASI-C

PASI-C = Pace Analytical Services - Charlotte

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-2 **Lab ID: 92783288001** Collected: 03/03/25 14:15 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	**0.34**	ug/L	0.020	0.0075	1	03/06/25 07:46	03/06/25 16:23	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	97	%	60-140		1	03/06/25 07:46	03/06/25 16:23	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	50000	18200	500		03/07/25 04:31	75-85-4	
tert-Amylmethyl ether	ND	ug/L	5000	1330	500		03/07/25 04:31	994-05-8	
Benzene	**2960**	ug/L	500	172	500		03/07/25 04:31	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	50000	26000	500		03/07/25 04:31	624-95-3	
tert-Butyl Alcohol	**21900J**	ug/L	50000	13400	500		03/07/25 04:31	75-65-0	v3
tert-Butyl Formate	ND	ug/L	25000	14700	500		03/07/25 04:31	762-75-4	
1,2-Dichloroethane	ND	ug/L	500	161	500		03/07/25 04:31	107-06-2	
Diisopropyl ether	ND	ug/L	500	154	500		03/07/25 04:31	108-20-3	
Ethanol	ND	ug/L	100000	36100	500		03/07/25 04:31	64-17-5	
Ethylbenzene	**1530**	ug/L	500	152	500		03/07/25 04:31	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	5000	1620	500		03/07/25 04:31	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	500	211	500		03/07/25 04:31	1634-04-4	
Naphthalene	**661**	ug/L	500	322	500		03/07/25 04:31	91-20-3	
Toluene	**78200**	ug/L	500	242	500		03/07/25 04:31	108-88-3	
Xylene (Total)	**8040**	ug/L	500	169	500		03/07/25 04:31	1330-20-7	
m&p-Xylene	**5000**	ug/L	1000	354	500		03/07/25 04:31	179601-23-1	
o-Xylene	**3040**	ug/L	500	169	500		03/07/25 04:31	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		500		03/07/25 04:31	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	70-130		500		03/07/25 04:31	17060-07-0	
Toluene-d8 (S)	97	%	70-130		500		03/07/25 04:31	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-6 **Lab ID: 92783288002** Collected: 03/04/25 11:10 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	03/06/25 07:46	03/06/25 16:34	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	89	%	60-140		1	03/06/25 07:46	03/06/25 16:34	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/06/25 23:32	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/06/25 23:32	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/06/25 23:32	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/06/25 23:32	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/06/25 23:32	75-65-0	v2
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/06/25 23:32	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/06/25 23:32	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/06/25 23:32	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/06/25 23:32	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/06/25 23:32	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/06/25 23:32	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/06/25 23:32	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/06/25 23:32	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/06/25 23:32	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/06/25 23:32	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/06/25 23:32	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/06/25 23:32	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		1		03/06/25 23:32	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	70-130		1		03/06/25 23:32	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		03/06/25 23:32	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-7 **Lab ID: 92783288003** Collected: 03/04/25 10:30 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/06/25 07:46	03/06/25 16:46	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	90	%	60-140		1	03/06/25 07:46	03/06/25 16:46	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/06/25 23:51	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/06/25 23:51	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/06/25 23:51	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/06/25 23:51	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/06/25 23:51	75-65-0	v2
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/06/25 23:51	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/06/25 23:51	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/06/25 23:51	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/06/25 23:51	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/06/25 23:51	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/06/25 23:51	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/06/25 23:51	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/06/25 23:51	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/06/25 23:51	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/06/25 23:51	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/06/25 23:51	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/06/25 23:51	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		1		03/06/25 23:51	460-00-4	
1,2-Dichloroethane-d4 (S)	88	%	70-130		1		03/06/25 23:51	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		03/06/25 23:51	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-8 **Lab ID: 92783288004** Collected: 03/04/25 11:35 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/06/25 07:46	03/06/25 16:57	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	87	%	60-140		1	03/06/25 07:46	03/06/25 16:57	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/07/25 00:09	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/07/25 00:09	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/07/25 00:09	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/07/25 00:09	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/07/25 00:09	75-65-0	v2
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/07/25 00:09	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/07/25 00:09	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/07/25 00:09	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/07/25 00:09	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/07/25 00:09	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/07/25 00:09	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/07/25 00:09	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/07/25 00:09	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/07/25 00:09	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/07/25 00:09	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/07/25 00:09	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/07/25 00:09	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		1		03/07/25 00:09	460-00-4	
1,2-Dichloroethane-d4 (S)	88	%	70-130		1		03/07/25 00:09	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		03/07/25 00:09	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-11 **Lab ID: 92783288005** Collected: 03/04/25 12:50 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/06/25 07:46	03/06/25 17:08	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	90	%	60-140		1	03/06/25 07:46	03/06/25 17:08	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/07/25 00:28	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/07/25 00:28	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/07/25 00:28	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/07/25 00:28	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/07/25 00:28	75-65-0	v2
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/07/25 00:28	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/07/25 00:28	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/07/25 00:28	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/07/25 00:28	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/07/25 00:28	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/07/25 00:28	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/07/25 00:28	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/07/25 00:28	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/07/25 00:28	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/07/25 00:28	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/07/25 00:28	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/07/25 00:28	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		1		03/07/25 00:28	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	70-130		1		03/07/25 00:28	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		03/07/25 00:28	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-12 **Lab ID: 92783288006** Collected: 03/04/25 13:20 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/06/25 07:46	03/06/25 17:20	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	89	%	60-140		1	03/06/25 07:46	03/06/25 17:20	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/07/25 00:47	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/07/25 00:47	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/07/25 00:47	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/07/25 00:47	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/07/25 00:47	75-65-0	v2
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/07/25 00:47	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/07/25 00:47	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/07/25 00:47	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/07/25 00:47	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/07/25 00:47	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/07/25 00:47	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/07/25 00:47	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/07/25 00:47	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/07/25 00:47	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/07/25 00:47	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/07/25 00:47	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/07/25 00:47	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	90	%	70-130		1		03/07/25 00:47	460-00-4	
1,2-Dichloroethane-d4 (S)	89	%	70-130		1		03/07/25 00:47	17060-07-0	
Toluene-d8 (S)	97	%	70-130		1		03/07/25 00:47	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-13 **Lab ID: 92783288007** Collected: 03/03/25 10:45 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/06/25 07:46	03/06/25 17:31	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	83	%	60-140		1	03/06/25 07:46	03/06/25 17:31	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/07/25 01:05	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/07/25 01:05	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/07/25 01:05	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/07/25 01:05	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/07/25 01:05	75-65-0	v2
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/07/25 01:05	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/07/25 01:05	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/07/25 01:05	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/07/25 01:05	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/07/25 01:05	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/07/25 01:05	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/07/25 01:05	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/07/25 01:05	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/07/25 01:05	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/07/25 01:05	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/07/25 01:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/07/25 01:05	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	91	%	70-130		1		03/07/25 01:05	460-00-4	
1,2-Dichloroethane-d4 (S)	87	%	70-130		1		03/07/25 01:05	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		03/07/25 01:05	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-19 **Lab ID: 92783288008** Collected: 03/03/25 13:15 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/06/25 07:46	03/06/25 17:42	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	99	%	60-140		1	03/06/25 07:46	03/06/25 17:42	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100000	36400	1000		03/07/25 19:01	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10000	2660	1000		03/07/25 19:01	994-05-8	
Benzene	**8930**	ug/L	1000	345	1000		03/07/25 19:01	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100000	51900	1000		03/07/25 19:01	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100000	26800	1000		03/07/25 19:01	75-65-0	
tert-Butyl Formate	ND	ug/L	50000	29400	1000		03/07/25 19:01	762-75-4	
1,2-Dichloroethane	ND	ug/L	1000	322	1000		03/07/25 19:01	107-06-2	
Diisopropyl ether	ND	ug/L	1000	308	1000		03/07/25 19:01	108-20-3	
Ethanol	ND	ug/L	200000	72200	1000		03/07/25 19:01	64-17-5	
Ethylbenzene	**2070**	ug/L	1000	304	1000		03/07/25 19:01	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10000	3240	1000		03/07/25 19:01	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1000	422	1000		03/07/25 19:01	1634-04-4	
Naphthalene	**823J**	ug/L	1000	645	1000		03/07/25 19:01	91-20-3	
Toluene	**103000**	ug/L	1000	485	1000		03/07/25 19:01	108-88-3	
Xylene (Total)	**10100**	ug/L	1000	338	1000		03/07/25 19:01	1330-20-7	
m&p-Xylene	**6340**	ug/L	2000	709	1000		03/07/25 19:01	179601-23-1	
o-Xylene	**3760**	ug/L	1000	338	1000		03/07/25 19:01	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1000		03/07/25 19:01	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1000		03/07/25 19:01	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1000		03/07/25 19:01	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-14 **Lab ID: 92783288009** Collected: 03/03/25 11:45 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.021	0.0078	1	03/06/25 07:46	03/06/25 17:54	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	85	%	60-140		1	03/06/25 07:46	03/06/25 17:54	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/07/25 13:17	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/07/25 13:17	994-05-8	
Benzene	**0.36J**	ug/L	1.0	0.34	1		03/07/25 13:17	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/07/25 13:17	624-95-3	
tert-Butyl Alcohol	**51.1J**	ug/L	100	26.8	1		03/07/25 13:17	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/07/25 13:17	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/07/25 13:17	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/07/25 13:17	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/07/25 13:17	64-17-5	
Ethylbenzene	**0.74J**	ug/L	1.0	0.30	1		03/07/25 13:17	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/07/25 13:17	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/07/25 13:17	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/07/25 13:17	91-20-3	
Toluene	**1.7**	ug/L	1.0	0.48	1		03/07/25 13:17	108-88-3	
Xylene (Total)	**3.6**	ug/L	1.0	0.34	1		03/07/25 13:17	1330-20-7	
m&p-Xylene	**3.0**	ug/L	2.0	0.71	1		03/07/25 13:17	179601-23-1	
o-Xylene	**0.62J**	ug/L	1.0	0.34	1		03/07/25 13:17	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		03/07/25 13:17	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		03/07/25 13:17	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		03/07/25 13:17	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-15 **Lab ID: 92783288010** Collected: 03/03/25 11:00 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0076	1	03/06/25 07:46	03/06/25 18:05	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	89	%	60-140		1	03/06/25 07:46	03/06/25 18:05	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	40000	14600	400		03/10/25 23:04	75-85-4	
tert-Amylmethyl ether	ND	ug/L	4000	1060	400		03/10/25 23:04	994-05-8	
Benzene	**1530**	ug/L	400	138	400		03/10/25 23:04	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	40000	20800	400		03/10/25 23:04	624-95-3	
tert-Butyl Alcohol	ND	ug/L	40000	10700	400		03/10/25 23:04	75-65-0	
tert-Butyl Formate	ND	ug/L	20000	11800	400		03/10/25 23:04	762-75-4	
1,2-Dichloroethane	ND	ug/L	400	129	400		03/10/25 23:04	107-06-2	
Diisopropyl ether	ND	ug/L	400	123	400		03/10/25 23:04	108-20-3	
Ethanol	ND	ug/L	80000	28900	400		03/10/25 23:04	64-17-5	
Ethylbenzene	**872**	ug/L	400	122	400		03/10/25 23:04	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	4000	1300	400		03/10/25 23:04	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	400	169	400		03/10/25 23:04	1634-04-4	
Naphthalene	**326J**	ug/L	400	258	400		03/10/25 23:04	91-20-3	
Toluene	**47500**	ug/L	400	194	400		03/10/25 23:04	108-88-3	
Xylene (Total)	**5780**	ug/L	400	135	400		03/10/25 23:04	1330-20-7	
m&p-Xylene	**3710**	ug/L	800	284	400		03/10/25 23:04	179601-23-1	
o-Xylene	**2060**	ug/L	400	135	400		03/10/25 23:04	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		400		03/10/25 23:04	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-130		400		03/10/25 23:04	17060-07-0	
Toluene-d8 (S)	99	%	70-130		400		03/10/25 23:04	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-16 **Lab ID: 92783288011** Collected: 03/03/25 11:15 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	**1.2**	ug/L	0.041	0.015	2	03/06/25 07:46	03/07/25 11:48	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	80	%	60-140		2	03/06/25 07:46	03/07/25 11:48	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	**247000**	ug/L	100000	36400	1000		03/07/25 19:19	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10000	2660	1000		03/07/25 19:19	994-05-8	
Benzene	**11600**	ug/L	1000	345	1000		03/07/25 19:19	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100000	51900	1000		03/07/25 19:19	624-95-3	
tert-Butyl Alcohol	**170000**	ug/L	100000	26800	1000		03/07/25 19:19	75-65-0	
tert-Butyl Formate	ND	ug/L	50000	29400	1000		03/07/25 19:19	762-75-4	
1,2-Dichloroethane	ND	ug/L	1000	322	1000		03/07/25 19:19	107-06-2	
Diisopropyl ether	ND	ug/L	1000	308	1000		03/07/25 19:19	108-20-3	
Ethanol	ND	ug/L	200000	72200	1000		03/07/25 19:19	64-17-5	
Ethylbenzene	**1760**	ug/L	1000	304	1000		03/07/25 19:19	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10000	3240	1000		03/07/25 19:19	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1000	422	1000		03/07/25 19:19	1634-04-4	
Naphthalene	ND	ug/L	1000	645	1000		03/07/25 19:19	91-20-3	
Toluene	**112000**	ug/L	1000	485	1000		03/07/25 19:19	108-88-3	
Xylene (Total)	**9380**	ug/L	1000	338	1000		03/07/25 19:19	1330-20-7	
m&p-Xylene	**6290**	ug/L	2000	709	1000		03/07/25 19:19	179601-23-1	
o-Xylene	**3090**	ug/L	1000	338	1000		03/07/25 19:19	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1000		03/07/25 19:19	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1000		03/07/25 19:19	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1000		03/07/25 19:19	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-17 **Lab ID: 92783288012** Collected: 03/03/25 11:30 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0077	1	03/06/25 07:46	03/06/25 19:13	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	95	%	60-140		1	03/06/25 07:46	03/06/25 19:13	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	40000	14600	400		03/07/25 18:43	75-85-4	
tert-Amylmethyl ether	ND	ug/L	4000	1060	400		03/07/25 18:43	994-05-8	
Benzene	**1570**	ug/L	400	138	400		03/07/25 18:43	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	40000	20800	400		03/07/25 18:43	624-95-3	
tert-Butyl Alcohol	ND	ug/L	40000	10700	400		03/07/25 18:43	75-65-0	
tert-Butyl Formate	ND	ug/L	20000	11800	400		03/07/25 18:43	762-75-4	
1,2-Dichloroethane	ND	ug/L	400	129	400		03/07/25 18:43	107-06-2	
Diisopropyl ether	ND	ug/L	400	123	400		03/07/25 18:43	108-20-3	
Ethanol	ND	ug/L	80000	28900	400		03/07/25 18:43	64-17-5	
Ethylbenzene	**1670**	ug/L	400	122	400		03/07/25 18:43	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	4000	1300	400		03/07/25 18:43	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	400	169	400		03/07/25 18:43	1634-04-4	
Naphthalene	**560**	ug/L	400	258	400		03/07/25 18:43	91-20-3	
Toluene	**43700**	ug/L	400	194	400		03/07/25 18:43	108-88-3	
Xylene (Total)	**11200**	ug/L	400	135	400		03/07/25 18:43	1330-20-7	
m&p-Xylene	**7190**	ug/L	800	284	400		03/07/25 18:43	179601-23-1	
o-Xylene	**3990**	ug/L	400	135	400		03/07/25 18:43	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		400		03/07/25 18:43	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		400		03/07/25 18:43	17060-07-0	
Toluene-d8 (S)	100	%	70-130		400		03/07/25 18:43	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-18 **Lab ID: 92783288013** Collected: 03/03/25 12:00 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/06/25 07:46	03/06/25 19:36	106-93-4	M1,R1
Surrogates									
1-Chloro-2-bromopropane (S)	115	%	60-140		1	03/06/25 07:46	03/06/25 19:36	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	40000	14600	400		03/07/25 19:38	75-85-4	
tert-Amylmethyl ether	ND	ug/L	4000	1060	400		03/07/25 19:38	994-05-8	
Benzene	**736**	ug/L	400	138	400		03/07/25 19:38	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	40000	20800	400		03/07/25 19:38	624-95-3	
tert-Butyl Alcohol	ND	ug/L	40000	10700	400		03/07/25 19:38	75-65-0	
tert-Butyl Formate	ND	ug/L	20000	11800	400		03/07/25 19:38	762-75-4	
1,2-Dichloroethane	ND	ug/L	400	129	400		03/07/25 19:38	107-06-2	
Diisopropyl ether	ND	ug/L	400	123	400		03/07/25 19:38	108-20-3	
Ethanol	ND	ug/L	80000	28900	400		03/07/25 19:38	64-17-5	
Ethylbenzene	**1750**	ug/L	400	122	400		03/07/25 19:38	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	4000	1300	400		03/07/25 19:38	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	400	169	400		03/07/25 19:38	1634-04-4	
Naphthalene	**468**	ug/L	400	258	400		03/07/25 19:38	91-20-3	
Toluene	**41700**	ug/L	400	194	400		03/07/25 19:38	108-88-3	
Xylene (Total)	**9190**	ug/L	400	135	400		03/07/25 19:38	1330-20-7	
m&p-Xylene	**6150**	ug/L	800	284	400		03/07/25 19:38	179601-23-1	
o-Xylene	**3040**	ug/L	400	135	400		03/07/25 19:38	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		400		03/07/25 19:38	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		400		03/07/25 19:38	17060-07-0	
Toluene-d8 (S)	99	%	70-130		400		03/07/25 19:38	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 TW-1 **Lab ID: 92783288014** Collected: 03/03/25 14:45 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0076	1	03/06/25 07:46	03/06/25 20:10	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	96	%	60-140		1	03/06/25 07:46	03/06/25 20:10	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/07/25 16:12	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/07/25 16:12	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/07/25 16:12	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/07/25 16:12	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/07/25 16:12	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/07/25 16:12	762-75-4	M1
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/07/25 16:12	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/07/25 16:12	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/07/25 16:12	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/07/25 16:12	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/07/25 16:12	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/07/25 16:12	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/07/25 16:12	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/07/25 16:12	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/07/25 16:12	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/07/25 16:12	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/07/25 16:12	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		1		03/07/25 16:12	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	70-130		1		03/07/25 16:12	17060-07-0	
Toluene-d8 (S)	106	%	70-130		1		03/07/25 16:12	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 TW-2 **Lab ID: 92783288015** Collected: 03/04/25 12:10 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0077	1	03/06/25 07:46	03/06/25 20:21	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	93	%	60-140		1	03/06/25 07:46	03/06/25 20:21	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/07/25 16:30	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/07/25 16:30	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/07/25 16:30	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/07/25 16:30	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/07/25 16:30	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/07/25 16:30	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/07/25 16:30	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/07/25 16:30	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/07/25 16:30	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/07/25 16:30	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/07/25 16:30	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/07/25 16:30	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/07/25 16:30	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/07/25 16:30	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/07/25 16:30	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/07/25 16:30	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/07/25 16:30	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		03/07/25 16:30	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		03/07/25 16:30	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		03/07/25 16:30	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 RW-1 **Lab ID: 92783288016** Collected: 03/03/25 14:00 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/06/25 07:46	03/06/25 20:32	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	92	%	60-140		1	03/06/25 07:46	03/06/25 20:32	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	**411J**	ug/L	500	182	5		03/07/25 19:16	75-85-4	
tert-Amylmethyl ether	ND	ug/L	50.0	13.3	5		03/07/25 19:16	994-05-8	
Benzene	**377**	ug/L	5.0	1.7	5		03/07/25 19:16	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	500	260	5		03/07/25 19:16	624-95-3	
tert-Butyl Alcohol	**1020**	ug/L	500	134	5		03/07/25 19:16	75-65-0	
tert-Butyl Formate	ND	ug/L	250	147	5		03/07/25 19:16	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.6	5		03/07/25 19:16	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	1.5	5		03/07/25 19:16	108-20-3	
Ethanol	ND	ug/L	1000	361	5		03/07/25 19:16	64-17-5	
Ethylbenzene	**620**	ug/L	5.0	1.5	5		03/07/25 19:16	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	50.0	16.2	5		03/07/25 19:16	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.1	5		03/07/25 19:16	1634-04-4	
Naphthalene	**519**	ug/L	5.0	3.2	5		03/07/25 19:16	91-20-3	
Toluene	**24.8**	ug/L	5.0	2.4	5		03/07/25 19:16	108-88-3	
Xylene (Total)	**70.6**	ug/L	5.0	1.7	5		03/07/25 19:16	1330-20-7	
m&p-Xylene	**64.9**	ug/L	10.0	3.5	5		03/07/25 19:16	179601-23-1	
o-Xylene	**5.7**	ug/L	5.0	1.7	5		03/07/25 19:16	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	96	%	70-130		5		03/07/25 19:16	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	70-130		5		03/07/25 19:16	17060-07-0	
Toluene-d8 (S)	103	%	70-130		5		03/07/25 19:16	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 SW-1 **Lab ID: 92783288017** Collected: 03/04/25 13:50 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0076	1	03/06/25 07:46	03/06/25 20:44	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	91	%	60-140		1	03/06/25 07:46	03/06/25 20:44	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/06/25 23:23	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/06/25 23:23	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/06/25 23:23	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/06/25 23:23	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/06/25 23:23	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/06/25 23:23	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/06/25 23:23	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/06/25 23:23	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/06/25 23:23	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/06/25 23:23	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/06/25 23:23	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/06/25 23:23	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/06/25 23:23	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/06/25 23:23	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/06/25 23:23	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/06/25 23:23	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/06/25 23:23	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		03/06/25 23:23	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		03/06/25 23:23	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		03/06/25 23:23	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 MW-18 DUP **Lab ID: 92783288018** Collected: 03/03/25 00:00 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	**0.077**	ug/L	0.020	0.0076	1	03/06/25 07:46	03/06/25 20:55	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	106	%	60-140		1	03/06/25 07:46	03/06/25 20:55	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	25000	9100	250		03/10/25 22:10	75-85-4	
tert-Amylmethyl ether	ND	ug/L	2500	665	250		03/10/25 22:10	994-05-8	
Benzene	**843**	ug/L	250	86.2	250		03/10/25 22:10	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	25000	13000	250		03/10/25 22:10	624-95-3	
tert-Butyl Alcohol	ND	ug/L	25000	6700	250		03/10/25 22:10	75-65-0	
tert-Butyl Formate	ND	ug/L	12500	7350	250		03/10/25 22:10	762-75-4	
1,2-Dichloroethane	ND	ug/L	250	80.5	250		03/10/25 22:10	107-06-2	
Diisopropyl ether	ND	ug/L	250	77.0	250		03/10/25 22:10	108-20-3	
Ethanol	ND	ug/L	50000	18000	250		03/10/25 22:10	64-17-5	
Ethylbenzene	**1810**	ug/L	250	76.0	250		03/10/25 22:10	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	2500	810	250		03/10/25 22:10	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	250	106	250		03/10/25 22:10	1634-04-4	
Naphthalene	**395**	ug/L	250	161	250		03/10/25 22:10	91-20-3	
Toluene	**45500**	ug/L	250	121	250		03/10/25 22:10	108-88-3	
Xylene (Total)	**9800**	ug/L	250	84.5	250		03/10/25 22:10	1330-20-7	
m&p-Xylene	**6530**	ug/L	500	177	250		03/10/25 22:10	179601-23-1	
o-Xylene	**3270**	ug/L	250	84.5	250		03/10/25 22:10	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		250		03/10/25 22:10	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-130		250		03/10/25 22:10	17060-07-0	
Toluene-d8 (S)	100	%	70-130		250		03/10/25 22:10	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 RW-1 DUP **Lab ID: 92783288019** Collected: 03/03/25 00:00 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	03/06/25 07:46	03/06/25 21:06	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	95	%	60-140		1	03/06/25 07:46	03/06/25 21:06	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	**403**	ug/L	400	146	4		03/10/25 23:40	75-85-4	
tert-Amylmethyl ether	ND	ug/L	40.0	10.6	4		03/10/25 23:40	994-05-8	
Benzene	**378**	ug/L	4.0	1.4	4		03/10/25 23:40	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	400	208	4		03/10/25 23:40	624-95-3	
tert-Butyl Alcohol	**837**	ug/L	400	107	4		03/10/25 23:40	75-65-0	
tert-Butyl Formate	ND	ug/L	200	118	4		03/10/25 23:40	762-75-4	
1,2-Dichloroethane	ND	ug/L	4.0	1.3	4		03/10/25 23:40	107-06-2	
Diisopropyl ether	ND	ug/L	4.0	1.2	4		03/10/25 23:40	108-20-3	
Ethanol	ND	ug/L	800	289	4		03/10/25 23:40	64-17-5	
Ethylbenzene	**584**	ug/L	4.0	1.2	4		03/10/25 23:40	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	40.0	13.0	4		03/10/25 23:40	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	4.0	1.7	4		03/10/25 23:40	1634-04-4	
Naphthalene	**483**	ug/L	4.0	2.6	4		03/10/25 23:40	91-20-3	
Toluene	**26.7**	ug/L	4.0	1.9	4		03/10/25 23:40	108-88-3	
Xylene (Total)	**70.4**	ug/L	4.0	1.4	4		03/10/25 23:40	1330-20-7	
m&p-Xylene	**63.5**	ug/L	8.0	2.8	4		03/10/25 23:40	179601-23-1	
o-Xylene	**6.9**	ug/L	4.0	1.4	4		03/10/25 23:40	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		4		03/10/25 23:40	460-00-4	
1,2-Dichloroethane-d4 (S)	91	%	70-130		4		03/10/25 23:40	17060-07-0	
Toluene-d8 (S)	99	%	70-130		4		03/10/25 23:40	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 WWC **Lab ID: 92783288020** Collected: 03/04/25 14:40 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	03/06/25 07:46	03/06/25 21:18	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	88	%	60-140		1	03/06/25 07:46	03/06/25 21:18	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/06/25 23:41	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/06/25 23:41	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/06/25 23:41	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/06/25 23:41	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/06/25 23:41	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/06/25 23:41	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/06/25 23:41	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/06/25 23:41	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/06/25 23:41	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/06/25 23:41	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/06/25 23:41	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/06/25 23:41	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/06/25 23:41	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/06/25 23:41	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/06/25 23:41	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/06/25 23:41	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/06/25 23:41	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		03/06/25 23:41	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		03/06/25 23:41	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		03/06/25 23:41	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 FB1 **Lab ID: 92783288021** Collected: 03/03/25 10:40 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	03/06/25 07:46	03/06/25 21:29	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	89	%	60-140		1	03/06/25 07:46	03/06/25 21:29	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/06/25 23:05	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/06/25 23:05	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/06/25 23:05	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/06/25 23:05	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/06/25 23:05	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/06/25 23:05	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/06/25 23:05	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/06/25 23:05	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/06/25 23:05	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/06/25 23:05	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/06/25 23:05	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/06/25 23:05	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/06/25 23:05	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/06/25 23:05	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/06/25 23:05	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/06/25 23:05	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/06/25 23:05	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		03/06/25 23:05	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		03/06/25 23:05	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		03/06/25 23:05	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 FB2 **Lab ID: 92783288022** Collected: 03/04/25 10:20 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0077	1	03/06/25 07:46	03/06/25 21:40	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	90	%	60-140		1	03/06/25 07:46	03/06/25 21:40	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/06/25 22:11	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/06/25 22:11	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/06/25 22:11	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/06/25 22:11	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/06/25 22:11	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/06/25 22:11	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/06/25 22:11	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/06/25 22:11	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/06/25 22:11	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/06/25 22:11	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/06/25 22:11	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/06/25 22:11	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/06/25 22:11	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/06/25 22:11	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/06/25 22:11	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/06/25 22:11	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/06/25 22:11	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		03/06/25 22:11	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		03/06/25 22:11	17060-07-0	
Toluene-d8 (S)	99	%	70-130		1		03/06/25 22:11	2037-26-5	

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ANALYTICAL RESULTS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Sample: 05156 TB1 **Lab ID: 92783288023** Collected: 03/04/25 00:00 Received: 03/05/25 14:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/06/25 22:29	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/06/25 22:29	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/06/25 22:29	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/06/25 22:29	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/06/25 22:29	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/06/25 22:29	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/06/25 22:29	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/06/25 22:29	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/06/25 22:29	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/06/25 22:29	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/06/25 22:29	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/06/25 22:29	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/06/25 22:29	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/06/25 22:29	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/06/25 22:29	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/06/25 22:29	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/06/25 22:29	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		03/06/25 22:29	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	70-130		1		03/06/25 22:29	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		03/06/25 22:29	2037-26-5	

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

QC Batch: 920508 | Analysis Method: EPA 8260D
QC Batch Method: EPA 8260D | Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92783288017, 92783288020, 92783288021, 92783288022, 92783288023

METHOD BLANK: 4729907 Matrix: Water
Associated Lab Samples: 92783288017, 92783288020, 92783288021, 92783288022, 92783288023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	03/06/25 21:16	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	03/06/25 21:16	
Benzene	ug/L	ND	1.0	0.34	03/06/25 21:16	
Diisopropyl ether	ug/L	ND	1.0	0.31	03/06/25 21:16	
Ethanol	ug/L	ND	200	72.2	03/06/25 21:16	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	03/06/25 21:16	
Ethylbenzene	ug/L	ND	1.0	0.30	03/06/25 21:16	
m&p-Xylene	ug/L	ND	2.0	0.71	03/06/25 21:16	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	03/06/25 21:16	
Naphthalene	ug/L	ND	1.0	0.64	03/06/25 21:16	
o-Xylene	ug/L	ND	1.0	0.34	03/06/25 21:16	
tert-Amyl Alcohol	ug/L	ND	100	36.4	03/06/25 21:16	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	03/06/25 21:16	
tert-Butyl Alcohol	ug/L	ND	100	26.8	03/06/25 21:16	
tert-Butyl Formate	ug/L	ND	50.0	29.4	03/06/25 21:16	
Toluene	ug/L	ND	1.0	0.48	03/06/25 21:16	
Xylene (Total)	ug/L	ND	1.0	0.34	03/06/25 21:16	
1,2-Dichloroethane-d4 (S)	%	100	70-130		03/06/25 21:16	
4-Bromofluorobenzene (S)	%	98	70-130		03/06/25 21:16	
Toluene-d8 (S)	%	99	70-130		03/06/25 21:16	

LABORATORY CONTROL SAMPLE: 4729908

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	22.9	115	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	433	108	70-130	
Benzene	ug/L	20	23.4	117	70-130	
Diisopropyl ether	ug/L	20	22.1	110	70-130	
Ethanol	ug/L	800	850	106	70-130	
Ethyl-tert-butyl ether	ug/L	40	43.0	108	70-130	
Ethylbenzene	ug/L	20	22.3	112	70-130	
m&p-Xylene	ug/L	40	44.6	112	70-130	
Methyl-tert-butyl ether	ug/L	20	21.4	107	70-130	
Naphthalene	ug/L	20	22.6	113	70-130	
o-Xylene	ug/L	20	22.7	114	70-130	
tert-Amyl Alcohol	ug/L	400	439	110	70-130	
tert-Amylmethyl ether	ug/L	40	42.6	106	70-130	
tert-Butyl Alcohol	ug/L	200	214	107	70-130	
tert-Butyl Formate	ug/L	160	155	97	70-130	

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

LABORATORY CONTROL SAMPLE: 4729908

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	22.1	111	70-130	
Xylene (Total)	ug/L	60	67.3	112	70-130	
1,2-Dichloroethane-d4 (S)	%			102	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 4729909

Parameter	Units	92783288017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	ND	20	21.6	108	70-137	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	415	104	39-157	
Benzene	ug/L	ND	20	22.5	112	70-151	
Diisopropyl ether	ug/L	ND	20	21.0	105	63-144	
Ethanol	ug/L	ND	800	831	104	39-176	
Ethyl-tert-butyl ether	ug/L	ND	40	40.8	102	66-137	
Ethylbenzene	ug/L	ND	20	21.2	106	66-153	
m&p-Xylene	ug/L	ND	40	42.7	107	69-152	
Methyl-tert-butyl ether	ug/L	ND	20	20.0	100	54-156	
Naphthalene	ug/L	ND	20	20.9	105	61-148	
o-Xylene	ug/L	ND	20	21.4	107	70-148	
tert-Amyl Alcohol	ug/L	ND	400	421	105	54-153	
tert-Amylmethyl ether	ug/L	ND	40	39.6	99	69-139	
tert-Butyl Alcohol	ug/L	ND	200	225	113	43-188	
tert-Butyl Formate	ug/L	ND	160	58.6	37	10-170	
Toluene	ug/L	ND	20	21.3	107	59-148	
Xylene (Total)	ug/L	ND	60	64.1	107	63-158	
1,2-Dichloroethane-d4 (S)	%				102	70-130	
4-Bromofluorobenzene (S)	%				101	70-130	
Toluene-d8 (S)	%				100	70-130	

SAMPLE DUPLICATE: 4729910

Parameter	Units	92783288020 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane	ug/L	ND	ND		30	
3,3-Dimethyl-1-Butanol	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethanol	ug/L	ND	ND		30	
Ethyl-tert-butyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

SAMPLE DUPLICATE: 4729910

Parameter	Units	92783288020 Result	Dup Result	RPD	Max RPD	Qualifiers
tert-Amyl Alcohol	ug/L	ND	ND		30	
tert-Amylmethyl ether	ug/L	ND	ND		30	
tert-Butyl Alcohol	ug/L	ND	ND		30	
tert-Butyl Formate	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	100	100			
4-Bromofluorobenzene (S)	%	98	97			
Toluene-d8 (S)	%	99	99			

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

QC Batch: 920510 | Analysis Method: EPA 8260D
QC Batch Method: EPA 8260D | Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92783288001, 92783288002, 92783288003, 92783288004, 92783288005, 92783288006, 92783288007

METHOD BLANK: 4729916 Matrix: Water
Associated Lab Samples: 92783288001, 92783288002, 92783288003, 92783288004, 92783288005, 92783288006, 92783288007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	03/06/25 21:03	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	03/06/25 21:03	
Benzene	ug/L	ND	1.0	0.34	03/06/25 21:03	
Diisopropyl ether	ug/L	ND	1.0	0.31	03/06/25 21:03	
Ethanol	ug/L	ND	200	72.2	03/06/25 21:03	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	03/06/25 21:03	
Ethylbenzene	ug/L	ND	1.0	0.30	03/06/25 21:03	
m&p-Xylene	ug/L	ND	2.0	0.71	03/06/25 21:03	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	03/06/25 21:03	
Naphthalene	ug/L	ND	1.0	0.64	03/06/25 21:03	
o-Xylene	ug/L	ND	1.0	0.34	03/06/25 21:03	
tert-Amyl Alcohol	ug/L	ND	100	36.4	03/06/25 21:03	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	03/06/25 21:03	
tert-Butyl Alcohol	ug/L	ND	100	26.8	03/06/25 21:03	v2
tert-Butyl Formate	ug/L	ND	50.0	29.4	03/06/25 21:03	
Toluene	ug/L	ND	1.0	0.48	03/06/25 21:03	
Xylene (Total)	ug/L	ND	1.0	0.34	03/06/25 21:03	
1,2-Dichloroethane-d4 (S)	%	87	70-130		03/06/25 21:03	
4-Bromofluorobenzene (S)	%	91	70-130		03/06/25 21:03	
Toluene-d8 (S)	%	99	70-130		03/06/25 21:03	

LABORATORY CONTROL SAMPLE: 4729917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	18.6	93	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	331	83	70-130	
Benzene	ug/L	20	20.6	103	70-130	
Diisopropyl ether	ug/L	20	16.7	84	70-130	
Ethanol	ug/L	800	667	83	70-130	
Ethyl-tert-butyl ether	ug/L	40	35.6	89	70-130	
Ethylbenzene	ug/L	20	19.4	97	70-130	
m&p-Xylene	ug/L	40	39.1	98	70-130	
Methyl-tert-butyl ether	ug/L	20	18.1	91	70-130	
Naphthalene	ug/L	20	20.2	101	70-130	
o-Xylene	ug/L	20	20.7	104	70-130	
tert-Amyl Alcohol	ug/L	400	339	85	70-130	
tert-Amylmethyl ether	ug/L	40	36.3	91	70-130	
tert-Butyl Alcohol	ug/L	200	160	80	70-130	v3
tert-Butyl Formate	ug/L	160	130	81	70-130	

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

LABORATORY CONTROL SAMPLE: 4729917

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	19.5	97	70-130	
Xylene (Total)	ug/L	60	59.8	100	70-130	
1,2-Dichloroethane-d4 (S)	%			89	70-130	
4-Bromofluorobenzene (S)	%			95	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE SAMPLE: 4729918

Parameter	Units	92783288006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	ND	20	17.4	87	70-137	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	317	79	39-157	
Benzene	ug/L	ND	20	18.9	94	70-151	
Diisopropyl ether	ug/L	ND	20	15.9	80	63-144	
Ethanol	ug/L	ND	800	621	78	39-176	
Ethyl-tert-butyl ether	ug/L	ND	40	33.0	82	66-137	
Ethylbenzene	ug/L	ND	20	17.7	88	66-153	
m&p-Xylene	ug/L	ND	40	36.4	91	69-152	
Methyl-tert-butyl ether	ug/L	ND	20	16.5	82	54-156	
Naphthalene	ug/L	ND	20	17.4	87	61-148	
o-Xylene	ug/L	ND	20	18.2	91	70-148	
tert-Amyl Alcohol	ug/L	ND	400	329	82	54-153	
tert-Amylmethyl ether	ug/L	ND	40	33.4	83	69-139	
tert-Butyl Alcohol	ug/L	ND	200	187	93	43-188	
tert-Butyl Formate	ug/L	ND	160	40.8J	25	10-170	
Toluene	ug/L	ND	20	18.3	91	59-148	
Xylene (Total)	ug/L	ND	60	54.7	91	63-158	
1,2-Dichloroethane-d4 (S)	%				93	70-130	
4-Bromofluorobenzene (S)	%				98	70-130	
Toluene-d8 (S)	%				98	70-130	

SAMPLE DUPLICATE: 4729919

Parameter	Units	92783288007 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane	ug/L	ND	ND		30	
3,3-Dimethyl-1-Butanol	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethanol	ug/L	ND	ND		30	
Ethyl-tert-butyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

SAMPLE DUPLICATE: 4729919

Parameter	Units	92783288007 Result	Dup Result	RPD	Max RPD	Qualifiers
tert-Amyl Alcohol	ug/L	ND	ND		30	
tert-Amylmethyl ether	ug/L	ND	ND		30	
tert-Butyl Alcohol	ug/L	ND	ND		30	
tert-Butyl Formate	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	87	90			
4-Bromofluorobenzene (S)	%	91	93			
Toluene-d8 (S)	%	99	100			

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

QC Batch: 920806 | Analysis Method: EPA 8260D
QC Batch Method: EPA 8260D | Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92783288008, 92783288009, 92783288011, 92783288012, 92783288013

METHOD BLANK: 4731214 Matrix: Water
Associated Lab Samples: 92783288008, 92783288009, 92783288011, 92783288012, 92783288013

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	03/07/25 12:23	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	03/07/25 12:23	
Benzene	ug/L	ND	1.0	0.34	03/07/25 12:23	
Diisopropyl ether	ug/L	ND	1.0	0.31	03/07/25 12:23	
Ethanol	ug/L	ND	200	72.2	03/07/25 12:23	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	03/07/25 12:23	
Ethylbenzene	ug/L	ND	1.0	0.30	03/07/25 12:23	
m&p-Xylene	ug/L	ND	2.0	0.71	03/07/25 12:23	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	03/07/25 12:23	
Naphthalene	ug/L	ND	1.0	0.64	03/07/25 12:23	
o-Xylene	ug/L	ND	1.0	0.34	03/07/25 12:23	
tert-Amyl Alcohol	ug/L	ND	100	36.4	03/07/25 12:23	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	03/07/25 12:23	
tert-Butyl Alcohol	ug/L	ND	100	26.8	03/07/25 12:23	
tert-Butyl Formate	ug/L	ND	50.0	29.4	03/07/25 12:23	
Toluene	ug/L	ND	1.0	0.48	03/07/25 12:23	
Xylene (Total)	ug/L	ND	1.0	0.34	03/07/25 12:23	
1,2-Dichloroethane-d4 (S)	%	100	70-130		03/07/25 12:23	
4-Bromofluorobenzene (S)	%	98	70-130		03/07/25 12:23	
Toluene-d8 (S)	%	100	70-130		03/07/25 12:23	

LABORATORY CONTROL SAMPLE: 4731215

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	22.5	113	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	440	110	70-130	
Benzene	ug/L	20	23.2	116	70-130	
Diisopropyl ether	ug/L	20	21.6	108	70-130	
Ethanol	ug/L	800	868	108	70-130	
Ethyl-tert-butyl ether	ug/L	40	41.9	105	70-130	
Ethylbenzene	ug/L	20	22.1	110	70-130	
m&p-Xylene	ug/L	40	44.3	111	70-130	
Methyl-tert-butyl ether	ug/L	20	21.2	106	70-130	
Naphthalene	ug/L	20	22.8	114	70-130	
o-Xylene	ug/L	20	22.3	112	70-130	
tert-Amyl Alcohol	ug/L	400	450	112	70-130	
tert-Amylmethyl ether	ug/L	40	41.7	104	70-130	
tert-Butyl Alcohol	ug/L	200	219	109	70-130	
tert-Butyl Formate	ug/L	160	152	95	70-130	

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

LABORATORY CONTROL SAMPLE: 4731215

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	22.7	114	70-130	
Xylene (Total)	ug/L	60	66.6	111	70-130	
1,2-Dichloroethane-d4 (S)	%			97	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 4731216

Parameter	Units	92783133005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	2.4	20	22.3	99	70-137	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	349	87	39-157	
Benzene	ug/L	ND	20	21.1	106	70-151	
Diisopropyl ether	ug/L	10.3	20	28.9	93	63-144	
Ethanol	ug/L	ND	800	664	83	39-176	
Ethyl-tert-butyl ether	ug/L	ND	40	37.4	93	66-137	
Ethylbenzene	ug/L	ND	20	18.8	94	66-153	
m&p-Xylene	ug/L	ND	40	38.6	94	69-152	
Methyl-tert-butyl ether	ug/L	31.7	20	54.2	112	54-156	
Naphthalene	ug/L	3.4	20	21.1	88	61-148	
o-Xylene	ug/L	ND	20	20.1	97	70-148	
tert-Amyl Alcohol	ug/L	653	400	1150	123	54-153	
tert-Amylmethyl ether	ug/L	ND	40	36.6	91	69-139	
tert-Butyl Alcohol	ug/L	134	200	359	113	43-188	
tert-Butyl Formate	ug/L	ND	160	ND	0	10-170	M1
Toluene	ug/L	ND	20	19.7	96	59-148	
Xylene (Total)	ug/L	ND	60	58.7	98	63-158	
1,2-Dichloroethane-d4 (S)	%				95	70-130	
4-Bromofluorobenzene (S)	%				95	70-130	
Toluene-d8 (S)	%				98	70-130	

SAMPLE DUPLICATE: 4731217

Parameter	Units	92782567026 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane	ug/L	ND	ND		30	
3,3-Dimethyl-1-Butanol	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	0.80J		30	
Ethanol	ug/L	ND	ND		30	
Ethyl-tert-butyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	5.2	5.2	0	30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

SAMPLE DUPLICATE: 4731217

Parameter	Units	92782567026 Result	Dup Result	RPD	Max RPD	Qualifiers
tert-Amyl Alcohol	ug/L	227	231	2	30	
tert-Amylmethyl ether	ug/L	ND	ND		30	
tert-Butyl Alcohol	ug/L	127	127	0	30	
tert-Butyl Formate	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	101	102			
4-Bromofluorobenzene (S)	%	98	98			
Toluene-d8 (S)	%	99	100			

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

QC Batch: 920808
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92783288014, 92783288015, 92783288016

METHOD BLANK: 4731249 Matrix: Water
Associated Lab Samples: 92783288014, 92783288015, 92783288016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	03/07/25 11:54	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	03/07/25 11:54	
Benzene	ug/L	ND	1.0	0.34	03/07/25 11:54	
Diisopropyl ether	ug/L	ND	1.0	0.31	03/07/25 11:54	
Ethanol	ug/L	ND	200	72.2	03/07/25 11:54	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	03/07/25 11:54	
Ethylbenzene	ug/L	ND	1.0	0.30	03/07/25 11:54	
m&p-Xylene	ug/L	ND	2.0	0.71	03/07/25 11:54	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	03/07/25 11:54	
Naphthalene	ug/L	ND	1.0	0.64	03/07/25 11:54	
o-Xylene	ug/L	ND	1.0	0.34	03/07/25 11:54	
tert-Amyl Alcohol	ug/L	ND	100	36.4	03/07/25 11:54	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	03/07/25 11:54	
tert-Butyl Alcohol	ug/L	ND	100	26.8	03/07/25 11:54	
tert-Butyl Formate	ug/L	ND	50.0	29.4	03/07/25 11:54	
Toluene	ug/L	ND	1.0	0.48	03/07/25 11:54	
Xylene (Total)	ug/L	ND	1.0	0.34	03/07/25 11:54	
1,2-Dichloroethane-d4 (S)	%	100	70-130		03/07/25 11:54	
4-Bromofluorobenzene (S)	%	97	70-130		03/07/25 11:54	
Toluene-d8 (S)	%	103	70-130		03/07/25 11:54	

LABORATORY CONTROL SAMPLE: 4731250

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	21.7	109	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	348	87	70-130	
Benzene	ug/L	20	21.1	105	70-130	
Diisopropyl ether	ug/L	20	21.1	105	70-130	
Ethanol	ug/L	800	764	96	70-130	
Ethyl-tert-butyl ether	ug/L	40	39.9	100	70-130	
Ethylbenzene	ug/L	20	21.8	109	70-130	
m&p-Xylene	ug/L	40	43.5	109	70-130	
Methyl-tert-butyl ether	ug/L	20	20.4	102	70-130	
Naphthalene	ug/L	20	23.8	119	70-130	
o-Xylene	ug/L	20	22.1	110	70-130	
tert-Amyl Alcohol	ug/L	400	384	96	70-130	
tert-Amylmethyl ether	ug/L	40	38.0	95	70-130	
tert-Butyl Alcohol	ug/L	200	192	96	70-130	
tert-Butyl Formate	ug/L	160	161	101	70-130	

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

LABORATORY CONTROL SAMPLE: 4731250

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	19.6	98	70-130	
Xylene (Total)	ug/L	60	65.6	109	70-130	
1,2-Dichloroethane-d4 (S)	%			105	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			95	70-130	

MATRIX SPIKE SAMPLE: 4731251

Parameter	Units	92783288014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	ND	20	23.5	118	70-137	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	461	115	39-157	
Benzene	ug/L	ND	20	24.7	124	70-151	
Diisopropyl ether	ug/L	ND	20	21.9	109	63-144	
Ethanol	ug/L	ND	800	900	112	39-176	
Ethyl-tert-butyl ether	ug/L	ND	40	46.8	117	66-137	
Ethylbenzene	ug/L	ND	20	22.3	112	66-153	
m&p-Xylene	ug/L	ND	40	45.0	112	69-152	
Methyl-tert-butyl ether	ug/L	ND	20	23.1	115	54-156	
Naphthalene	ug/L	ND	20	23.4	117	61-148	
o-Xylene	ug/L	ND	20	23.2	116	70-148	
tert-Amyl Alcohol	ug/L	ND	400	483	121	54-153	
tert-Amylmethyl ether	ug/L	ND	40	45.9	115	69-139	
tert-Butyl Alcohol	ug/L	ND	200	294	147	43-188	
tert-Butyl Formate	ug/L	ND	160	ND	0	10-170	M1
Toluene	ug/L	ND	20	22.9	115	59-148	
Xylene (Total)	ug/L	ND	60	68.2	114	63-158	
1,2-Dichloroethane-d4 (S)	%				94	70-130	
4-Bromofluorobenzene (S)	%				96	70-130	
Toluene-d8 (S)	%				97	70-130	

SAMPLE DUPLICATE: 4731252

Parameter	Units	92783288015 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane	ug/L	ND	ND		30	
3,3-Dimethyl-1-Butanol	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethanol	ug/L	ND	ND		30	
Ethyl-tert-butyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

SAMPLE DUPLICATE: 4731252

Parameter	Units	92783288015 Result	Dup Result	RPD	Max RPD	Qualifiers
tert-Amyl Alcohol	ug/L	ND	ND		30	
tert-Amylmethyl ether	ug/L	ND	ND		30	
tert-Butyl Alcohol	ug/L	ND	ND		30	
tert-Butyl Formate	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	101	102			
4-Bromofluorobenzene (S)	%	98	98			
Toluene-d8 (S)	%	101	100			

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

QC Batch: 921146
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92783288010, 92783288018, 92783288019

METHOD BLANK: 4733243 Matrix: Water
Associated Lab Samples: 92783288010, 92783288018, 92783288019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	03/10/25 15:53	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	03/10/25 15:53	
Benzene	ug/L	ND	1.0	0.34	03/10/25 15:53	
Diisopropyl ether	ug/L	ND	1.0	0.31	03/10/25 15:53	
Ethanol	ug/L	ND	200	72.2	03/10/25 15:53	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	03/10/25 15:53	
Ethylbenzene	ug/L	ND	1.0	0.30	03/10/25 15:53	
m&p-Xylene	ug/L	ND	2.0	0.71	03/10/25 15:53	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	03/10/25 15:53	
Naphthalene	ug/L	ND	1.0	0.64	03/10/25 15:53	
o-Xylene	ug/L	ND	1.0	0.34	03/10/25 15:53	
tert-Amyl Alcohol	ug/L	ND	100	36.4	03/10/25 15:53	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	03/10/25 15:53	
tert-Butyl Alcohol	ug/L	ND	100	26.8	03/10/25 15:53	
tert-Butyl Formate	ug/L	ND	50.0	29.4	03/10/25 15:53	
Toluene	ug/L	ND	1.0	0.48	03/10/25 15:53	
Xylene (Total)	ug/L	ND	1.0	0.34	03/10/25 15:53	
1,2-Dichloroethane-d4 (S)	%	93	70-130		03/10/25 15:53	
4-Bromofluorobenzene (S)	%	101	70-130		03/10/25 15:53	
Toluene-d8 (S)	%	100	70-130		03/10/25 15:53	

LABORATORY CONTROL SAMPLE: 4733244

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	18.7	94	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	386	96	70-130	
Benzene	ug/L	20	21.5	107	70-130	
Diisopropyl ether	ug/L	20	20.3	101	70-130	
Ethanol	ug/L	800	862	108	70-130	
Ethyl-tert-butyl ether	ug/L	40	38.8	97	70-130	
Ethylbenzene	ug/L	20	19.9	99	70-130	
m&p-Xylene	ug/L	40	40.4	101	70-130	
Methyl-tert-butyl ether	ug/L	20	19.7	99	70-130	
Naphthalene	ug/L	20	19.8	99	70-130	
o-Xylene	ug/L	20	20.8	104	70-130	
tert-Amyl Alcohol	ug/L	400	375	94	70-130	
tert-Amylmethyl ether	ug/L	40	37.7	94	70-130	
tert-Butyl Alcohol	ug/L	200	190	95	70-130	
tert-Butyl Formate	ug/L	160	153	96	70-130	

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

LABORATORY CONTROL SAMPLE: 4733244

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	20.4	102	70-130	
Xylene (Total)	ug/L	60	61.2	102	70-130	
1,2-Dichloroethane-d4 (S)	%			89	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 4733245

Parameter	Units	92783407015 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	ND	20	18.8	94	70-137	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	389	97	39-157	
Benzene	ug/L	2.4	20	24.5	111	70-151	
Diisopropyl ether	ug/L	ND	20	21.2	103	63-144	
Ethanol	ug/L	ND	800	782	98	39-176	
Ethyl-tert-butyl ether	ug/L	ND	40	39.1	98	66-137	
Ethylbenzene	ug/L	3.1	20	23.8	104	66-153	
m&p-Xylene	ug/L	4.1	40	46.7	107	69-152	
Methyl-tert-butyl ether	ug/L	ND	20	19.9	99	54-156	
Naphthalene	ug/L	4.2	20	24.9	103	61-148	
o-Xylene	ug/L	1.6	20	23.4	109	70-148	
tert-Amyl Alcohol	ug/L	ND	400	384	96	54-153	
tert-Amylmethyl ether	ug/L	ND	40	38.2	96	69-139	
tert-Butyl Alcohol	ug/L	ND	200	217	108	43-188	
tert-Butyl Formate	ug/L	ND	160	57.2	36	10-170	
Toluene	ug/L	ND	20	21.0	103	59-148	
Xylene (Total)	ug/L	5.7	60	70.1	107	63-158	
1,2-Dichloroethane-d4 (S)	%				90	70-130	
4-Bromofluorobenzene (S)	%				103	70-130	
Toluene-d8 (S)	%				99	70-130	

SAMPLE DUPLICATE: 4733246

Parameter	Units	92783407018 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane	ug/L	ND	ND		30	
3,3-Dimethyl-1-Butanol	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethanol	ug/L	ND	ND		30	
Ethyl-tert-butyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	1.4	1.4	2	30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

SAMPLE DUPLICATE: 4733246

Parameter	Units	92783407018 Result	Dup Result	RPD	Max RPD	Qualifiers
tert-Amyl Alcohol	ug/L	ND	ND		30	
tert-Amylmethyl ether	ug/L	ND	ND		30	
tert-Butyl Alcohol	ug/L	ND	ND		30	
tert-Butyl Formate	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	94	92			
4-Bromofluorobenzene (S)	%	99	104			
Toluene-d8 (S)	%	99	98			

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

QC Batch: 920377
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92783288001, 92783288002, 92783288003, 92783288004, 92783288005, 92783288006, 92783288007, 92783288008, 92783288009, 92783288010, 92783288011

METHOD BLANK: 4729429 Matrix: Water
Associated Lab Samples: 92783288001, 92783288002, 92783288003, 92783288004, 92783288005, 92783288006, 92783288007, 92783288008, 92783288009, 92783288010, 92783288011

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	0.0074	03/06/25 13:33	
1-Chloro-2-bromopropane (S)	%	113	60-140		03/06/25 13:33	

LABORATORY CONTROL SAMPLE & LCSD: 4729430 4729431

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.25	0.28	0.28	113	113	60-140	0	20	
1-Chloro-2-bromopropane (S)	%				108	114	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4729433 4729434

Parameter	Units	92782008002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	0.25	0.25	0.24	0.24	93	93	60-140	0	20	
1-Chloro-2-bromopropane (S)	%						94	108	60-140			

SAMPLE DUPLICATE: 4729432

Parameter	Units	92782008001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	73	97			

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QUALITY CONTROL DATA

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

QC Batch: 920380
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92783288012, 92783288013, 92783288014, 92783288015, 92783288016, 92783288017, 92783288018, 92783288019, 92783288020, 92783288021, 92783288022

METHOD BLANK: 4729435 Matrix: Water
Associated Lab Samples: 92783288012, 92783288013, 92783288014, 92783288015, 92783288016, 92783288017, 92783288018, 92783288019, 92783288020, 92783288021, 92783288022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	0.0074	03/06/25 18:39	
1-Chloro-2-bromopropane (S)	%	98	60-140		03/06/25 18:39	

LABORATORY CONTROL SAMPLE & LCSD: 4729436 4729437

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.25	0.26	0.28	105	111	60-140	6	20	
1-Chloro-2-bromopropane (S)	%				100	110	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4729439 4729440

Parameter	Units	92783288013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	0.25	0.25	0.37	0.54	148	217	60-140	38	20	M1,R1
1-Chloro-2-bromopropane (S)	%						93	114	60-140			

SAMPLE DUPLICATE: 4729438

Parameter	Units	92783288012 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	95	100			

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QUALIFIERS

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
v2	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92783288001	**05156 MW-2**	EPA 8011	920377	EPA 8011	920494
92783288002	**05156 MW-6**	EPA 8011	920377	EPA 8011	920494
92783288003	**05156 MW-7**	EPA 8011	920377	EPA 8011	920494
92783288004	**05156 MW-8**	EPA 8011	920377	EPA 8011	920494
92783288005	**05156 MW-11**	EPA 8011	920377	EPA 8011	920494
92783288006	**05156 MW-12**	EPA 8011	920377	EPA 8011	920494
92783288007	**05156 MW-13**	EPA 8011	920377	EPA 8011	920494
92783288008	**05156 MW-19**	EPA 8011	920377	EPA 8011	920494
92783288009	**05156 MW-14**	EPA 8011	920377	EPA 8011	920494
92783288010	**05156 MW-15**	EPA 8011	920377	EPA 8011	920494
92783288011	**05156 MW-16**	EPA 8011	920377	EPA 8011	920494
92783288012	**05156 MW-17**	EPA 8011	920380	EPA 8011	920496
92783288013	**05156 MW-18**	EPA 8011	920380	EPA 8011	920496
92783288014	**05156 TW-1**	EPA 8011	920380	EPA 8011	920496
92783288015	**05156 TW-2**	EPA 8011	920380	EPA 8011	920496
92783288016	**05156 RW-1**	EPA 8011	920380	EPA 8011	920496
92783288017	**05156 SW-1**	EPA 8011	920380	EPA 8011	920496
92783288018	**05156 MW-18 DUP**	EPA 8011	920380	EPA 8011	920496
92783288019	**05156 RW-1 DUP**	EPA 8011	920380	EPA 8011	920496
92783288020	**05156 WWC**	EPA 8011	920380	EPA 8011	920496
92783288021	**05156 FB1**	EPA 8011	920380	EPA 8011	920496
92783288022	**05156 FB2**	EPA 8011	920380	EPA 8011	920496
92783288001	**05156 MW-2**	EPA 8260D	920510		
92783288002	**05156 MW-6**	EPA 8260D	920510		
92783288003	**05156 MW-7**	EPA 8260D	920510		
92783288004	**05156 MW-8**	EPA 8260D	920510		
92783288005	**05156 MW-11**	EPA 8260D	920510		
92783288006	**05156 MW-12**	EPA 8260D	920510		
92783288007	**05156 MW-13**	EPA 8260D	920510		
92783288008	**05156 MW-19**	EPA 8260D	920806		
92783288009	**05156 MW-14**	EPA 8260D	920806		
92783288010	**05156 MW-15**	EPA 8260D	921146		
92783288011	**05156 MW-16**	EPA 8260D	920806		
92783288012	**05156 MW-17**	EPA 8260D	920806		
92783288013	**05156 MW-18**	EPA 8260D	920806		
92783288014	**05156 TW-1**	EPA 8260D	920808		
92783288015	**05156 TW-2**	EPA 8260D	920808		
92783288016	**05156 RW-1**	EPA 8260D	920808		
92783288017	**05156 SW-1**	EPA 8260D	920508		
92783288018	**05156 MW-18 DUP**	EPA 8260D	921146		
92783288019	**05156 RW-1 DUP**	EPA 8260D	921146		
92783288020	**05156 WWC**	EPA 8260D	920508		
92783288021	**05156 FB1**	EPA 8260D	920508		
92783288022	**05156 FB2**	EPA 8260D	920508		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: SO1 AMOCC 05156
Pace Project No.: 92783288

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92783288023	**05156 TB1**	EPA 8260D	920508		

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

WO# : 92783288

92783288

Workorder Number or

E ONLY

ger:

Company: Emerald	Billing Information:
Address: PO Box 3650 Sumter SC 29151	
Report To: C. McClary	Email To:
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: Sol Amoco	State: SC County/City: Myrtle Beach Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET
Phone: 803-469-3454 Email:	Site/Facility ID #: 05156 Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Matthew Elungs	Purchase Order #: Quote #: DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Immediately Packed on Ice: [ ] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips:	
Sample pH Acceptable	Y N NA
pH Strips:	
Sulfide Present	Y N NA
Lead Acetate Strips:	

LAB USE ONLY:
Lab Sample # / Comments: 92783288

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Time	Composite End Date	Time	Res Cl	# of Ctns	BTEX DCA NMOXYS (8260D)	EDB (8011)	Lab Sample # / Comments
05156 MW-2	GW	G			3/3/25	1415		6	X	X	001
MW-6					3/4/25	1110					002
MW-7						1030					003
MW-8						1135					004
MW-11						1250					005
MW-12					3/4/25	1320					006
MW-13					3/3/25	1045					007
MW-13						1315					008
MW-14						1145					009
05156 MW-15	GW	G			3/3/25	1100		6	X	X	010

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used: B.B.

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2926198

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: 92T082
Cooler 1 Temp Upon Receipt: 2.0 oC
Cooler 1 Therm Corr. Factor: 0 oC
Cooler 1 Corrected Temp: 2.0 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
[signature]	3/4/25	[signature] IPOW	3/5/25 0945
[signature] IPOW	3/5/25 1415	AC Pace HNL	3/5/25 1415

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of: 3

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Emerald

Address: PO Box 3054 Sumter SC 29151

Report To: C. McClary

Copy To:

Customer Project Name/Number: SO1 Amoco

Phone: 803-469-5454
Email:

Collected By (print): Matthew Elvington

Collected By (signature):

Sample Disposal:
[ ] Dispose as appropriate [ ] Return
[ ] Archive: _____
[ ] Hold: _____

Billing Information:

Email To:

Site Collection Info/Address:

State: SC County/City: Myrtle Beach Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Site/Facility ID #: 05156

Purchase Order #:
Quote #:

Turnaround Date Required:

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [ ] Yes [ ] No

DW PWS ID #:
DW Location Code:

Immediately Packed on Ice: [ ] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis: _____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments: 92783288

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	BTEX ORA NMOXYS (8260D)	EDB (8011)	Lab Sample # / Comments
05156 MW-16	GW	G			3/3/25	1115		6	X	X	011
MW-17						1130					012
MW-18						1200					013
TW-1					3/3/25	1445					014
TW-2					3/4/25	1210					015
RW-1					3/3/25	1400					016
SW-1					3/4/25	1350					017
MW-18 DUP					3/3/25	—					018
RW-1 DUP					3/3/25	—					019
05156 WWC	GW	G			3/4/25	1440		6	X	X	020

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2926199

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____oC
Cooler 1 Therm Corr. Factor: _____oC
Cooler 1 Corrected Temp: _____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
[signature]	3/4/25	[signature]	3/5/25 0945
[signature]	3/5/25 1415	AC Pace HNC	3/5/25 1415

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 2 of: 3

Pace Analytical

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Emerald

Address: 20 Box 3050 Sumter SC 29151

Report To: C. McClary

Copy To:

Customer Project Name/Number: SOI Amoco

Phone: 803-469-5454
Email:

Collected By (print): Matthew Elmington

Collected By (signature):

Sample Disposal:
[ ] Dispose as appropriate [ ] Return
[ ] Archive: _____
[ ] Hold: _____

Billing Information:

Email To:

Site Collection Info/Address:

State: SC County/City: Myrtle Beach Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Site/Facility ID #: 05156

Purchase Order #:
Quote #:

Turnaround Date Required:

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [ ] Yes [ ] No

DW PWS ID #:
DW Location Code:

Immediately Packed on Ice: [ ] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis: _____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments: 92783288

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	BTEX/CA-NMOXYS(8260D)	EDB(8011)								Lab Sample # / Comments
05156 FB1	GW	G			3/3/25	1040		6	X	X								021
05156 FB2	↓	↓			3/4/25	1020		6	X	X								022
05156 TB1	GW	G			3/3/25	—		2	X									023

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2926200

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____oC
Cooler 1 Therm Corr. Factor: _____oC
Cooler 1 Corrected Temp: _____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
[signature]	3/4/25	[signature]	3/5/25 0948
[signature]	3/5/25 1415	[signature]	3/5/25 1415

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 3 of: 3

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project # WO#: 92783288

PM: BH Due Date: 03/13/25

CLIENT: 92-EMERALD

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client Emerald Profile/EZ (Circle one)_____ Notes_____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)		BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9H-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gasket (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project #

2

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client_____ Profile/EZ (Circle one)_____ Notes_____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)		BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project #

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☐ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client_____ Profile/EZ (Circle one)_____ Notes_____

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)		BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9A-40 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U 50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3R-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (Cl-)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
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pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

APPENDIX E

DISPOSAL MANIFESTS

Emerald, Inc.

CONSULTING AND ENGINEERING
SERVICES IN ENVIRONMENTAL AFFAIRS

2520 TAHOE DRIVE · POST OFFICE BOX 3050 · SUMTER, SOUTH CAROLINA 29151

WEBSITE:
www.emeraldinc-us.com

TELEPHONE (803) 469-5454
FAX (803) 469-5465

April 18, 2025

Mr. Ryan Kellett, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
South Carolina Department of Environmental Services
2600 Bull Street
Columbia, SC 29201-1708

RE: Purge Water Treatment
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
Horry County
UST Permit #05156

Mr. Kellett,

Emerald, Inc. is providing this letter to certify the on-site treatment of purge water at the subject site. This purge water was treated in compliance with the conditions set forth in "Proposed Conditions for use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater".

Applicability:

Groundwater to be treated is generated from well development and sampling.

Conditions:

1. The purge and development water is mixed prior to treatment by the activated carbon unit.
2. Free product was not detected in the purge water.
3. Groundwater analytical results from monitoring wells indicate average concentrations of hydrocarbons to be less than 5,000 parts per billion (ppb) Benzene and less than 20,000 ppb total BTEX.
4. The carbon filter material will be replaced after 5,000 gallons of treatment.

5. A record of usage will be maintained by the Contractor.
6. The manufacturer's recommendations have been adhered to.
7. Any SCDES recommendations and any conditions set forth by SCDES will be adhered to.

Purge waters were treated on-site by Emerald, Inc. personnel using a treatment drum loaded with approximately 50 pounds of activated carbon. This carbon will be loaded to a maximum amount of 3 pounds of total organic carbon or 5,000 gallons of development/purge water, whichever occurs first. Cumulative organic compounds absorbed by the activated carbon is tracked to ensure the capacity of the carbon is not exceeded.

Origin of Water	Treatment Date	Amount
Development Water	1/29/25	30 Gallons
Purge Water	3/3 and 3/4/25	90 Gallons

If you have any additional questions please contact Emerald, Inc. at your convenience. Emerald, Inc. can be reached at 803-469-5454.

Yours very truly,
EMERALD, INC.

W. C. McClary/RB

William C. McClary, P.G.
Project Geologist

5032

NON-HAZARDOUS WASTE MANIFEST

2632

I M

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 920-24

2. Page 1 of

3. Generator's Name and Mailing Address: Various UST Sites (See Section G)

4. Generator's Phone ( )

5. Transporter 1 Company Name: Emerald Inc

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address:
T.K. Tank Services
425 Boulevard Road
Sumter, SC 29153

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

11. WASTE DESCRIPTION	12. Containers No.	Type	13. Total Quantity	14. Unit Wt./Vol.
a. Petroleum Contaminated Soil	1	CM	1.6	T
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above: 501 Amoco UST Permit 05156

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: William McCley for 501 Amoco

Signature

Date: Month 1 Day 28 Year 25

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name

Signature

Date: Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name: Bobby Snowden

Signature: Bobby Snowden

Date: Month 1 Day 28 Year 25

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: Brittany Boykin

Signature: Brittany Boykin

Date: Month 1 Day 28 Year 25

GENERATOR

TRANSPORTER

FACILITY

NON-HAZARDOUS WASTE

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HODGE AUTO/TRUCK SERVICE CENTER, INC.

No. 9166

493 E. Liberty Street
Sumter, South Carolina 29150
(803) 778-1200

CUSTOMER TK Trans

ADDRESS _____

DRIVER _____ ON ☐
Signature OFF ☐

WEIGH MASTER: _____

05:02 PM 01/28/2025

7160 lb G(Scale 1)
1920 lb G(Scale 2)
00 lb G(Scale 3)
9080 lb G (Total)

HODGE AUTO/TRUCK SERVICE CENTER, INC.

No. 9163

493 E. Liberty Street
Sumter, South Carolina 29150
(803) 778-1200

CUSTOMER TK Tank

ADDRESS _____

DRIVER _____ ON ☐
Signature OFF ☐

WEIGH MASTER: _____

04:38 PM 01/28/2025

7440 lb G(Scale 1)
4760 lb G(Scale 2)
00 lb G(Scale 3)
12200 lb G (Total)

RE INTEGRATED

425 Boulevard Road • Sumter, SC 29153
FACILITY PHONE NUMBER: (803) 418-5314

CERTIFICATE OF DISPOSAL

Certifies to all that the following quantities received on the shipping document from the listed Generator were disposed/treated/recycled in accordance with the Sumter Solidification (dba ReIntegrated) Facility Permit, EPA Regulations, and if applicable the approved ReIntegrated Facility Profile Form.

QUANTITY RECEIVED: _____ ☐ DM

QUANTITY RECEIVED: _____ ☐ DF

QUANTITY RECEIVED: _____ ☐ CF

QUANTITY RECEIVED: _____ ☐ CM

QUANTITY RECEIVED: _____ ☐ TT

QUANTITY RECEIVED & TYPE: 1.6 TON ☑ OTHER

GENERATOR NAME: 501 AMOCO

DATE RECEIVED: 1/28/2025

BROKER/BILL-TO: EMERALD

Matthew Chapman

Matthew Chapman, Director Of Operations

NON-HAZARDOUS WASTE MANIFEST

Please print or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 1834-

2. Page 1 of

3. Generator's Name and Mailing Address
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST Permit # 05156

4. Generator's Phone ( )

5. Transporter 1 Company Name
Emerald, Inc.

6. US EPA ID Number

A. State Transporter's ID

B. Transporter 1 Phone 803-469-5454

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
City of Manning
Wastewater Treatment Facility
PO Box 546
Manning, SC 29102

10. US EPA ID Number

E. State Facility's ID

F. Facility's Phone

GENERATOR

11. WASTE DESCRIPTION	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non-Hazardous Petroleum Contaminated Groundwater	1	TT	5480	
b.				
c.				
d.				

G. Additional Descriptions for Materials Listed Above

H. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. GENERATOR'S CERTIFICATION: I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: Christopher Scott Jr | Signature | Date: Month 2 Day 7 Year 25

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month 2 Day 7 Year 25

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.

Printed/Typed Name: Kathy Hodge | Signature: Kathy Hodge | Date: Month 2 Day 10 Year 25

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2.43-2.80


GPI
Electronic
Fuel Meter
For Motor
Fuels Only
DISPLAY
NON-COMMERCIAL
GREAT PLAINS INDUSTRIES, INC., WICHITA, KS.

APPENDIX F

QAPP CONTRACTOR'S CHECKLIST

South Carolina
Underground Storage Tank Program

501 Amoco
SCDES ID #05156
April 18, 2025

Contractor Checklist

For each report submitted to the UST Management Division, the contractor will be required to verify that all data elements for the required scope of work have been provided. For items not required for the scope of work, the N/A box should be checked. For items required and not completed or provided, the No box should be checked and a thorough description of the reason must be provided.

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

Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk Evaluation)			X
29	Have the exposure pathways been analyzed? (Tier 2 Risk Evaluation)			X
30	Have the SSTLs for each compund and pathway been calculated? (Tier 2 Risk Evaluation)			X
31	Have recommendations for further action been provided and explained?	X		
32	Has the soil analytical data for the site been provided in tabular format?			X
33	Has the potentiometric data for the site been provided in tabular format? (Table 1)	X		
34	Has the current and historical laboratory data been provided in tabular format? (Table 2 and 3)	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			X
36	Have the Site conceptual model tables been included? (Tier 1 Risk Evaluation)			X
37	Has the topographic map been provided with all required elements?	X		
38	Has the site base map been provided with all required elements?	X		
39	Have the CoC site maps been provided? (Figure 4 through 4F)	X		
40	Has the site potentiometric map been provided? (Figure 3)	X		
41	Have the geologic cross-sections been provided?			X
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements?			X
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements? (Appendix C)	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements?			X
47	Have the soil boring/field screening logs been provided?			X
48	Have the well completion logs and SCDES Form 1903 been provided?	X		
49	Have the aquifer evaluation forms, data, graphs, equation, etc. been provided?			X
50	Have the disposal manifests been provided? (Appendix D)	X		
51	Has a copy of the local zoning regulations been provided?			X
52	Has all fate and transport modeling been provided?			X
53	Have copies of all access agreements obtained by the contractor been provided?			X
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided? (Appendix E)	X		

SC DEPARTMENT *of*
ENVIRONMENTAL SERVICES

Yusef Hussein
Corrective Action & Field Support Section
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201

TODD INVESTMENT PROPERTIES LLC
220 RIVERVIEW RD
ATHENS GA 30606

JAN 28 2026



Re: **Site Specific Work Plan Request for Groundwater Sampling**
501 Amoco, 1432 Hwy 501, Myrtle Beach, SC
UST Permit #05156
Release reported December 31, 1991
Monitoring Report received April 23, 2025
Horry County

To Whom It May Concern:

The Underground Storage Tank Management Division (UST Division) of the S.C. Department of Environmental Services (SCDES) has reviewed the referenced report submitted by your contractor. The report documents petroleum chemicals in the soil and/or groundwater above Risk-Based Screening Levels.

Pursuant to S.C. Code Ann. Section 44-2-40(D), "The SUPERB Account and the SUPERB Financial Responsibility Fund shall provide combined coverage for site rehabilitation and third party claims, respectively, not to exceed one million dollars per occurrence". **According to UST Division records, approximately $392,606.89 has been expended from the SUPERB Account to date.**

Your selected contractor has proposed groundwater sampling as the next appropriate scope of work. To determine what risk the referenced release may pose to human health and the environment, and in accordance with Section 280.65 of the S.C. UST Control Regulations R.61-92, submittal of the Site Specific Work Plan (SSWP) for groundwater sampling may proceed. All work must be conducted in compliance with the current revision of the UST Quality Assurance Program Plan (QAPP), your contractor's Annual Contractor Quality Assurance Plan, and all applicable regulations. The QAPP is available at des.sc.gov/programs/bureau-land-waste-management/underground-storage-tanks/ust-quality-assurance-program-plan-qapp.

Groundwater samples should be collected from all monitoring wells associated with this release along with all water supply wells and surface waters within a 1,000 foot radius of the site. Samples should be analyzed for BTEX, Naphthalene, MTBE, 1,2-DCA, the 8 oxygenates, and EDB. All wells should be purged prior to sampling.

Your contractor must complete the SSWP and submit it within 30 days from the date of this letter. Every component may not be necessary to complete the above scope of work. The State Underground Petroleum Environmental Response Bank (SUPERB) Account allowable cost for each component is included on the Assessment Component Cost Agreement Form. **Please note that approval from SCDES must be issued before work begins.**

If the plan cannot be submitted by the required due date, an extension must be requested by submitting a written request, either via postal mail or email, to my attention prior to the due date. The Department will issue a Notice of Alleged Violation if the report/plan is not submitted by the required due date.

On all correspondence concerning this site, please reference UST Permit number above. Should you have any questions, please contact me by phone at (803) 898-2946, by fax at (803) 898-0673, or by email at Yusef.Hussein@des.sc.gov.

Sincerely,

Yusef Hussein, Hydrogeologist

cc: Emerald Inc, PO Box 3050, Sumter, SC 29151 (w/o enc)
Technical file

Emerald, Inc.

CONSULTING AND ENGINEERING
SERVICES IN ENVIRONMENTAL AFFAIRS

2520 TAHOE DRIVE · POST OFFICE BOX 3050 · SUMTER, SOUTH CAROLINA 29151

WEBSITE:
www.emeraldinc-us.com

TELEPHONE (803) 469-5454
FAX (803) 469-5465

January 6, 2026



Yusef Hussein, Hydrogeologist
Corrective Action & Field Support Section
Underground Storage Tank Division
Bureau of Land and Waste Management
South Carolina Department Environmental Services
2600 Bull Street
Columbia, SC 29201



Site Specific Work Plan – Groundwater Sampling
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
Horry County
UST Permit #05156

Mr. Hussein,

Please find the attached Site-Specific Work Plan, figures, and proposed costs for a comprehensive groundwater sampling event at the subject site. If you have any questions or concerns, please feel free to contact Emerald, Inc. at 803-469-5454.

Sincerely,

William C. McClary, P.G.
President

Attachments
Appendix A - Site Specific Work Plan
Appendix B - Figures
Appendix C – Proposed Costs

APPENDIX A

SITE SPECIFIC WORK PLAN

Site-Specific Work Plan for Approved ACQAP
Underground Storage Tank Management Division

To: Yusef Hussein, Hydrogeologist (SCDHEC Project Manager)
From: William (Chad) McClary, P.G. (Contractor Project Manager)
Contractor: Emerald, Inc. UST Contractor Certification Number: 67

Facility Name: 501 Amoco UST Permit #: 05156
Facility Address: 1432 US Highway 501, Myrtle Beach, SC
Responsible Party: Todd Investments Properties LLC Phone:
RP Address: 220 Riverview Road, Athens, GA 30606
Property Owner (if different): SAA
Property Owner Address: SAA
Current Use of Property: Car Lot

Scope of Work (Please check all that apply)

- ☐ IGWA
- ☐ Tier I
- ☐ Tier II
- ☐ Monitoring Well Installation
- ☑ Groundwater Sampling
- ☐ Other
- ☐ GAC

Analyses (Please check all that apply)

Groundwater/Surface Water:

- ☑ BTEXNMDCA (8260B)
- ☑ Oxygenates (8260B)
- ☑ EDB (8011)
- ☐ PAH (8270D)
- ☐ Lead
- ☐ 8 RCRA Metals
- ☐ TPH
- ☐ pH
- ☐ BOD
- ☐ Nitrate
- ☐ Sulfate
- ☐ Other
- ☐ Methane
- ☐ Ethanol
- ☐ Dissolved Iron

Drinking Water Supply Wells:

- ☐ BTEXNMDCA (524.2)
- ☐ Oxygenates & Ethanol (8260B)
- ☐ Mecury (200.8 245.1 or 245.2)
- ☐ RCRA Metals (200.8)
- ☐ EDB (504.1)

Soil:

- ☐ BTEXNM
- ☐ Lead
- ☐ RCRA Metals
- ☐ PAH
- ☐ Oil & Grease (9071)
- ☐ TPH-DRO (3550B/8015B)
- ☐ TPH-GRO (5030B/8015B)
- ☐ Grain Size
- ☐ TOC

Air:

- ☐ BTEXN

Sample Collection (Estimate the number of samples of each matrix that are expected to be collected.)

____ Soil	____ Water Supply Wells	____ Air	2 Field Blank
26 Monitoring Wells	1 Surface Water	2 Duplicate	2 Trip Blank

Field Screening Methodology

Estimate number and total completed depth for each point, and include their proposed locations on the attached map.

# of shallow points proposed: _____ Estimated Footage: _____ feet per point
# of deep points proposed: _____ Estimated Footage: _____ feet per point
Field Screening Methodology: _____

Permanent Monitoring Wells

Estimate number and total completed depth for each well, and include their proposed locations on the attached map.

# of shallow wells: _____ Estimated Footage: _____ feet per point
# of deep wells: _____ Estimated Footage: _____ feet per point
# of recovery wells: _____ Estimated Footage: _____ feet per point
Comments, if warranted:

_____

_____

UST Permit #: 05156 Facility Name: 501 Amoco

Implementation Schedule (Number of calendar days from approval)

Field Work Start-Up: 15 Field Work Completion: 60

Report Submittal: 90 # of Copies Provided to Property Owners: _____

Aquifer Characterization

Pump Test: ☐ Slug Test: ☐ (Check one and provide explanation below for choice)

_____

_____

_____

Investigation Derived Waste Disposal

Soil: _____ Tons Purge Water: 500 Gallons

Drilling Fluids: _____ Gallons Free-Phase Product: _____ Gallons

Additional Details For This Scope of Work

For example, list wells to be sampled, wells to be abandoned/repaired, well pads/bolts/caps to replace, details of AFVR event, etc.

Emerald, Inc. proposes groundwater sampling to provide current groundwater quality data.

Monitoring wells MW-1 through MW-18, TW-1, TW-2, and RW-1 through RW-5 will be sampled.

Each well will be sampled for BTEX, Napth, MTBE, DCA, Oxys (EPA 8260D), and EDB (EPA 8011).

Wells will be purged prior to sampling. Wells containing free product will be gauged and not sampled.

One surface water (pond) located 650 ft. east will be sampled for BTEX, Napth, MTBE, DCA, Oxys (EPA 8260D), and EDB (EPA 8011).

_____

_____

Compliance With Annual Contractor Quality Assurance Plan (ACQAP)

Yes Laboratory as indicated in ACQAP? (Yes/No) If no, indicate laboratory information below.

Name of Laboratory: _____

SCDHEC Certification Number: _____

Name of Laboratory Director: _____

____ Well Driller as indicated in ACQAP? (Yes/No) If no, indicate driller information below.

Name of Well Driller: _____

SCLLR Certification Number: _____

____ Other variations from ACQAP. Please describe below.

_____

_____

_____

_____

_____

Attachments

1. Attach a copy of the relevant portion of the USGS topographic map showing the site location.

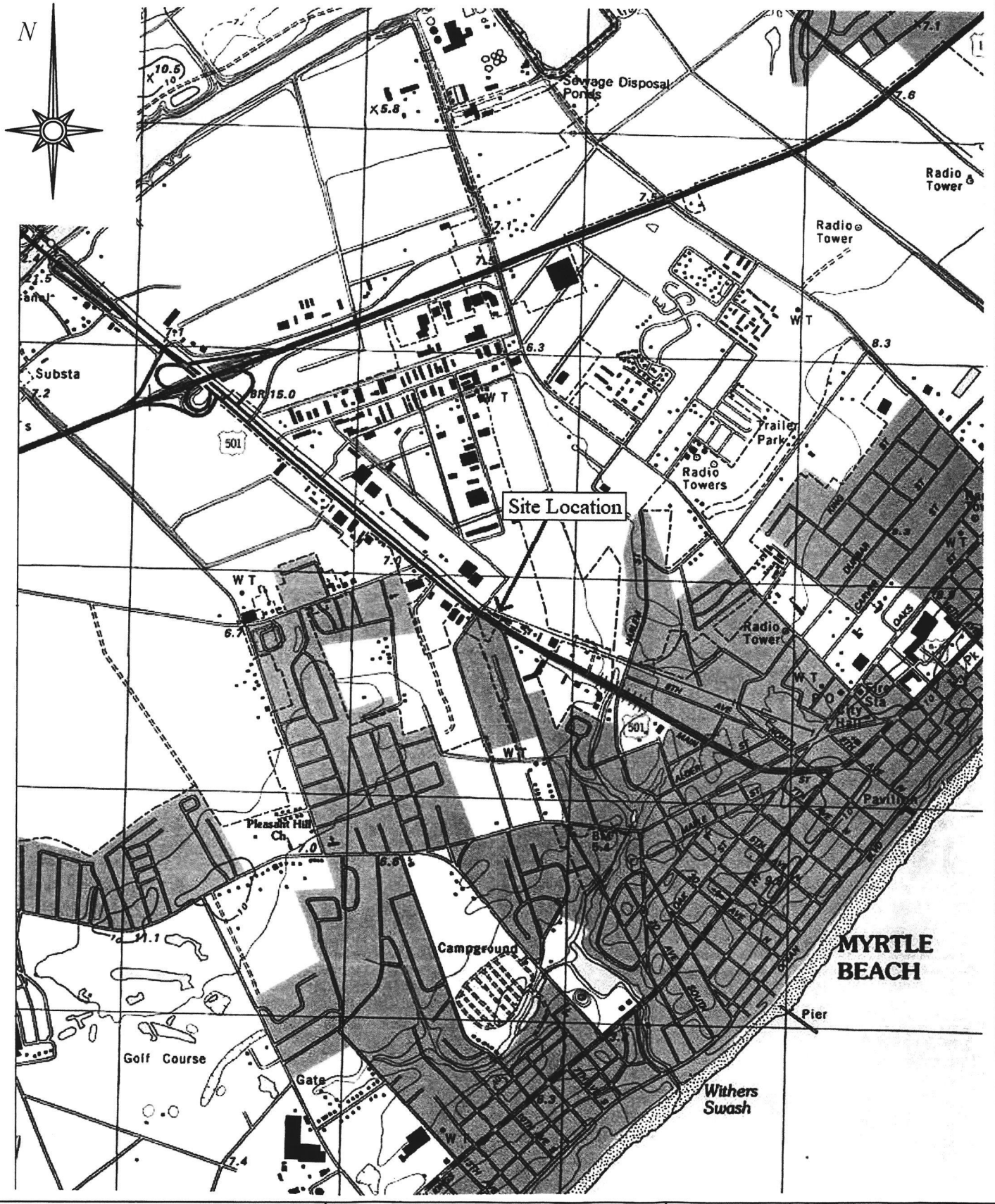
2. Prepare a site base map. This map must be accurately scaled, but does not need to be surveyed. The map must include the following:

North Arrow	Proposed monitoring well locations
Location of property lines	Legend with facility name and address, UST permit number, and bar scale
Location of buildings	Streets or highways (indicate names and numbers)
Previous soil sampling locations	Location of all present and former ASTs and USTs
Previous monitoring well locations	Location of all potential receptors
Proposed soil boring locations	

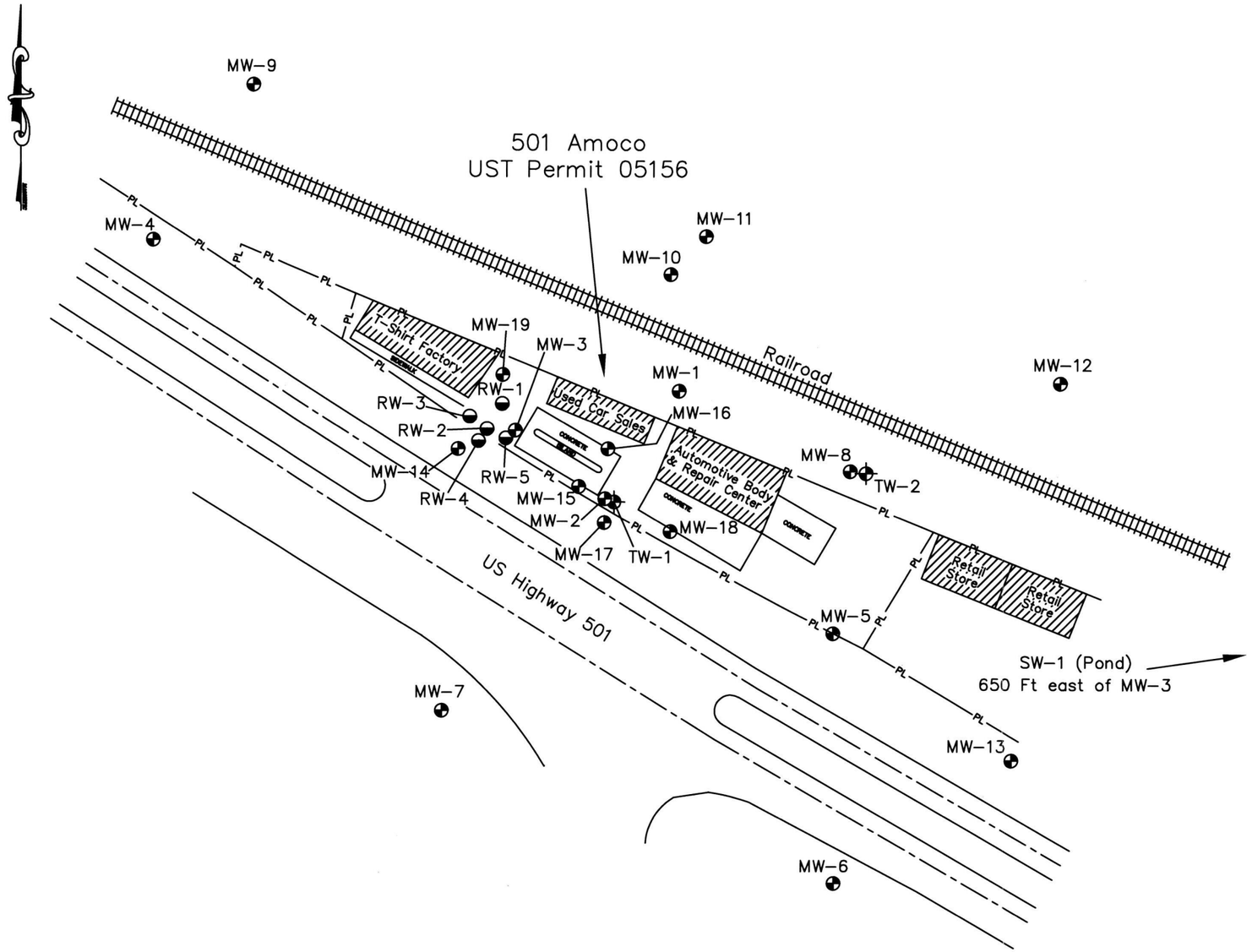
3. Assessment Component Cost Agreement, SCDHEC Form D-3664

APPENDIX B

FIGURES



PROJECT:	SHEET TITLE:	
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST Permit# 05156	Figure 1 USGS Topographic Map 7.5 Minute Series "Myrtle Beach, SC" Quadrangle Scale: 1 to 2,000 Contour Interval = 2 meters	EMERALD, INC. Sumter, SC



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

SCALE
1 INCH = 80 FEET
0 80′ 160′

Map based Kleen Sites Geoservices Figure 4

PROJECT:	DATE:	Figure 2 - Site Map
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	2/6/26	EMERALD, INC. SUMTER, SOUTH CAROLINA

APPENDIX C

PROPOSED COSTS

ASSESSMENT COMPONENT COST AGREEMENT

South Carolina Department of Health and Environmental Control
Underground Storage Tank Management Division
State Underground Petroleum Environmental Response Bank Account
August 9, 2023

Facility Name: 501 Amoco

UST Permit #: 05156 **Cost Agreement #:**

ITEM	QUANTITY	UNIT	UNIT PRICE		TOTAL
A. Plan Preparation					
1.2 Site-specific Work Plan	1	each	$183.22		$183.22
2.2 Tax Map		each	$85.50		$0.00
3.2 QAPP Contractor Addendum (App B)		each	$250.00		$0.00
B. Survey					
1.1 Receptor Survey		each	$673.06		$0.00
C. Survey					
1.2 Comprehensive Survey		each	$1,270.36		$0.00
5.1 Ground Penetrating Radar Survey (100 x 100)		each	$1,111.57		$0.00
D. Mob/Demob					
1.2 Equipment		each	$1,245.93		$0.00
2.2 Personnel	2	each	$516.69		$1,033.38
3.2 Adverse Terrain Vehicle		each	$610.75		$0.00
E. Soil Borings					
1.1 Soil Borings (hand auger)		foot	$21.80		$0.00
F. Soil Borings (requiring equipment, push technology, etc) or Field Screening (including sampling and analyst)					
1.2 Standard		per foot	$33.50		$0.00
2.2 Fractured Rock		per foot	$41.40		$0.00
G.					
H. Well Abandonment					
1.2 2" diameter or less		per foot	$3.79		$0.00
2.2 Greater than 2" to 6" diameter		per foot	$5.50		$0.00
3.2 Dug/Bored well (up to 6 feet diameter)		per foot	$18.32		$0.00
I. Well Installation (In accordance with R.61-71)					
1.2 Water Table (hand augered)		per foot	$31.40		$0.00
2.B Water Table (drill rig) 2" Diameter		per foot	$54.90		$0.00
2.2 Single-cased 2" Diameter Monitoring Well >50ft		per foot	$59.80		$0.00
3.2 Telescoping		per foot	$84.70		$0.00
4.2 Rock Drilling		per foot	$81.80		$0.00
5.2 2" Rock Coring		per foot	$88.50		$0.00
6.2 Multi-sampling ports/screens		per foot	$59.40		$0.00
7.2 Recovery Well (4" diameter)		per foot	$69.60		$0.00
9.2 Rotosonic (2" diameter)		per foot	$119.00		$0.00
10.2 Re-develop Existing Well		per foot	$13.44		$0.00
J. Groundwater Sample Collection / Gauging Depth to Water/Product					
1.2 Groundwater Purge	26	per well	$73.29		$1,905.54
2.2 Air or Vapors		sample	$14.66		$0.00

3.2 Water Supply Sample		sample	$26.87		$0.00
4.1A HydraSleeve		sample	$34.20		$0.00
4.2B No-purge Groundwater Sample/Surface wate	1	sample	$57.24		$57.24
5.2 Gauge Well only		sample	$8.55		$0.00
6.2 Sample Below Product		sample	$14.66		$0.00
7.2 Passive Diffusion Bag		sample	$31.75		$0.00
8.2 Field Duplicates (MWs & WSWs) and Field Blanks		sample	$30.06		$0.00
9.2 Groundwater (low flow purge)		sample	$111.16		$0.00
10.2 Equipment Blank		sample	$30.06		$0.00
11.1 Sample Product		per well	$52.66		$0.00
K. Laboratory Analyses-Groundwater					
1.2 BTEXNM+Oxyg's+1,2 DCA+Eth(8260D)	33	per sample	$149.02		$4,917.66
2.2 Lead, Filtered		per sample	$16.85		$0.00
3.2 Rush EPA Method 8260B		per sample	$187.62		$0.00
4.2 Trimethal, Butyl, and Isopropyl Benzenes		per sample	$34.20		$0.00
5.2 PAH's		per sample	$74.02		$0.00
6.2 Lead		per sample	$19.54		$0.00
7.2 EDB by EPA 8011	31	per sample	$55.21		$1,711.51
8.2 EDB by EPA Method 8011 Rush		per sample	$83.31		$0.00
9.2 8 RCRA Metals		per sample	$77.45		$0.00
10.2 TPH (9070)		per sample	$50.09		$0.00
11.2 PH		per sample	$6.35		$0.00
12.2 BOD		per sample	$24.42		$0.00
13.2 Ethanol		per sample	$18.08		$0.00
K. Analyses-Drinking Water					
14.2 BTEXNM+1,2 DCA (524.2)		per sample	$151.52		$0.00
15.2 7-OXYGENATES & ETHANOL (8260D)		per sample	$112.07		$0.00
16.2 EDB (504.1)		per sample	$97.11		$0.00
17.2 RCRA METALS (200.8)		per sample	$122.15		$0.00
K. Analyses-Soil					
18.2 BTEX + Naphth.		per sample	$78.18		$0.00
19.2 PAH's		per sample	$78.22		$0.00
20.2 8 RCRA Metals		per sample	$68.89		$0.00
21.2 TPH-DRO (3550C/8015C)		per sample	$48.86		$0.00
22.2 TPH-GRO (5035B/8015C)		per sample	$43.92		$0.00
23.2 Grain size/hydrometer		per sample	$127.04		$0.00
24.2 Total Organic Carbon		per sample	$37.38		$0.00
K. Analyses-Air					
25.2 BTEX + Naphthalene		per sample	$263.84		$0.00
K. Hydrocarbon Fuel Identification					
27.1 C3-C44 Whole Oil (ASTM D3328)		per sample	$465.93		$0.00
28.1 Fuel Oxygenates (1624 Mod)		per sample	$398.39		$0.00
29.1 ALKYL Leads, EDB MMT (8080)		per sample	$398.39		$0.00
30.1 C8-C40 Full Scan (ASTM 5739)		per sample	$629.64		$0.00
31.1 Simulated Distillation (ASTM 2887)		per sample	$398.39		$0.00
32.1 Parent & Alk. PAH Com. (8270 SIM)		per sample	$723.63		$0.00
33.1 C3-C10 Piano (8260 MOD)		per sample	$599.88		$0.00

34.1 C10+Alkane Fingerprints		per sample	$599.88		$0.00
35.1 Expert Data Interpretation & Report		each	$595.30		$0.00
L. Aquifer Characterization					
1.2 Pumping Test		per hour	$28.09		$0.00
2.2 Slug Test		per test	$233.31		$0.00
3.2 Fractured Rock		per test	$122.15		$0.00
M. Free Product					
1.1 Free Product Recovery Rate Test		each	$46.42		$0.00
N.					
O. Risk Evaluation					
1.2 Tier I Risk Evaluation		each	$366.45		$0.00
2.2 Tier II Risk Evaluation		each	$122.15		$0.00
P. Survey					
1.1 Subsequent Survey		each	$297.65		$0.00
Q. Disposal (gallons or tons)					
1.2 Wastewater	500	gallon	$1.19		$595.00
2.2 Free Product		gallon	$1.63		$0.00
3.2 Soil Treatment/Disposal		ton	$156.25		$0.00
4.2 Drilling fluids		gallon	$1.25		$0.00
R. Miscellaneous (attach receipts)					
		each	$0.00		$0.00
		each	$0.00		$0.00
T. Tier I Assessment (Use DHEC 3665 form)					
1.2 Southeast Region		standard	$12,622.56		$0.00
2.2 All Other Counties		standard	$13,844.06		$0.00
U. IGWA (Use DHEC 3666 form)					
1.2 Southeast Region		standard	$4,353.67		$0.00
2.2 All Other Counties		standard	$4,720.01		$0.00
22. Active Correction Action		PFP	Bid Cost		$0.00
W. Aggressive Fluid & Vapor Recovery (AFVR)					
1.2 8-hour Event		per event	$1,787.40		$0.00
2.1 24-hour Event		per event	$4,407.78		$0.00
3.1 48-hour Event		per event	$7,242.29		$0.00
4.1 96-hour Event		per event	$14,482.28		$0.00
5.1 Off-gas Treatment 8 hour		per event	$141.17		$0.00
6.2 Off-gas Treatment 24 hour		per event	$294.30		$0.00
7.2 Off-gas Treatment 48 hour		per event	$386.10		$0.00
8.1 Off-gas Treatment 96 hour		per event	$898.84		$0.00
9.1 Off-gas Treatment 8 hour (w/chlorinated compounds)		per event	$464.40		$0.00
10.1 Off-gas Treatment 24 hour (w/chlorinated compounds)		per event	$540.00		$0.00
11.1 Off-gas Treatment 48 hour (w/chlorinated compounds)		per event	$1,080.00		$0.00
12.1 Off-gas Treatment 96 hour (w/chlorinated compounds)		per event	$2,160.00		$0.00
13.2 AFVR Effluent Disposal(w/chlorinated compounds)		gallon	$0.64		$0.00
14.2 AFVR Site Reconnaissance		each	$302.40		$0.00
15.1 Additional Hook-ups		each	$29.68		$0.00
16.2 AFVR Effluent Disposal		gallon	$0.53		$0.00
17.2 AFVR Mobilization/Demobilization		each	$777.60		$0.00

18.1 Mobilization for absorbents/skimmers		each	$516.69		$0.00
19.1 Well sock 2" ID well		each	$36.94		$0.00
20.1 Well sock 4" ID well		each	$49.03		$0.00
21.1 pad (per pad)		each	$49.95		$0.00
22.1 3" diameter x 10' length boom		each	$108.00		$0.00
23.1 5" diameter x 10' length boom		each	$132.84		$0.00
24.1 New FPP recovery skimmer (2" wells)		each	$791.10		$0.00
25.1 New FPP recovery skimmer (4" wells)		each	$1,247.40		$0.00
26.1 Refurbished FPP recovery skimmer (2" or 4" wells)		each	$760.32		$0.00
27.1 Disposal of Absorbents		pound	$4.10		$0.00
28.1 Disposal of product from skimmers		gallon	$0.50		$0.00
X. Granulated Activated Carbon (GAC) filter system installation & service:					
1.2 New GAC System Installation		each	$2,320.86		$0.00
2.2 Refurbished GAC Sys. Install		each	$1,099.35		$0.00
3.2 Filter replacement/removal		each	$427.53		$0.00
4.2 GAC System removal, cleaning, & refurbishment		each	$335.92		$0.00
5.2 GAC System housing		each	$305.38		$0.00
6.2 In-line particulate filter		each	$183.22		$0.00
7.2 Additional piping & fittings		foot	$1.84		$0.00
Y. Well Repair					
1.2 Additional Copies of the Report Delivered		each	$61.07		$0.00
2.2 Repair 2x2 MW pad		each	$61.07		$0.00
3.2 Repair 4x4 MW pad		each	$107.49		$0.00
4.2 Replace well vault		each	$144.14		$0.00
5.2 Replace well cover bolts		each	$3.18		$0.00
6.2 Replace locking well cap & lock		each	$18.32		$0.00
7.2 Replace/Repair stick-up		each	$163.68		$0.00
8.2 Convert Flush-mount to Stick-up		each	$183.22		$0.00
9.2 Convert Stick-up to Flush-mount		each	$158.79		$0.00
10.2 Replace missing/illegible well ID plate		each	$14.66		$0.00
11.1 Down-hole Camera		per foot	$29.25		$0.00
Z. High Resolution Site Characterization					
1.1 HRSC Screening Equipment Mobilization		each	$1,468.80		$0.00
2.1 HRSC Drilling Category 1		per foot	$31.32		$0.00
3.1 HRSC Drilling Category 2		per foot	$36.18		$0.00
4.1 HRSC Drilling Category 3		per foot	$29.16		$0.00
5.1 HRSC 3-D Model		each	$4,363.20		$0.00
S. Report Prep & Project Management	12%	percent	$10,403.55		$1,248.43
TOTAL					$11,651.98

SC DEPARTMENT *of*
ENVIRONMENTAL SERVICES

Yusef Hussein
Corrective Action & Field Support Section
Underground Storage Tank Management Division
2600 Bull Street
Columbia, SC 29201



TODD INVESTMENT PROPERTIES LLC
220 RIVERVIEW RD
ATHENS GA 30606

FEB 24 2026

Re: **Site Specific Work Plan Approval and Groundwater Sampling Notice to Proceed**
501 Amoco, 1432 Hwy 501, Myrtle Beach, SC
UST Permit #05156; CA #70983
Release reported December 31, 1991
Site Specific Work Plan received February 18, 2026
Horry County

To Whom It May Concern:

The Underground Storage Tank Management Division (UST Division) of the S.C. Department of Environmental Services has reviewed and approved the referenced Site Specific Work Plan (SSWP) submitted by your contractor. The groundwater sampling event should begin immediately upon receipt of this letter. All work should be conducted in compliance with the current revision of the UST Quality Assurance Program Plan (QAPP), your contractor's Annual Contractor Quality Assurance Plan, and all applicable regulations. The QAPP is available at des.sc.gov/programs/bureau-land-waste-management/underground-storage-tanks/ust-quality-assurance-program-plan-qapp.

Pursuant to S.C. Code Ann. Section 44-2-40(D), "The SUPERB Account and the SUPERB Financial Responsibility Fund shall provide combined coverage for site rehabilitation and third party claims, respectively, not to exceed one million dollars per occurrence". **According to UST Division records, approximately $392,606.89 has been expended from the SUPERB Account to date.** This scope of work, as recommended by your contractor, is anticipated to cost approximately $11,651.98.

The contractor must provide notification to the UST Project Manager via email 4 days prior to initiation of any site rehabilitation activities. If there are any changes to the schedule, the UST Project Manager must be contacted within 24 hours of those changes.

In accordance with Section IV.A.4.c of the SUPERB Site Rehabilitation & Fund Access Regulation (R.61-98), the contractor shall be required to indemnify the property owner, underground storage tank owner/operator and the State of South Carolina from and against all claims, damages, losses and expenses arising out of or resulting from activity conducted by the contractor, its agents, employees or subcontractors.

Your contractor can submit an invoice for direct payment from the State Underground Petroleum Environmental Response Bank (SUPERB) Account for pre-approved costs. **The Monitoring Report, contractor checklist (QAPP Appendix K), and invoice should be submitted to the UST Division within sixty (60) days of the date of this correspondence.** If the invoice is not submitted within 120 days from the date of this letter, monies allocated to pay this invoice will be uncommitted. This means that the invoice will not be processed for payment until all other committed funds are paid or monies become available.

If the report cannot be submitted by the required due date, an extension may be requested by submitting a written request, either via postal mail or email, to my attention prior to the due date. The Department will issue a Notice of Alleged Violation if the report is not submitted by the required due date.

Please note that sections 44-2-110(4) and 44-2-130 of the SUPERB Statute state that the SUPERB Account cannot compensate any costs that are not pre-approved. If for any reason additional tasks will be completed, these additional tasks, and the associated cost, must be pre-approved by the UST Division for the cost to be paid. The UST Division reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria. Further, the UST Division reserves the right to question and/or reject costs if deemed unreasonable and the right to audit project records at any time during the project or after completion of work. **Per Section III.3.b of the SUPERB Site Rehabilitation and Fund Access Regulations (R.61-98), reimbursement for site rehabilitation activities shall in no event exceed the actual costs incurred.**

Please note that applicable South Carolina certification requirements regarding laboratory services, well installation, and report preparation must be satisfied. Any site rehabilitation activity associated with the UST release must be performed by a SCDES-certified site rehabilitation contractor as required by the SUPERB Site Rehabilitation and Fund Access Regulation, R.61-98.

The UST Division grants pre-approval for transportation of virgin petroleum impacted soil and groundwater from the referenced site to a permitted treatment facility. There can be no spillage or leakage in transport. All investigation-derived waste (IDW) must be properly contained and labeled prior to disposal. IDW should not be stored on-site longer than ninety (90) days. A copy of the disposal manifest and/or acceptance letter from the receiving facility that clearly designates the quantity received must be included as an appendix to the report. If the Chemical of Concern (CoC) concentrations based on laboratory analysis is below Risk-Based Screening Levels (RBSLs), please contact the project manager for approval to dispose of soil and/or groundwater on-site. The SUPERB Account will not reimburse for transportation or treatment of soil and/or groundwater with concentrations below RBSLs.

The contractor will be responsible for keeping and preserving suitable records of hydrological and other site assessments, site plans, contracts, accounts, invoices, or other transactions related to the cleanup and rehabilitation and the records must be accessible to the department during regular business hours. In addition, this includes all subcontractor agreements, invoices, correspondence, plans, reports, records, including electronic and paper formats. All records must be maintained for 10 years after project completion.

On all correspondence regarding this site, please reference the UST Permit number above. Should you have any questions, please contact me by phone at (803) 898-2946, by fax at (803) 898-0673, or by email at Yusef.Hussein@des.sc.gov.

Sincerely,

Yusef Hussein, Hydrogeologist

enc: Approved Cost Agreement

cc: Emerald Inc, PO Box 3050, Sumter, SC 29151 (w/ enc)
Technical file (w/ enc)

Approved Cost Agreement CA-70983

Facility Name: 05156 - 501 AMOCO

Facility Number: 05156

PO Number	Description	Comments	Qty / Pct	Unit Price	Amount
70983	A / PLAN PREPARATION / 1.2 / SITE SPECIFIC WORK PLAN		1	$183.22	$183.22
70983	D / MOB/DEMOB / 2.2 / PERSONNEL		2	$516.69	$1033.38
70983	J / SAMPLE COLLECTION / 1.2 / GROUND WATER PURGE		26	$73.29	$1905.54
70983	J / SAMPLE COLLECTION / 4.2B / NO-PURGE GROUNDWATER		1	$57.24	$57.24
70983	K / ANALYSES / 1.2 / BTEXNM+OXYGS+1,2 DCA+ETH 8260D		33	$149.02	$4917.66
70983	K / ANALYSES / 7.2 / EDB BY EPA 8011		31	$55.21	$1711.51
70983	Q / DISPOSAL / 1.2 / WASTEWATER		500	$1.19	$595
70983	S / REPORT PROJECT MANAGEMENT / S / REPORT PREP & PROJ. MANAGEMENT		0.12	$0.12	$1248.43
					Total : $11651.98

Domenico Model

UST # 05156
Site Name: 501 Amoco
Modeler: Yusef Hussein
Date: 3/19/2026

Groundwater Flow Parameters

T1 (4/29/04)

K	342.79632	ft/yr
dh/dx	0.00642	
θeff	0.2	dec. %
v_x	11.00376187	ft/yr

Transport Parameters

x_{max}	157	ft
$y_{max/2}$	42	ft
z	0	ft
Source Width	30	ft
Source Thickness	15	ft
Plume Length	262	ft
α_x	12.8588372	ft
α_y	1.28588372	ft
α_z	1.00E-99	ft

Simulation Time

t_{sim} 34.19167 yrs

Aquifer Characteristics

ρ_d	1.7	kg/L
f_{oc}	0.0002	

Source Area CoC Data

CoC	C_{source} (mg/L)	K_{oc} (L/kg)
Benzene		81
Toluene		133
Ethylbenzene	2.07	176
Xylenes		639
Naphthalene	0.823	1543
MtBE		11
EDB		28
1,2-DCA		17.5

Retarded Velocity (ft/yr)

CoC	R	v_R
Benzene	1.138	9.67
Toluene	1.226	8.97
Ethylbenzene	1.299	8.47
Xylenes	2.086	5.27
Naphthalene	3.623	3.04
MtBE	1.019	10.80
EDB	1.048	10.50
1,2-DCA	1.030	10.69

Simulation Points for Breakthrough Curves

x		ft	x		ft
y		ft	y		ft
z		ft	z		ft

$$C(x,y,z,t) = \left(\frac{C_0}{8}\right)\exp\left[\left(\frac{x}{2\alpha_x}\right)\left(1-\sqrt{1+\frac{4\lambda\alpha_x}{v}}\right)\right] erfc\left[\frac{x-vt\sqrt{1+\frac{4\lambda\alpha_x}{v}}}{2\sqrt{\alpha_x vt}}\right]\left\{erf\left[\frac{y+\frac{Y}{2}}{2\sqrt{\alpha_y x}}\right]-erf\left[\frac{y-\frac{Y}{2}}{2\sqrt{\alpha_y x}}\right]\right\}\left\{erf\left[\frac{z+Z}{2\sqrt{\alpha_z x}}\right]-erf\left[\frac{z-Z}{2\sqrt{\alpha_z x}}\right]\right\}$$

Ethylbenzene Calibration

Spatial Calibration Data

(centerline)

x	C_{obs} (mg/L)	C_{sim} (mg/L)	
0	2.07	2.07	MW-19
15.7		1.024	
31.4		0.475	
47.1		0.219	
62.8		0.102	
78.5		0.048	
94.2		0.023	
109.9		0.011	
125.6		0.005	
141.3		0.002	
157	0.001	0.001	MW-11

Temporal Calibration Data

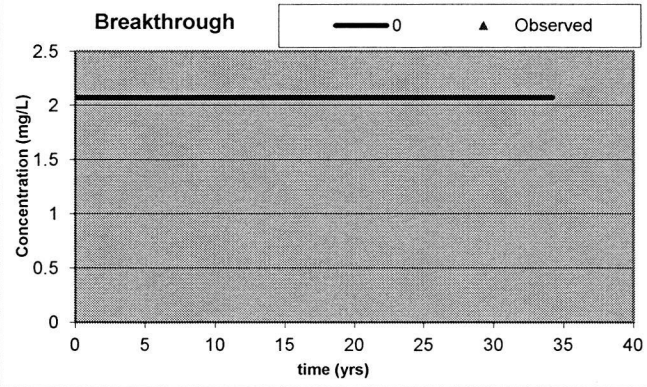
		0	0
t (yrs)	C_{obs} (mg/L)	C_{sim} (mg/L)	C_{obs} (mg/L)	C_{sim} (mg/L)
0		2.07		2.07
3.419167		2.070		2.070
6.838333		2.070		2.070
10.2575		2.070		2.070
13.67667		2.070		2.070
17.09583		2.070		2.070
20.515		2.070		2.070
23.93417		2.070		2.070
27.35333		2.070		2.070
30.7725		2.070		2.070
34.19167		2.070		2.070

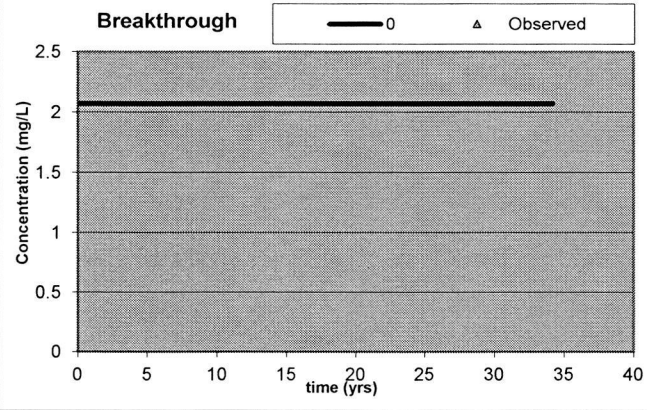
Site ID 05156

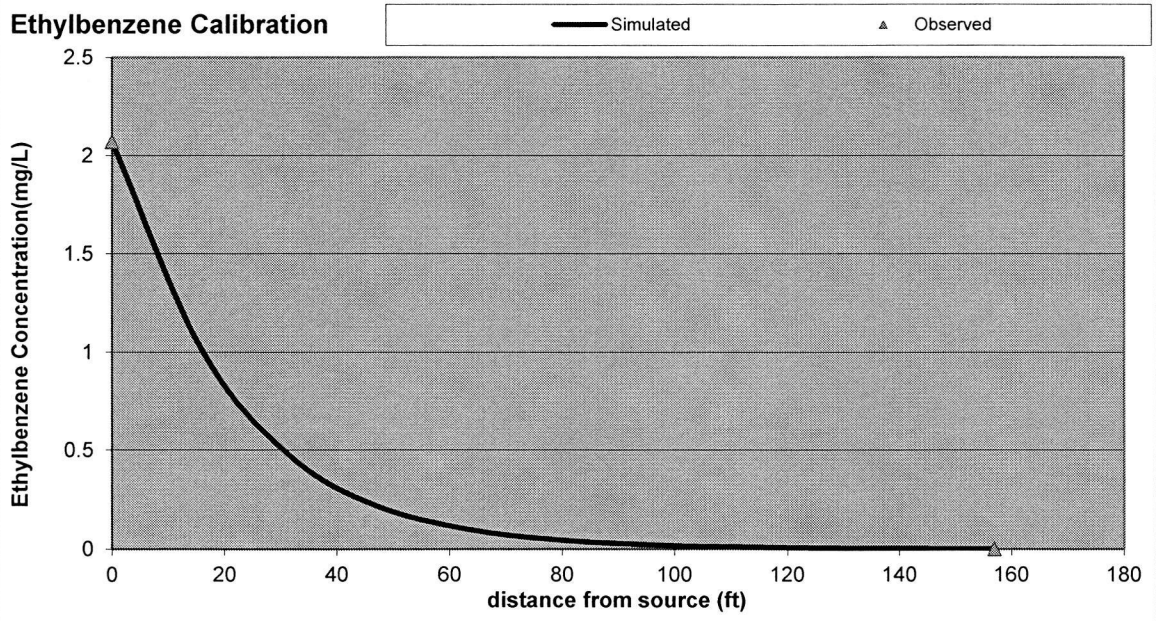
Site Name 501 Amoco

Model Calibration Parameters

$t_{1/2}$	1.2	yrs	λ	0.5775 yr^{-1}
v_x	11.00376	ft/yr		
R	1.299			
v_R	8.470	ft/yr	C_{source}	2.07 mg/L
L_p	262	ft		
α_x	12.85884	ft	t_{sim}	34.1917 yrs
α_y	1.285884	ft		
α_z	1E-99	ft		







Source	15.7	31.4	47.1	62.8	78.5	94.2	109.9	125.6	141.3	157
42	1.1191E-05	0.00069867	0.00187385	0.00224157	0.00192626	0.0013971	0.000917	0.000565	0.000333	0.00019
21	0.17991995	0.13247601	0.07737007	0.0421572	0.02222378	0.0114947	0.005874	0.002979	0.001502	0.000755
0	1.02385589	0.47545865	0.21893591	0.10163793	0.04762971	0.022504	0.010705	0.005121	0.002461	0.001188
21	0.17991995	0.13247601	0.07737007	0.0421572	0.02222378	0.0114947	0.005874	0.002979	0.001502	0.000755
42	1.1191E-05	0.00069867	0.00187385	0.00224157	0.00192626	0.0013971	0.000917	0.000565	0.000333	0.00019

Naphthalene Calibration

Spatial Calibration Data

(centerline)

x	C_{obs} (mg/L)	C_{sim} (mg/L)	
0	0.823	0.823	MW-19
15.7		0.443	
31.4		0.224	
47.1		0.112	
62.8		0.057	
78.5		0.029	
94.2		0.015	
109.9		0.007	
125.6		0.004	
141.3		0.002	
157	0.001	0.001	MW-11

Temporal Calibration Data

	0		0	
t (yrs)	C_{obs} (mg/L)	C_{sim} (mg/L)	C_{obs} (mg/L)	C_{sim} (mg/L)
0		0.823		0.823
3.419167		0.823		0.823
6.838333		0.823		0.823
10.2575		0.823		0.823
13.67667		0.823		0.823
17.09583		0.823		0.823
20.515		0.823		0.823
23.93417		0.823		0.823
27.35333		0.823		0.823
30.7725		0.823		0.823
34.19167		0.823		0.823

Site ID 05156

Site Name 501 Amoco

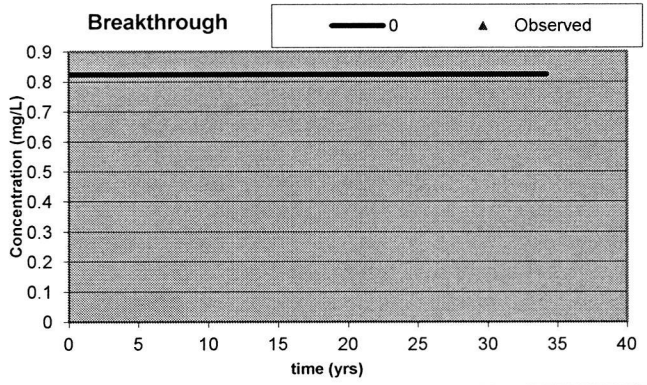
Model Calibration Parameters

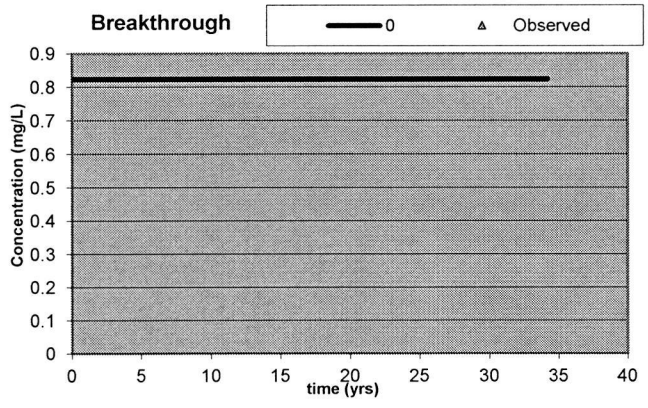
$t_{1/2}$	4	yrs
v_x	11.00376	ft/yr
R	3.623	
v_R	3.037	ft/yr
L_p	262	ft
α_x	12.85884	ft
α_y	1.285884	ft
α_z	1E-99	ft

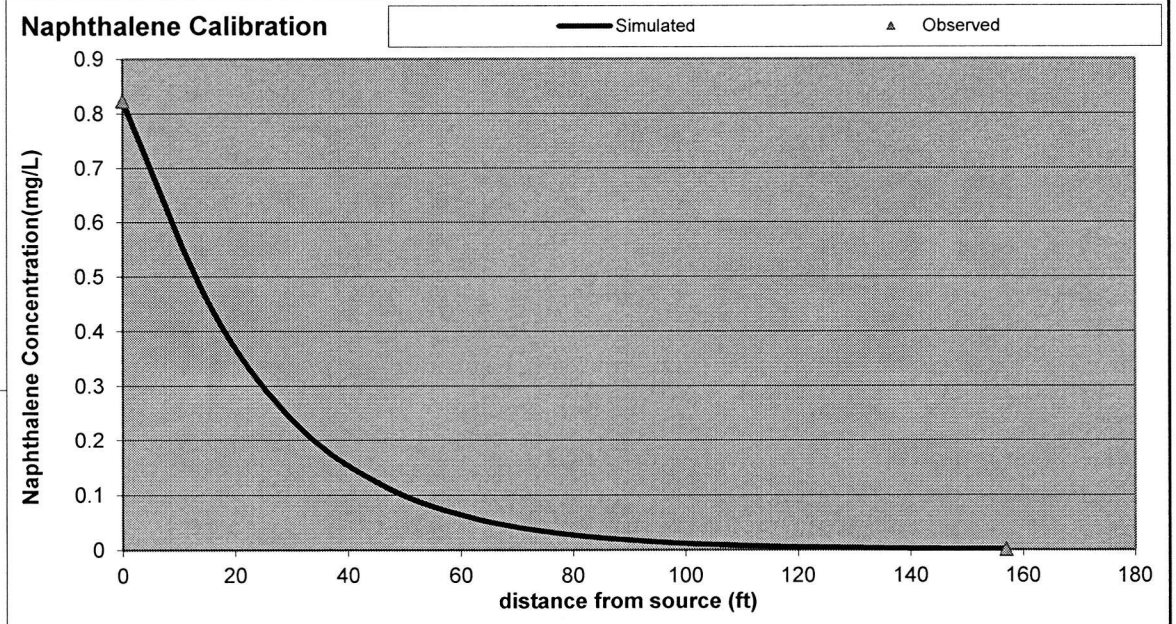
λ 0.17325 yr^{-1}

C_{source} 0.823 mg/L

t_{sim} 34.1917 yrs







Source	15.7	31.4	47.1	62.8	78.5	94.2	109.9	125.6	141.3	157
42	4.8445E-06	0.00032926	0.00096093	0.00124953	0.00116452	0.0009119	0.000641	0.000417	0.000255	0.000147
21	0.07788501	0.06243079	0.03967619	0.02349985	0.01343545	0.0075026	0.004106	0.002201	0.00115	0.000583
0	0.4432139	0.22406517	0.11227264	0.05665643	0.02879467	0.0146884	0.007483	0.003784	0.001885	0.000917
21	0.07788501	0.06243079	0.03967619	0.02349985	0.01343545	0.0075026	0.004106	0.002201	0.00115	0.000583
42	4.8445E-06	0.00032926	0.00096093	0.00124953	0.00116452	0.0009119	0.000641	0.000417	0.000255	0.000147

SSTLs t 1000 yrs

UST Permit #
Site Name:

SSTLs in mg/L		RBSLs (mg/L):				0.700			0.025		
MW #	x (ft)	y (ft)	z (ft)			Ethylbenzene SSTL			Naphthalene SSTL		
MW-1	421	0	0			>99999			>99999		
MW-2	486	0	0			>99999			>99999		
MW-3	450	0	0			>99999			>99999		
MW-5	581	0	0			>99999			>99999		
MW-7	605	0	0			>99999			>99999		
MW-8	495	0	0			>99999			>99999		
MW-10	341	0	0			>99999			29706.600		
MW-11	331	0	0			>99999			19991.964		
MW-13	812	0	0			>99999			>99999		
MW-15	499	0	0			>99999			>99999		
MW-16	482	0	0			>99999			>99999		
MW-17	514	0	0			>99999			>99999		
MW-18	521	0	0			>99999			>99999		
MW-19	413	0	0			>99999			>99999		
			λ (yr^{-1}):			0.578			0.173		
			R:			1.299			3.623		
			Pure Substance Solubility:			169			31		
			Effective Solubility:			3.7			6.7		

Domenico Model

UST # 05156
Site Name: 501 Amoco
Modeler: Yusef Hussein
Date: 3/24/2026

Groundwater Flow Parameters

T1 (4/29/04)

K	342.79632	ft/yr
dh/dx	0.00642	
θeff	0.2	dec. %
v_x	11.00376187	ft/yr

Transport Parameters

x_{max}	194	ft
$y_{max/2}$	42	ft
z	0	ft
Source Width	30	ft
Source Thickness	15	ft
Plume Length	262	ft
α_x	12.8588372	ft
α_y	1.28588372	ft
α_z	1.00E-99	ft

Simulation Time

t_{sim} 34.19167 yrs

Aquifer Characteristics

ρ_d	1.7	kg/L
f_{oc}	0.0002	

Source Area CoC Data

CoC	C_{source} (mg/L)	K_{oc} (L/kg)
Benzene	11.6	81
Toluene	112	133
Ethylbenzene		176
Xylenes	11.2	639
Naphthalene		1543
MtBE		11
EDB	0.0012	28
1,2-DCA		17.5

Retarded Velocity (ft/yr)

CoC	R	v_R
Benzene	1.138	9.67
Toluene	1.226	8.97
Ethylbenzene	1.299	8.47
Xylenes	2.086	5.27
Naphthalene	3.623	3.04
MtBE	1.019	10.80
EDB	1.048	10.50
1,2-DCA	1.030	10.69

Simulation Points for Breakthrough Curves

x		ft
y		ft
z		ft

x		ft
y		ft
z		ft

$$C(x,y,z,t) = \left(\frac{C_0}{8}\right)\exp\left[\left(\frac{x}{2\alpha_x}\right)\left(1-\sqrt{1+\frac{4\lambda\alpha_x}{v}}\right)\right] erfc\left[\frac{x-vt\sqrt{1+\frac{4\lambda\alpha_x}{v}}}{2\sqrt{\alpha_x vt}}\right]\left\{erf\left[\frac{y+\frac{Y}{2}}{2\sqrt{\alpha_y x}}\right]-erf\left[\frac{y-\frac{Y}{2}}{2\sqrt{\alpha_y x}}\right]\right\}\left\{erf\left[\frac{z+Z}{2\sqrt{\alpha_z x}}\right]-erf\left[\frac{z-Z}{2\sqrt{\alpha_z x}}\right]\right\}$$

Benzene Calibration

Spatial Calibration Data (centerline)

x	C_{obs} (mg/L)	C_{sim} (mg/L)	
0	11.6	11.6	MW-16
19.4		4.656	
38.8		1.735	
58.2		0.648	
77.6		0.246	
97		0.094	
116.4		0.037	
135.8		0.014	
155.2		0.006	
174.6		0.002	
194	0.001	0.001	MW-11

Temporal Calibration Data

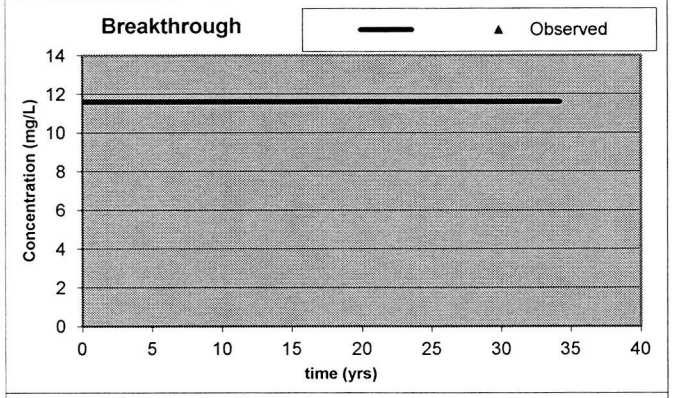
t (yrs)	C_{obs} (mg/L)	C_{sim} (mg/L)	C_{obs} (mg/L)	C_{sim} (mg/L)
0		11.6		11.6
3.419167		11.600		11.600
6.838333		11.600		11.600
10.2575		11.600		11.600
13.67667		11.600		11.600
17.09583		11.600		11.600
20.515		11.600		11.600
23.93417		11.600		11.600
27.35333		11.600		11.600
30.7725		11.600		11.600
34.19167		11.600		11.600

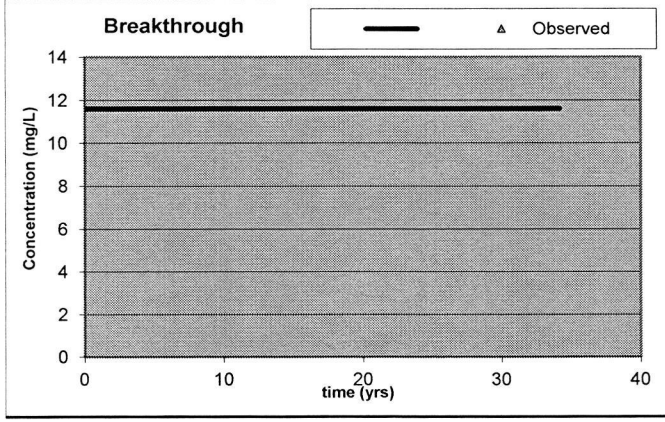
Site ID 05156

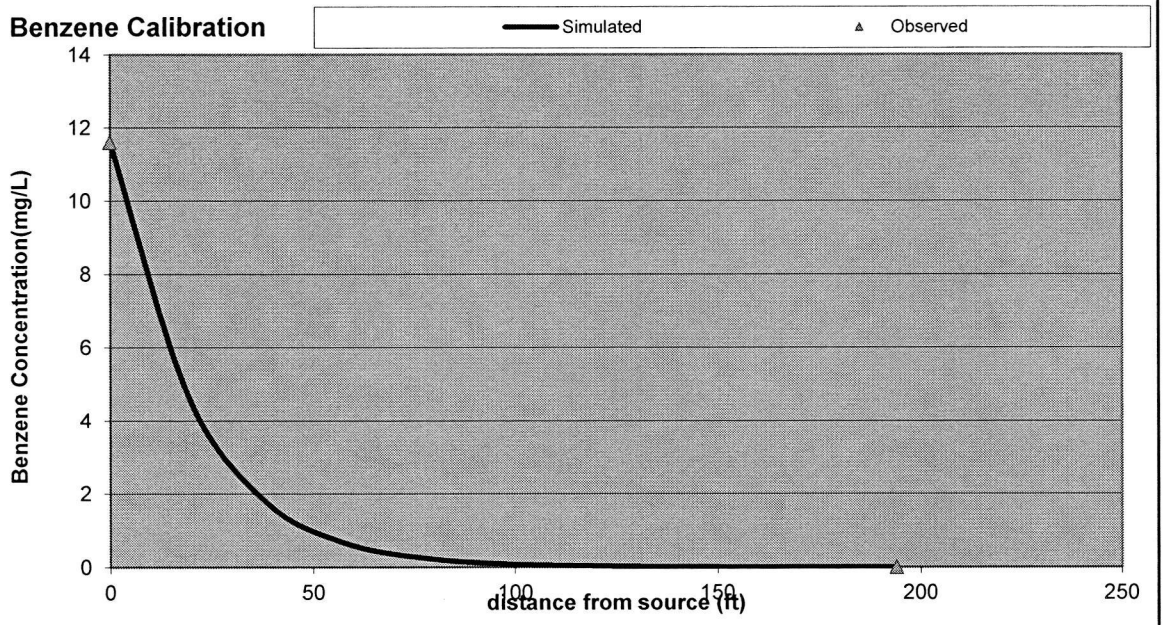
Site Name 501 Amoco

Model Calibration Parameters

$t_{1/2}$	1	yrs	λ	0.693	yr^{-1}
v_x	11.00376	ft/yr			
R	1.138				
v_R	9.672	ft/yr	C_{source}	11.6	mg/L
L_p	262	ft			
α_x	12.85884	ft	t_{sim}	34.1917	yrs
α_y	1.285884	ft			
α_z	1E-99	ft			







Source	19.4	38.8	58.2	77.6	97	116.4	135.8	155.2	174.6	194
42	0.0003183	0.00687951	0.01135754	0.00965801	0.00624613	0.0035065	0.001811	0.000886	0.000418	0.000192
21	0.95323219	0.54824322	0.25802063	0.11403059	0.04888818	0.020604	0.008594	0.003561	0.001469	0.000605
0	4.65634984	1.73513341	0.64846506	0.24583726	0.09438348	0.0366027	0.014308	0.005629	0.002226	0.000884
21	0.95323219	0.54824322	0.25802063	0.11403059	0.04888818	0.020604	0.008594	0.003561	0.001469	0.000605
42	0.0003183	0.00687951	0.01135754	0.00965801	0.00624613	0.0035065	0.001811	0.000886	0.000418	0.000192

Toluene Calibration

Spatial Calibration Data

(centerline)

x	C_{obs} (mg/L)	C_{sim} (mg/L)	
0	112	112	MW-16
19.4		36.461	
38.8		11.019	
58.2		3.340	
77.6		1.027	
97		0.320	
116.4		0.101	
135.8		0.032	
155.2		0.010	
174.6		0.003	
194	0.001	0.001	MW-11

Temporal Calibration Data

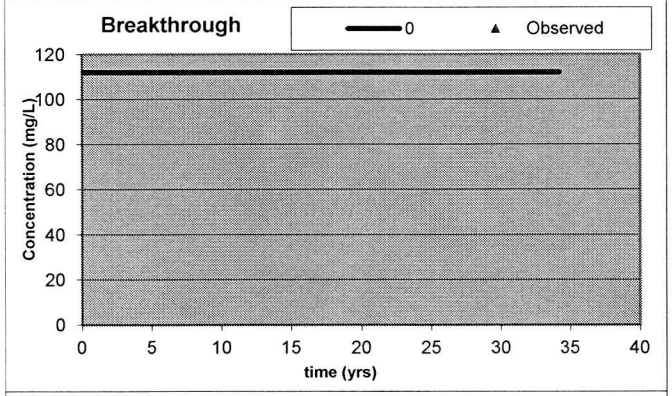
	0		0	
t (yrs)	C_{obs} (mg/L)	C_{sim} (mg/L)	C_{obs} (mg/L)	C_{sim} (mg/L)
0		112		112
3.419167		112.000		112.000
6.838333		112.000		112.000
10.2575		112.000		112.000
13.67667		112.000		112.000
17.09583		112.000		112.000
20.515		112.000		112.000
23.93417		112.000		112.000
27.35333		112.000		112.000
30.7725		112.000		112.000
34.19167		112.000		112.000

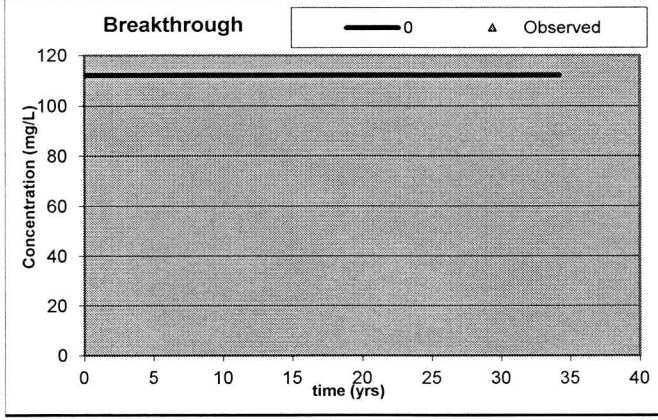
Site ID 05156

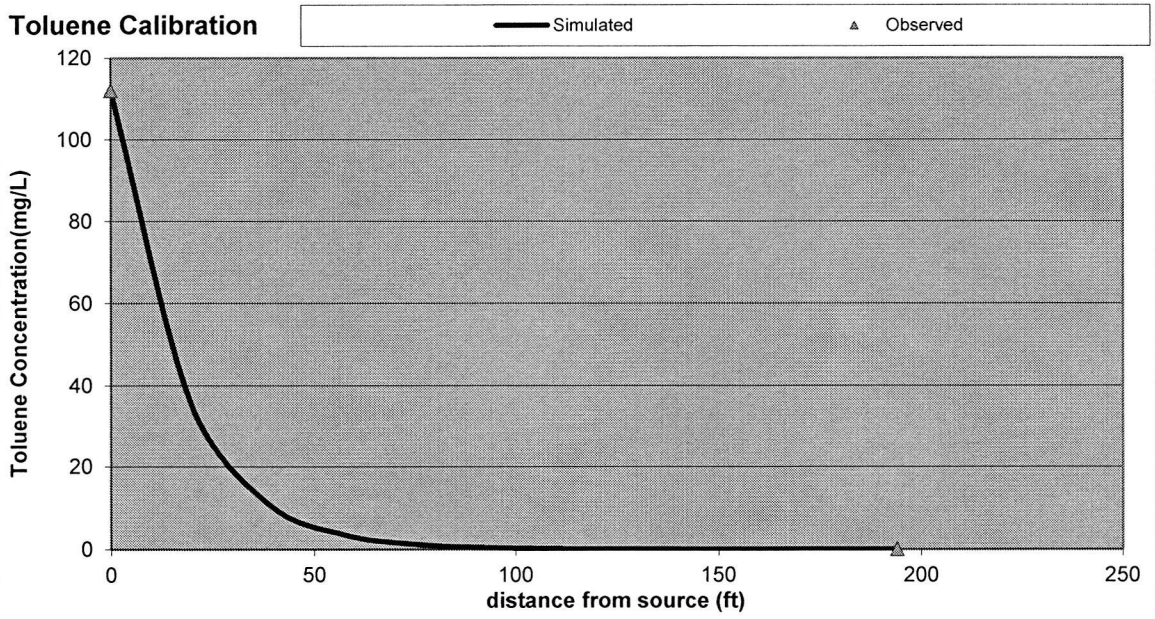
Site Name 501 Amoco

Model Calibration Parameters

$t_{1/2}$	0.8	yrs	λ	0.86625 yr^{-1}
v_x	11.00376	ft/yr		
R	1.226			
v_R	8.975	ft/yr	C_{source}	112 mg/L
L_p	262	ft		
α_x	12.85884	ft	t_{sim}	34.1917 yrs
α_y	1.285884	ft		
α_z	1E-99	ft		







Source	19.4	38.8	58.2	77.6	97	116.4	135.8	155.2	174.6	194
42	0.0024924	0.04368863	0.05849527	0.04034129	0.02115917	0.0096337	0.004034	0.001601	0.000612	0.000228
21	7.46421624	3.48164318	1.32889574	0.47630303	0.16561182	0.0566062	0.019148	0.006435	0.002153	0.000719
0	36.4612132	11.0190427	3.33981996	1.02685625	0.31973003	0.1005602	0.031881	0.010172	0.003263	0.001051
21	7.46421624	3.48164318	1.32889574	0.47630303	0.16561182	0.0566062	0.019148	0.006435	0.002153	0.000719
42	0.0024924	0.04368863	0.05849527	0.04034129	0.02115917	0.0096337	0.004034	0.001601	0.000612	0.000228

Xylenes Calibration

Spatial Calibration Data (centerline)

x	C_{obs} (mg/L)	C_{sim} (mg/L)	
0	11.2	11.2	MW-17
19.4		4.277	
38.8		1.517	
58.2		0.539	
77.6		0.195	
97		0.071	
116.4		0.026	
135.8		0.010	
155.2		0.004	
174.6		0.001	
194	0.001	0.001	MW-11

Temporal Calibration Data

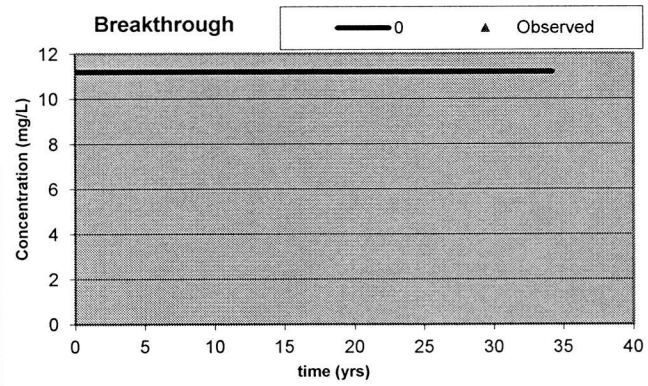
	0		0	
t (yrs)	C_{obs} (mg/L)	C_{sim} (mg/L)	C_{obs} (mg/L)	C_{sim} (mg/L)
0		11.2		11.2
3.419167		11.200		11.200
6.838333		11.200		11.200
10.2575		11.200		11.200
13.67667		11.200		11.200
17.09583		11.200		11.200
20.515		11.200		11.200
23.93417		11.200		11.200
27.35333		11.200		11.200
30.7725		11.200		11.200
34.19167		11.200		11.200

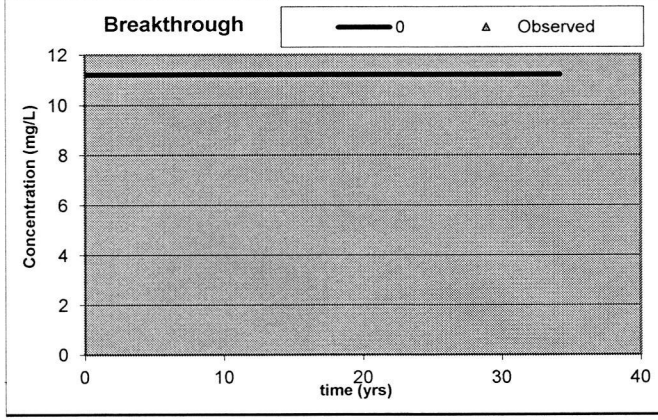
Site ID 05156

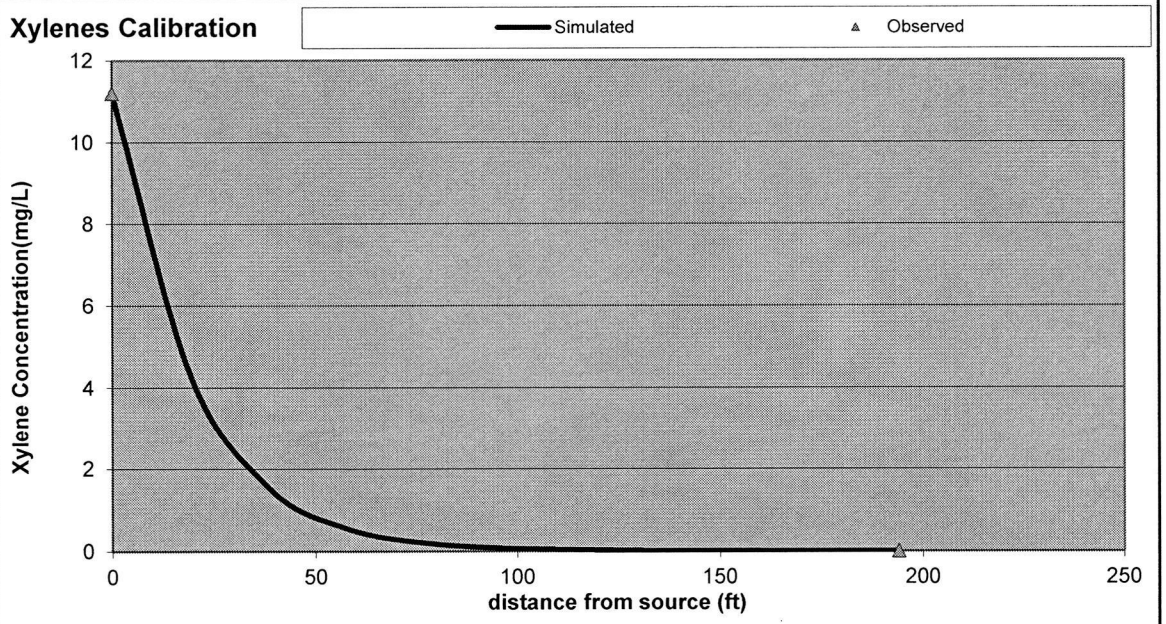
Site Name 501 Amoco

Model Calibration Parameters

$t_{1/2}$	1.7	yrs	λ	0.40765	yr^{-1}
v_x	11.00376	ft/yr			
R	2.086				
v_R	5.274	ft/yr	C_{source}	11.2	mg/L
L_p	262	ft			
α_x	12.85884	ft	t_{sim}	34.1917	yrs
α_y	1.285884	ft			
α_z	1E-99	ft			







Source	19.4	38.8	58.2	77.6	97	116.4	135.8	155.2	174.6	194
42	0.0002924	0.00601284	0.0094447	0.00764139	0.00470193	0.0025114	0.001234	0.000574	0.000258	0.000112
21	0.87566905	0.47917684	0.21456465	0.09022068	0.03680177	0.0147568	0.005856	0.002309	0.000906	0.000354
0	4.27746929	1.51654542	0.53925022	0.19450573	0.07104946	0.0262153	0.00975	0.003649	0.001373	0.000518
21	0.87566905	0.47917684	0.21456465	0.09022068	0.03680177	0.0147568	0.005856	0.002309	0.000906	0.000354
42	0.0002924	0.00601284	0.0094447	0.00764139	0.00470193	0.0025114	0.001234	0.000574	0.000258	0.000112

EDB Calibration

Spatial Calibration Data (centerline)

x	C_{obs} (mg/L)	C_{sim} (mg/L)	
0	0.0012	0.00120	MW-16
19.4		0.00080	
38.8		0.00050	
58.2		0.00031	
77.6		0.00020	
97		0.00013	
116.4		0.00008	
135.8		0.00005	
155.2		0.00003	
174.6		0.00002	
194	0.00002	0.00002	MW-11

Temporal Calibration Data

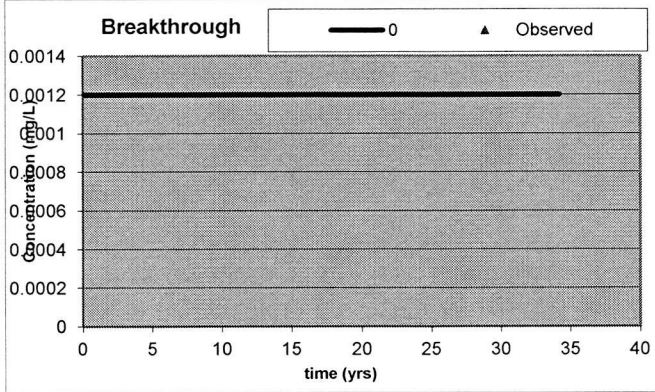
	0		0	
t (yrs)	C_{obs} (mg/L)	C_{sim} (mg/L)	C_{obs} (mg/L)	C_{sim} (mg/L)
0		0.00120		0.00120
3.419167		0.00120		0.00120
6.838333		0.00120		0.00120
10.2575		0.00120		0.00120
13.67667		0.00120		0.00120
17.09583		0.00120		0.00120
20.515		0.00120		0.00120
23.93417		0.00120		0.00120
27.35333		0.00120		0.00120
30.7725		0.00120		0.00120
34.19167		0.00120		0.00120

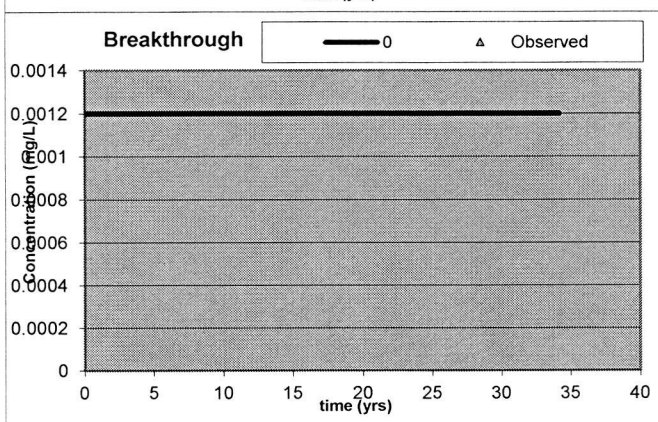
Site ID 05156

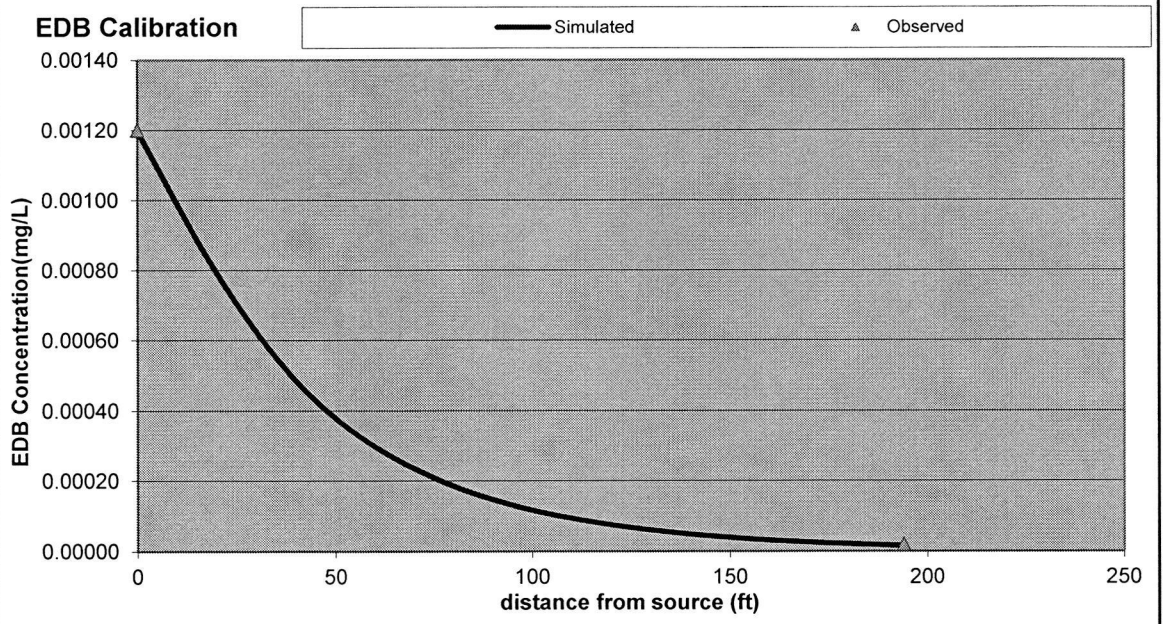
Site Name 501 Amoco

Model Calibration Parameters

$t_{1/2}$	2.8	yrs	λ	0.2475 yr^{-1}
v_x	11.00376	ft/yr		
R	1.048			
v_R	10.504	ft/yr	C_{source}	0.0012 mg/L
L_p	262	ft		
α_x	12.85884	ft	t_{sim}	34.1917 yrs
α_y	1.285884	ft		
α_z	1E-99	ft		







Source	19.4	38.8	58.2	77.6	97	116.4	135.8	155.2	174.6	194
42	5.4884E-08	1.9772E-06	5.441E-06	7.7121E-06	8.3135E-06	7.779E-06	6.7E-06	5.46E-06	4.29E-06	3.28E-06
21	0.00016437	0.00015757	0.00012361	9.1055E-05	6.5069E-05	4.571E-05	3.18E-05	2.19E-05	1.51E-05	1.04E-05
0	0.0008029	0.0004987	0.00031066	0.0001963	0.00012562	8.12E-05	5.29E-05	3.47E-05	2.29E-05	1.51E-05
21	0.00016437	0.00015757	0.00012361	9.1055E-05	6.5069E-05	4.571E-05	3.18E-05	2.19E-05	1.51E-05	1.04E-05
42	5.4884E-08	1.9772E-06	5.441E-06	7.7121E-06	8.3135E-06	7.779E-06	6.7E-06	5.46E-06	4.29E-06	3.28E-06

SSTLs t 1000 yrs

UST Permit #
Site Name:

SSTLs in mg/L		RBSLs (mg/L):		0.005	1.000		10.000			0.00005	
MW #	x (ft)	y (ft)	z (ft)	Benzene SSTL	Toluene SSTL		Xylenes SSTL			EDB SSTL	
MW-1	421	0	0	>99999	>99999		>99999			0.41422	
MW-2	486	0	0	>99999	>99999		>99999			1.51811	
MW-3	450	0	0	>99999	>99999		>99999			0.74025	
MW-5	581	0	0	>99999	>99999		>99999			9.99302	
MW-7	605	0	0	>99999	>99999		>99999			16.05264	
MW-8	495	0	0	>99999	>99999		>99999			1.81598	
MW-10	341	0	0	65590.450	>99999		>99999			0.08253	
MW-11	331	0	0	41139.390	>99999		>99999			0.06736	
MW-13	812	0	0	>99999	>99999		>99999			933.52149	
MW-15	499	0	0	>99999	>99999		>99999			1.96641	
MW-16	482	0	0	>99999	>99999		>99999			1.40184	
MW-17	514	0	0	>99999	>99999		>99999			2.64954	
MW-18	521	0	0	>99999	>99999		>99999			3.04471	
MW-19	413	0	0	>99999	>99999		>99999			0.35279	
			λ (yr^{-1}):	0.693	0.866		0.408			0.248	
			R:	1.138	1.226		2.086			1.048	
			Pure Substance Solubility:	1750	526		175			4321	
			Effective Solubility:	44.39	26.54		21.68			1.9	

Domenico Model (Oxygenates)

UST # 05156
Site Name: 501 Amoco
Modeler: Yusef Hussein
Date: 3/9/2026

Groundwater Flow Parameters

T1 (4/29/04)

K	342.79632	ft/yr
dh/dx	0.00642	
θ	0.2	dec. %
v_x	11.00376187	ft/yr

Transport Parameters

x_{max}	194	ft
y_{max}	42	ft
z	0	ft
Source Width	30	ft
Source Thickness	15	ft
Plume Length	265	ft
α_x	12.93966	ft
α_y	1.293966	ft
α_z	1.00E-99	ft

Simulation Time

t_{sim} 34.19167 yrs

Aquifer Characteristics

ρ_d	1.7	kg/L
f_{oc}	0.0002	

Source Area CoC Data

CoC	C_{source} (mg/L)	K_{oc} (L/kg)
tBA	170	1
tAA	247	1
DIPE		1.5
tAME		1.5
EtBE		1.5
Ethanol		0.5

Retarded Velocity (ft/yr)

CoC	R	v_R
tBA	1.002	10.99
tAA	1.002	10.99
DIPE	1.003	10.98
tAME	1.003	10.98
EtBE	1.003	10.98
Ethanol	1.001	10.99

Simulation Points for Breakthrough Curves

x		ft
y		ft
z		ft

x		ft
y		ft
z		ft

$$C(x,y,z,t) = \left(\frac{C_0}{8}\right)\exp\left[\left(\frac{x}{2\alpha_x}\right)\left(1-\sqrt{1+\frac{4\lambda\alpha_x}{v}}\right)\right] erfc\left[\frac{x-vt\sqrt{1+\frac{4\lambda\alpha_x}{v}}}{2\sqrt{\alpha_x vt}}\right]\left\{erf\left[\frac{y+\frac{Y}{2}}{2\sqrt{\alpha_y x}}\right]-erf\left[\frac{y-\frac{Y}{2}}{2\sqrt{\alpha_y x}}\right]\right\}\left\{erf\left[\frac{z+Z}{2\sqrt{\alpha_z x}}\right]-erf\left[\frac{z-Z}{2\sqrt{\alpha_z x}}\right]\right\}$$

tBA Calibration

Spatial Calibration Data

(centerline)

x	C_{obs} (mg/L)	C_{sim} (mg/L)	
0	170	170	MW-16
19.4		83.686	
38.8		38.234	
58.2		17.526	
77.6		8.150	
97		3.839	
116.4		1.827	
135.8		0.876	
155.2		0.423	
174.6		0.205	
194	0.1	0.100	MW-11

Temporal Calibration Data

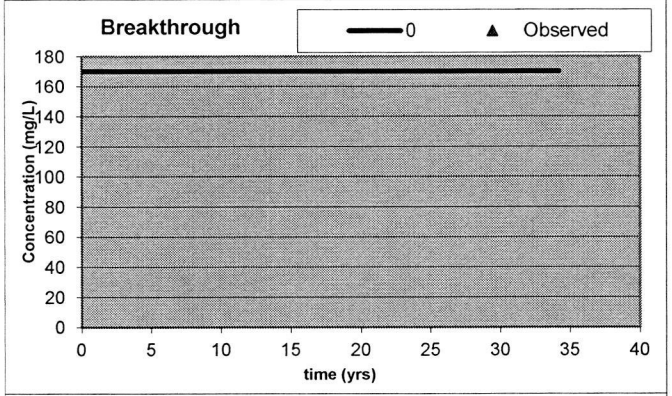
	0		0	
t (yrs)	C_{obs} (mg/L)	C_{sim} (mg/L)	C_{obs} (mg/L)	C_{sim} (mg/L)
0		170		170
3.419167		170.000		170.000
6.838333		170.000		170.000
10.2575		170.000		170.000
13.67667		170.000		170.000
17.09583		170.000		170.000
20.515		170.000		170.000
23.93417		170.000		170.000
27.35333		170.000		170.000
30.7725		170.000		170.000
34.19167		170.000		170.000

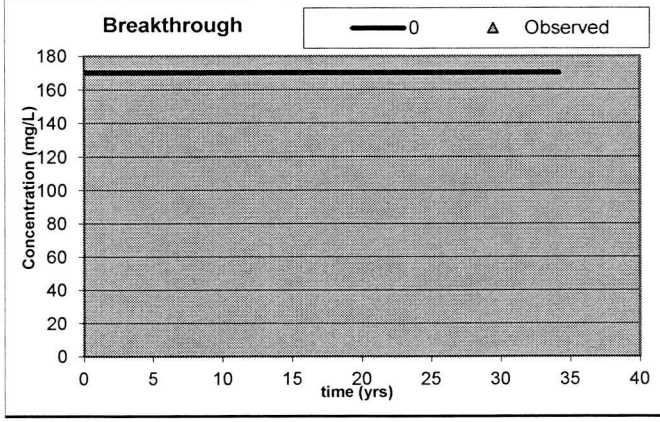
Site ID 05156

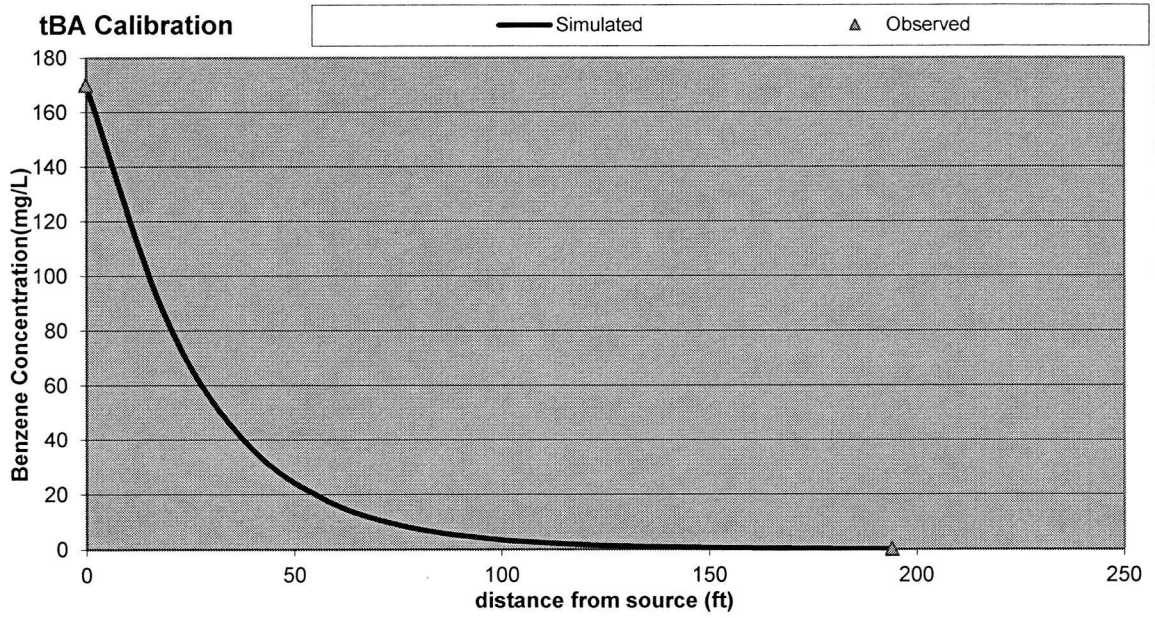
Site Name 501 Amoco

Model Calibration Parameters

$t_{1/2}$	**1.253**	yrs	λ 0.55307	yr^{-1}
v_x	11.00376	ft/yr		
R	1.002			
v_R	10.985	ft/yr	C_{source} 170	mg/L
L_p	265	ft		
α_x	12.93966	ft	t_{sim} 34.1917	yrs
α_y	1.293966	ft		
α_z	1E-99	ft		







Source	19.4	38.8	58.2	77.6	97	116.4	135.8	155.2	174.6	194
42	0.00600796	0.15570954	0.31299174	0.32529813	0.25751484	0.1770873	0.112054	0.067198	0.038842	0.021868
21	17.2059209	12.1249301	6.99740939	3.79274286	1.9944373	1.0310505	0.52754	0.268166	0.135744	0.068524
0	83.6858285	38.2337817	17.5255813	8.15049595	3.83904175	1.8266411	0.876108	0.422911	0.205216	0.100014
21	17.2059209	12.1249301	6.99740939	3.79274286	1.9944373	1.0310505	0.52754	0.268166	0.135744	0.068524
42	0.00600796	0.15570954	0.31299174	0.32529813	0.25751484	0.1770873	0.112054	0.067198	0.038842	0.021868

tAA Calibration

Spatial Calibration Data (centerline)

x	C_{obs} (mg/L)	C_{sim} (mg/L)	
0	247	247	MW-16
19.4		117.125	
38.8		51.546	
58.2		22.760	
77.6		10.196	
97		4.626	
116.4		2.120	
135.8		0.980	
155.2		0.456	
174.6		0.213	
194	0.1	0.100	MW-11

Temporal Calibration Data

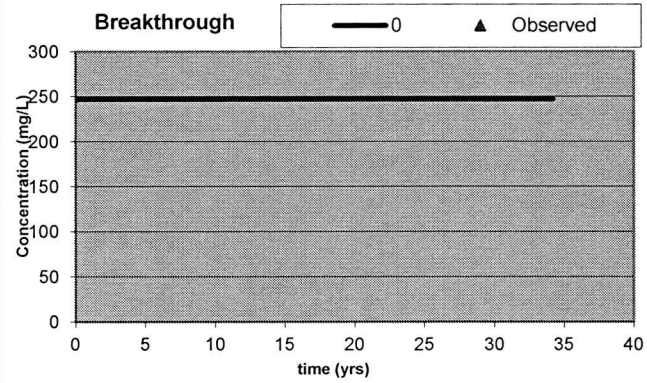
t (yrs)	C_{obs} (mg/L)	C_{sim} (mg/L)	C_{obs} (mg/L)	C_{sim} (mg/L)
	0		0	
0		247		247
3.419167		247.000		247.000
6.838333		247.000		247.000
10.2575		247.000		247.000
13.67667		247.000		247.000
17.09583		247.000		247.000
20.515		247.000		247.000
23.93417		247.000		247.000
27.35333		247.000		247.000
30.7725		247.000		247.000
34.19167		247.000		247.000

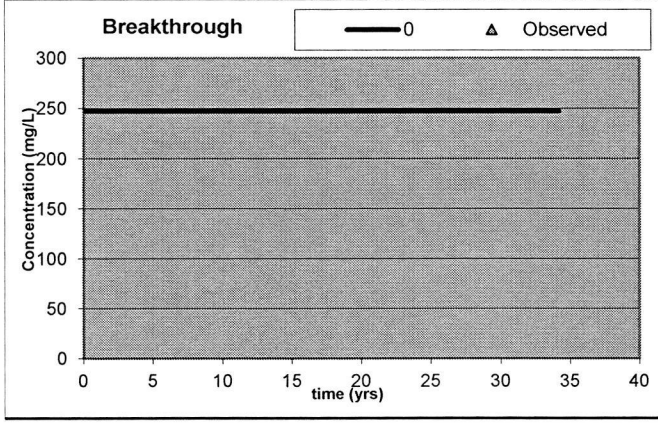
Site ID 05156

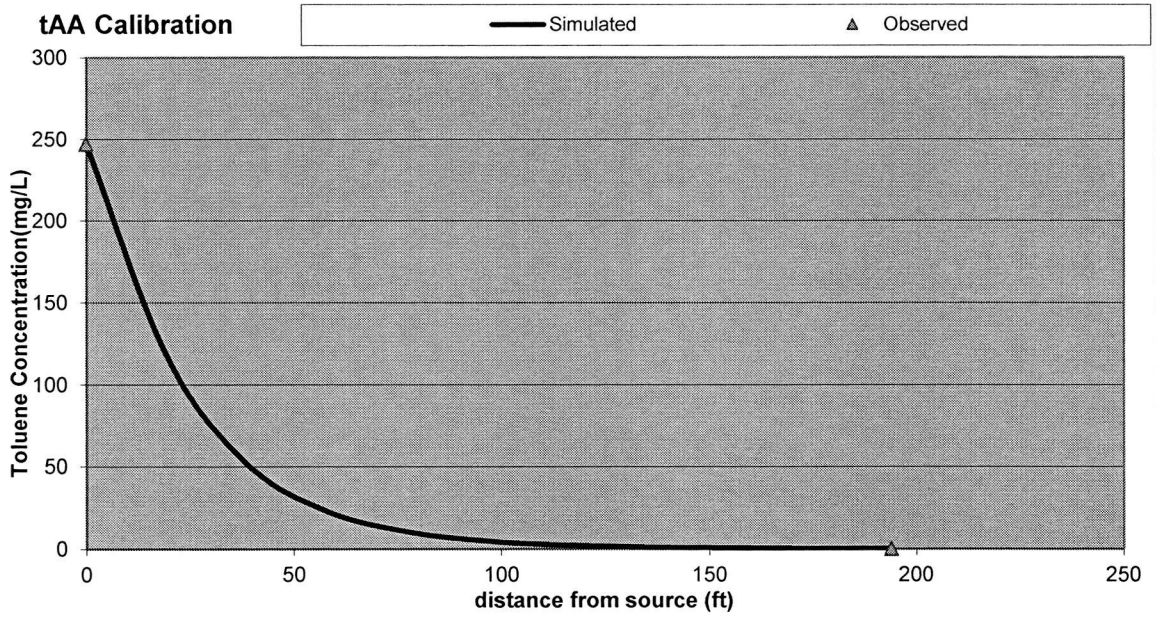
Site Name 501 Amoco

Model Calibration Parameters

$t_{1/2}$	1.167	yrs	λ 0.59383	yr^{-1}
v_x	11.00376	ft/yr		
R	1.002			
v_R	10.985	ft/yr	C_{source} 247	mg/L
L_p	265	ft		
α_x	12.93966	ft	t_{sim} 34.1917	yrs
α_y	1.293966	ft		
α_z	1E-99	ft		





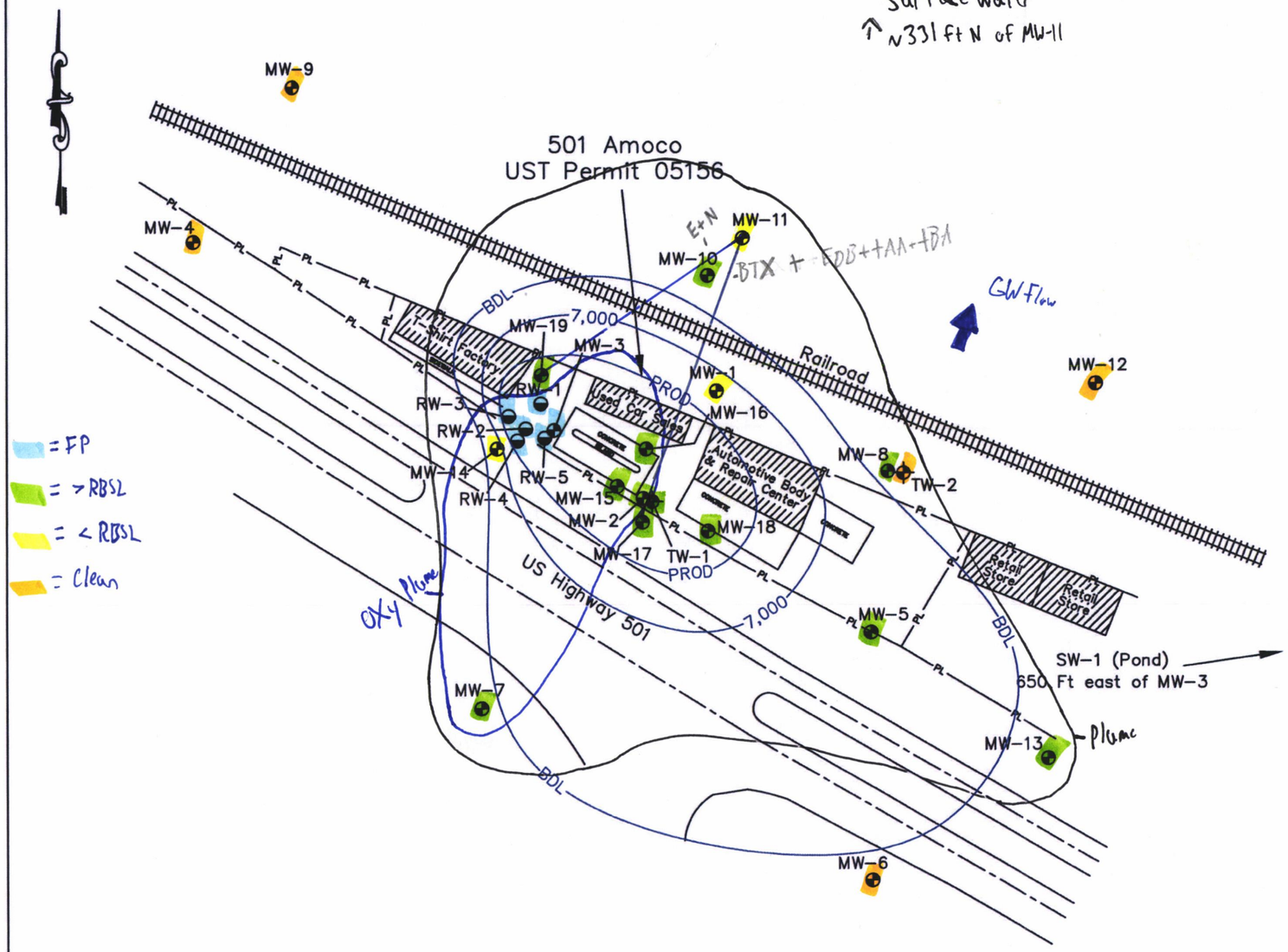


Source	19.4	38.8	58.2	77.6	97	116.4	135.8	155.2	174.6	194
42	0.00840866	0.20992599	0.40647639	0.40694479	0.3103185	0.2055627	0.125296	0.072379	0.040301	0.021856
21	24.0811613	16.3467049	9.08740195	4.74468438	2.40339853	1.196842	0.58988	0.288844	0.140842	0.068486
0	117.125491	51.5463878	22.7601378	10.1961911	4.62624085	2.1203625	0.979639	0.455521	0.212923	0.099959
21	24.0811613	16.3467049	9.08740195	4.74468438	2.40339853	1.196842	0.58988	0.288844	0.140842	0.068486
42	0.00840866	0.20992599	0.40647639	0.40694479	0.3103185	0.2055627	0.125296	0.072379	0.040301	0.021856

UST Permit # 05156
Site Name: 501 Amoco

SSTLs t 1000 yrs

SSTLs in mg/L		**RBSLs (mg/L):**		**1.400**	**0.240**				
MW #	x (ft)	y (ft)	z (ft)	tBA SSTL	tAA SSTL				
MW-1	421			>99999	>99999				
MW-2	486			>99999	>99999				
MW-3	450			>99999	>99999				
MW-5	581			>99999	>99999				
MW-7	605			>99999	>99999				
MW-8	495			>99999	>99999				
MW-10	341			>99999	>99999				
MW-11	331			>99999	>99999				
MW-13	812			>99999	>99999				
MW-15	499			>99999	>99999				
MW-16	482			>99999	>99999				
MW-17	514			>99999	>99999				
MW-18	521			>99999	>99999				
MW-19	413			>99999	>99999				



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,960	78,200	1,530	8,040	<500	661	<500	0.34
05156 MW-3	0.40 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-14	0.36J	1.7	0.74J	3.6	<1.0	<1.0	<1.0	<0.021
05156 MW-15	1,530	47,500	872	5,780	<400	326J	<400	<0.020
05156 MW-16	11,600	112,000	1,760	9,380	<1,000	<1,000	<1,000	1.2
05156 MW-17	1,570	43,700	1,670	11,200	<400	560	<400	<0.020
05156 MW-18	736	41,700	1,750	9,190	<400	468	<400	<0.020
MW-18 DUP	843	45,500	1,810	9,800	<250	395	<250	0.077
05156 MW-19	8,930	103,000	2,070	10,100	<1,000	823J	<1,000	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	377	24.8	620	70.6	<5.0	519	<5.0	<0.020
RW-1 DUP	378	26.7	584	70.4	<4.0	483	<4.0	<0.020
05156 RW-2	2.30 ft. of Free Product							
05156 RW-3	2.07 ft. of Free Product							
05156 RW-4	0.11 ft. of Free Product							
05156 RW-5	0.47 ft. of Free Product							

Notes: Samples Collected on March 3 and 4, 2025

Contour Interval = 7,000 ug/l

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

RW-1 not used in contouring

SCALE
1 INCH = 80 FEET
0 80' 160'

0.95 in / 80 ft = $ in / x ft

Map based Kleen Sites Geoservices Figure 4

PROJECT:	DATE:	Figure 4A - Benzene Contour Map
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	4/18/25	EMERALD, INC. SUMTER, SOUTH CAROLINA

D-88 addl

Domenico Model

UST # 05156
Site Name: 501 Amoco
Modeler: Yusef Hussein
Date: 4/6/2026

Groundwater Flow Parameters

T1 (4/29/04)

K	342.79632	ft/yr
dh/dx	0.00642	
θeff	0.2	dec. %
v_x	11.00376187	ft/yr

Transport Parameters

x_{max}	194	ft
$y_{max/2}$	42	ft
z	0	ft
Source Width	30	ft
Source Thickness	15	ft
Plume Length	262	ft
α_x	12.8588372	ft
α_y	1.28588372	ft
α_z	1.00E-99	ft

Simulation Time

t_{sim} 34.19167 yrs

Aquifer Characteristics

ρ_d	1.7	kg/L
f_{oc}	0.0002	

Source Area CoC Data

CoC	C_{source} (mg/L)	K_{oc} (L/kg)
Benzene	11.6	81
Toluene	112	133
Ethylbenzene		176
Xylenes	11.2	639
Naphthalene		1543
MtBE	0.4	11
EDB	0.0012	28
1,2-DCA		17.5

Retarded Velocity (ft/yr)

CoC	R	v_R
Benzene	1.138	9.67
Toluene	1.226	8.97
Ethylbenzene	1.299	8.47
Xylenes	2.086	5.27
Naphthalene	3.623	3.04
MtBE	1.019	10.80
EDB	1.048	10.50
1,2-DCA	1.030	10.69

Simulation Points for Breakthrough Curves

x		ft
y		ft
z		ft

x		ft
y		ft
z		ft

$$C(x,y,z,t) = \left(\frac{C_0}{8}\right)\exp\left[\left(\frac{x}{2\alpha_x}\right)\left(1-\sqrt{1+\frac{4\lambda\alpha_x}{v}}\right)\right] erfc\left[\frac{x-vt\sqrt{1+\frac{4\lambda\alpha_x}{v}}}{2\sqrt{\alpha_x vt}}\right]\left\{erf\left[\frac{y+\frac{Y}{2}}{2\sqrt{\alpha_y x}}\right]-erf\left[\frac{y-\frac{Y}{2}}{2\sqrt{\alpha_y x}}\right]\right\}\left\{erf\left[\frac{z+Z}{2\sqrt{\alpha_z x}}\right]-erf\left[\frac{z-Z}{2\sqrt{\alpha_z x}}\right]\right\}$$

MtBE Calibration

Spatial Calibration Data (centerline)

x	C_{obs} (mg/L)	C_{sim} (mg/L)
0	0.4	0.4
19.4		0.233
38.8		0.126
58.2		0.068
77.6		0.037
97		0.021
116.4		0.012
135.8		0.007
155.2		0.004
174.6		0.002
194	0.001	0.001

Temporal Calibration Data

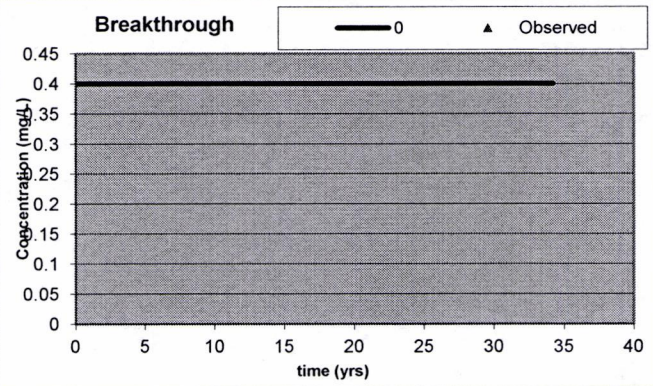
	0		0	
t (yrs)	C_{obs} (mg/L)	C_{sim} (mg/L)	C_{obs} (mg/L)	C_{sim} (mg/L)
0		0.4		0.4
3.419167		0.400		0.400
6.838333		0.400		0.400
10.2575		0.400		0.400
13.67667		0.400		0.400
17.09583		0.400		0.400
20.515		0.400		0.400
23.93417		0.400		0.400
27.35333		0.400		0.400
30.7725		0.400		0.400
34.19167		0.400		0.400

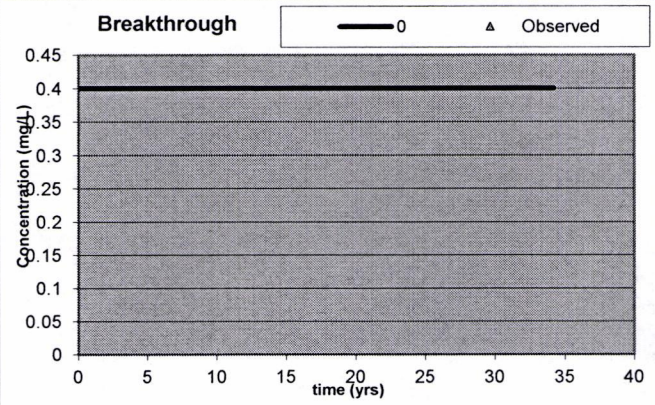
Site ID 05156

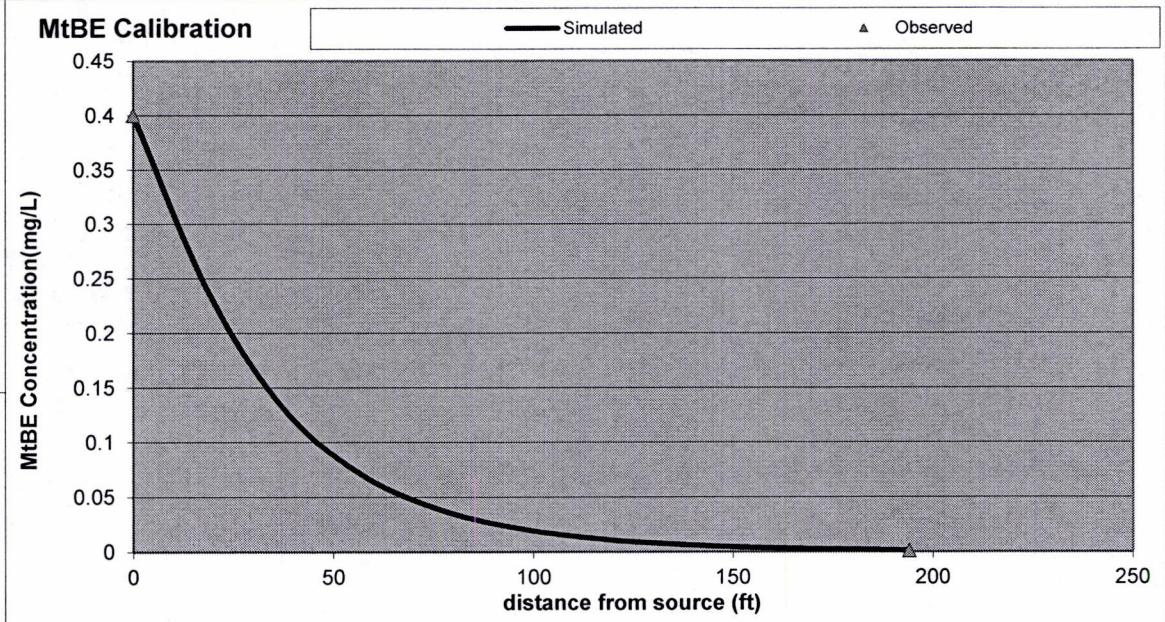
Site Name 501 Amoco

Model Calibration Parameters

$t_{1/2}$	1.8	yrs	λ 0.385	yr^{-1}
v_x	11.00376	ft/yr		
R	1.000			
v_R	11.004	ft/yr	C_{source} 0.4	mg/L
L_p	262	ft		
α_x	12.85884	ft	t_{sim} 34.1917	yrs
α_y	1.285884	ft		
α_z	1E-99	ft		







Source	19.4	38.8	58.2	77.6	97	116.4	135.8	155.2	174.6	194
42	1.59E-05	0.00049786	0.00119073	0.00146687	0.00137432	0.0011177	0.000836	0.000593	0.000405	0.000269
21	0.04761852	0.03967579	0.02705091	0.01731905	0.01075676	0.0065676	0.003968	0.002382	0.001424	0.000849
0	0.23260699	0.12556979	0.06798515	0.03733794	0.020767	0.0116672	0.006607	0.003766	0.002157	0.001241
21	0.04761852	0.03967579	0.02705091	0.01731905	0.01075676	0.0065676	0.003968	0.002382	0.001424	0.000849
42	1.59E-05	0.00049786	0.00119073	0.00146687	0.00137432	0.0011177	0.000836	0.000593	0.000405	0.000269

SSTLs t 1000 yrs

UST Permit #
Site Name:

SSTLs in mg/L		RBSLs (mg/L):		0.005	1.000		10.000	0.040		0.00005	
MW #	x (ft)	y (ft)	z (ft)	Benzene SSTL	Toluene SSTL		Xylenes SSTL	MtBE SSTL		EDB SSTL	
MW-1	421	0	0	>99999	>99999		>99999	6954.052		0.41422	
MW-2	486	0	0	>99999	>99999		>99999	40775.943		1.51811	
MW-3	450	0	0	>99999	>99999		>99999	15326.555		0.74025	
MW-5	581	0	0	>99999	>99999		>99999	>99999		9.99302	
MW-7	605	0	0	>99999	>99999		>99999	>99999		16.05264	
MW-8	495	0	0	>99999	>99999		>99999	52056.289		1.81598	
MW-10	341	0	0	65590.450	>99999		>99999	776.996		0.08253	
MW-11	331	0	0	41139.390	>99999		>99999	589.947		0.06736	
MW-13	812	0	0	>99999	>99999		>99999	>99999		933.52149	
MW-15	499	0	0	>99999	>99999		>99999	58022.243		1.96641	
MW-16	482	0	0	>99999	>99999		>99999	36579.785		1.40184	
MW-17	514	0	0	>99999	>99999		>99999	87134.604		2.64954	
MW-18	521	0	0	>99999	>99999		>99999	>99999		3.04471	
MW-19	413	0	0	>99999	>99999		>99999	5589.946		0.35279	
MW-6	615	0	0	>99999	>99999		>99999	>99999		19.55350	
			λ (yr^{-1}):	0.693	0.866		0.408	0.385		0.248	
			R:	1.138	1.226		2.086	1.000		1.048	
			Pure Substance Solubility:	1750	526		175	5110		4321	
			Effective Solubility:	44.39	26.54		21.68	173		1.9	

SSTLs t 1000 yrs

UST Permit #
Site Name:

SSTLs in mg/L		RBSLs (mg/L):				0.700			0.025		
MW #	x (ft)	y (ft)	z (ft)			Ethylbenzene SSTL			Naphthalene SSTL		
MW-1	421	0	0			>99999			>99999		
MW-2	486	0	0			>99999			>99999		
MW-3	450	0	0			>99999			>99999		
MW-5	581	0	0			>99999			>99999		
MW-7	605	0	0			>99999			>99999		
MW-8	495	0	0			>99999			>99999		
MW-10	341	0	0			>99999			29706.600		
MW-11	331	0	0			>99999			19991.964		
MW-13	812	0	0			>99999			>99999		
MW-15	499	0	0			>99999			>99999		
MW-16	482	0	0			>99999			>99999		
MW-17	514	0	0			>99999			>99999		
MW-18	521	0	0			>99999			>99999		
MW-19	413	0	0			>99999			>99999		
MW-6	615	0	0			>99999			>99999		
			λ (yr^{-1}):			0.578			0.173		
			R:			1.299			3.623		
			Pure Substance Solubility:			169			31		
			Effective Solubility:			3.7			6.7		

UST Permit # 05156
Site Name: 501 Amoco

SSTLs t 1000 yrs

SSTLs in mg/L		RBSLs (mg/L):		1.400	0.240				
MW #	x (ft)	y (ft)	z (ft)	tBA SSTL	tAA SSTL				
MW-1	421			>99999	>99999				
MW-2	486			>99999	>99999				
MW-3	450			>99999	>99999				
MW-5	581			>99999	>99999				
MW-7	605			>99999	>99999				
MW-8	495			>99999	>99999				
MW-10	341			>99999	>99999				
MW-11	331			>99999	>99999				
MW-13	812			>99999	>99999				
MW-15	499			>99999	>99999				
MW-16	482			>99999	>99999				
MW-17	514			>99999	>99999				
MW-18	521			>99999	>99999				
MW-19	413			>99999	>99999				
MW-6	615			>99999	>99999				

Outlook

501 Amoco (Permit 05156, CA 70983)

From Chad McClary <cmcclary@emeraldinc-us.com>
Date Mon 3/30/2026 4:37 PM
To Yusef W. Hussein <yusef.hussein@des.sc.gov>

1 attachment (83 KB)
501 Amoco Addendum 3-30-26.xlsx;



Good afternoon,

Please find the attached addendum for the 501 Amoco sampling event.

If you have any questions, please let me know.

William (Chad) McClary, P.G.
Emerald, Inc.
803-469-5454 (Office)
803-960-6039 (Cell)

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

ASSESSMENT COMPONENT COST AGREEMENT

South Carolina Department of Health and Environmental Control
Underground Storage Tank Management Division
State Underground Petroleum Environmental Response Bank Account
August 9, 2023

Facility Name: 501 Amoco

UST Permit #: 05156 **Cost Agreement #:** 70983

ITEM	QUANTITY	UNIT	UNIT PRICE		TOTAL
A. Plan Preparation					
1.2 Site-specific Work Plan		each	$183.22		$0.00
2.2 Tax Map		each	$85.50		$0.00
3.2 QAPP Contractor Addendum (App B)		each	$250.00		$0.00
B. Survey					
1.1 Receptor Survey		each	$673.06		$0.00
C. Survey					
1.2 Comprehensive Survey		each	$1,270.36		$0.00
5.1 Ground Penetrating Radar Survey (100 x 100)		each	$1,111.57		$0.00
D. Mob/Demob					
1.2 Equipment		each	$1,245.93		$0.00
2.2 Personnel		each	$516.69		$0.00
3.2 Adverse Terrain Vehicle		each	$610.75		$0.00
E. Soil Borings					
1.1 Soil Borings (hand auger)		foot	$21.80		$0.00
F. Soil Borings (requiring equipment, push technology, etc) or Field Screening (including sampling and analyst)					
1.2 Standard		per foot	$33.50		$0.00
2.2 Fractured Rock		per foot	$41.40		$0.00
G.					
H. Well Abandonment					
1.2 2" diameter or less		per foot	$3.79		$0.00
2.2 Greater than 2" to 6" diameter		per foot	$5.50		$0.00
3.2 Dug/Bored well (up to 6 feet diameter)		per foot	$18.32		$0.00
I. Well Installation (In accordance with R.61-71)					
1.2 Water Table (hand augered)		per foot	$31.40		$0.00
2.B Water Table (drill rig) 2" Diameter		per foot	$54.90		$0.00
2.2 Single-cased 2" Diameter Monitoring Well >50ft		per foot	$59.80		$0.00
3.2 Telescoping		per foot	$84.70		$0.00
4.2 Rock Drilling		per foot	$81.80		$0.00
5.2 2" Rock Coring		per foot	$88.50		$0.00
6.2 Multi-sampling ports/screens		per foot	$59.40		$0.00
7.2 Recovery Well (4" diameter)		per foot	$69.60		$0.00
9.2 Rotosonic (2" diameter)		per foot	$119.00		$0.00
10.2 Re-develop Existing Well		per foot	$13.44		$0.00
J. Groundwater Sample Collection / Gauging Depth to Water/Product					
1.2 Groundwater Purge	-10	per well	$73.29		($732.90)
2.2 Air or Vapors		sample	$14.66		$0.00
3.2 Water Supply Sample		sample	$26.87		$0.00
4.1A HydraSleeve		sample	$34.20		$0.00
4.2B No-purge Groundwater Sample/Surface water		sample	$57.24		$0.00
5.2 Gauge Well only	5	sample	$8.55		$42.75
6.2 Sample Below Product		sample	$14.66		$0.00
7.2 Passive Diffusion Bag		sample	$31.75		$0.00
8.2 Field Duplicates (MWs & WSWs) and Field Bla	4	sample	$30.06		$120.24
9.2 Groundwater (low flow purge)		sample	$111.16		$0.00
10.2 Equipment Blank		sample	$30.06		$0.00
11.1 Sample Product		per well	$52.66		$0.00
K. Laboratory Analyses-Groundwater					
1.2 BTEXNM+Oxyg's+1,2 DCA+Eth(8260D)	-8	per sample	$149.02		($1,192.16)
2.2 Lead, Filtered		per sample	$16.85		$0.00
3.2 Rush EPA Method 8260B		per sample	$187.62		$0.00
4.2 Trimethal, Butyl, and Isopropyl Benzenes		per sample	$34.20		$0.00
5.2 PAH's		per sample	$74.02		$0.00
6.2 Lead		per sample	$19.54		$0.00

Addendum

Previously Approved:	$11,651.98
Increase:	($2,871.37)
New Approved Total:	$8,780.60
Project Manager:	Yusef Hussein
Section Manager:	
Finance:	
Date:	3/31/2026

3 pages	
From: Chad McClary	
cmcclary@emeraldinc-us.com	
Emerald Inc	*UST/SCDHEC*
fax # ( )	
Phone# 803-469-5454	

The SCDHEC reserves the authority to pay only for work properly performed and/or technically justified and will only pay rates in accordance with established criteria.

7.2 EDB by EPA 8011	-8	per sample	$55.21		($441.68)
8.2 EDB by EPA Method 8011 Rush		per sample	$83.31		$0.00
9.2 8 RCRA Metals		per sample	$77.45		$0.00
10.2 TPH (9070)		per sample	$50.09		$0.00
11.2 PH		per sample	$6.35		$0.00
12.2 BOD		per sample	$24.42		$0.00
13.2 Ethanol		per sample	$18.08		$0.00
K. Analyses-Drinking Water					
14.2 BTEXNM+1,2 DCA (524.2)		per sample	$151.52		$0.00
15.2 7-OXYGENATES & ETHANOL (8260D)		per sample	$112.07		$0.00
16.2 EDB (504.1)		per sample	$97.11		$0.00
17.2 RCRA METALS (200.8)		per sample	$122.15		$0.00
K. Analyses-Soil					
18.2 BTEX + Naphth.		per sample	$78.18		$0.00
19.2 PAH's		per sample	$78.22		$0.00
20.2 8 RCRA Metals		per sample	$68.89		$0.00
21.2 TPH-DRO (3550C/8015C)		per sample	$48.86		$0.00
22.2 TPH-GRO (5035B/8015C)		per sample	$43.92		$0.00
23.2 Grain size/hydrometer		per sample	$127.04		$0.00
24.2 Total Organic Carbon		per sample	$37.38		$0.00
K. Analyses-Air					
25.2 BTEX + Naphthalene		per sample	$263.84		$0.00
K. Hydrocarbon Fuel Identification					
27.1 C3-C44 Whole Oil (ASTM D3328)		per sample	$465.93		$0.00
28.1 Fuel Oxygenates (1624 Mod)		per sample	$398.39		$0.00
29.1 ALKYL Leads, EDB MMT (8080)		per sample	$398.39		$0.00
30.1 C8-C40 Full Scan (ASTM 5739)		per sample	$629.64		$0.00
31.1 Simulated Distillation (ASTM 2887)		per sample	$398.39		$0.00
32.1 Parent & Alk. PAH Com. (8270 SIM)		per sample	$723.63		$0.00
33.1 C3-C10 Piano (8260 MOD)		per sample	$599.88		$0.00
34.1 C10+Alkane Fingerprints		per sample	$599.88		$0.00
35.1 Expert Data Interpretation & Report		each	$595.30		$0.00
L. Aquifer Characterization					
1.2 Pumping Test		per hour	$28.09		$0.00
2.2 Slug Test		per test	$233.31		$0.00
3.2 Fractured Rock		per test	$122.15		$0.00
M. Free Product					
1.1 Free Product Recovery Rate Test		each	$46.42		$0.00
N.					
O. Risk Evaluation					
1.2 Tier I Risk Evaluation		each	$366.45		$0.00
2.2 Tier II Risk Evaluation		each	$122.15		$0.00
P. Survey					
1.1 Subsequent Survey		each	$297.65		$0.00
Q. Disposal (gallons or tons)					
1.2 Wastewater	-302.5	gallon	$1.19		($359.98)
2.2 Free Product		gallon	$1.63		$0.00
3.2 Soil Treatment/Disposal		ton	$156.25		$0.00
4.2 Drilling fluids		gallon	$1.25		$0.00
R. Miscellaneous (attach receipts)					
		each	$0.00		$0.00
		each	$0.00		$0.00
		each	$0.00		$0.00
T. Tier I Assessment (Use DHEC 3665 form)					
1.2 Southeast Region		standard	$12,622.56		$0.00
2.2 All Other Counties		standard	$13,844.06		$0.00
U. IGWA (Use DHEC 3666 form)					
1.2 Southeast Region		standard	$4,353.67		$0.00
2.2 All Other Counties		standard	$4,720.01		$0.00
22. Active Correction Action		PFP	Bid Cost		$0.00
W. Aggressive Fluid & Vapor Recovery (AFVR)					
1.2 8-hour Event		per event	$1,787.40		$0.00
2.1 24-hour Event		per event	$4,407.78		$0.00
3.1 48-hour Event		per event	$7,242.29		$0.00
4.1 96-hour Event		per event	$14,482.28		$0.00
5.1 Off-gas Treatment 8 hour		per event	$141.17		$0.00
6.2 Off-gas Treatment 24 hour		per event	$294.30		$0.00
7.2 Off-gas Treatment 48 hour		per event	$386.10		$0.00
8.1 Off-gas Treatment 96 hour		per event	$898.84		$0.00
9.1 Off-gas Treatment 8 hour (w/chlorinated compounds)		per event	$464.40		$0.00

10.1 Off-gas Treatment 24 hour (w/chlorinated compounds)		per event	$540.00		$0.00
11.1 Off-gas Treatment 48 hour (w/chlorinated compounds)		per event	$1,080.00		$0.00
12.1 Off-gas Treatment 96 hour (w/chlorinated compounds)		per event	$2,160.00		$0.00
13.2 AFVR Effluent Disposal(w/chlorinated compounds)		gallon	$0.64		$0.00
14.2 AFVR Site Reconnaissance		each	$302.40		$0.00
15.1 Additional Hook-ups		each	$29.68		$0.00
16.2 AFVR Effluent Disposal		gallon	$0.53		$0.00
17.2 AFVR Mobilization/Demobilization		each	$777.60		$0.00
18.1 Mobilization for absorbents/skimmers		each	$516.69		$0.00
19.1 Well sock 2" ID well		each	$36.94		$0.00
20.1 Well sock 4" ID well		each	$49.03		$0.00
21.1 pad (per pad)		each	$49.95		$0.00
22.1 3" diameter x 10' length boom		each	$108.00		$0.00
23.1 5" diameter x 10' length boom		each	$132.84		$0.00
24.1 New FPP recovery skimmer (2" wells)		each	$791.10		$0.00
25.1 New FPP recovery skimmer (4" wells)		each	$1,247.40		$0.00
26.1 Refurbished FPP recovery skimmer (2" or 4" wells)		each	$760.32		$0.00
27.1 Disposal of Absorbents		pound	$4.10		$0.00
28.1 Disposal of product from skimmers		gallon	$0.50		$0.00
X. Granulated Activated Carbon (GAC) filter system installation & service:					
1.2 New GAC System Installation		each	$2,320.86		$0.00
2.2 Refurbished GAC Sys. Install		each	$1,099.35		$0.00
3.2 Filter replacement/removal		each	$427.53		$0.00
4.2 GAC System removal, cleaning, & refurbishment		each	$335.92		$0.00
5.2 GAC System housing		each	$305.38		$0.00
6.2 In-line particulate filter		each	$183.22		$0.00
7.2 Additional piping & fittings		foot	$1.84		$0.00
Y. Well Repair					
1.2 Additional Copies of the Report Delivered		each	$61.07		$0.00
2.2 Repair 2x2 MW pad		each	$61.07		$0.00
3.2 Repair 4x4 MW pad		each	$107.49		$0.00
4.2 Replace well vault		each	$144.14		$0.00
5.2 Replace well cover bolts		each	$3.18		$0.00
6.2 Replace locking well cap & lock		each	$18.32		$0.00
7.2 Replace/Repair stick-up		each	$163.68		$0.00
8.2 Convert Flush-mount to Stick-up		each	$183.22		$0.00
9.2 Convert Stick-up to Flush-mount		each	$158.79		$0.00
10.2 Replace missing/illegible well ID plate		each	$14.66		$0.00
11.1 Down-hole Camera		per foot	$29.25		$0.00
Z. High Resolution Site Characterization					
1.1 HRSC Screening Equipment Mobilization		each	$1,468.80		$0.00
2.1 HRSC Drilling Category 1		per foot	$31.32		$0.00
3.1 HRSC Drilling Category 2		per foot	$36.18		$0.00
4.1 HRSC Drilling Category 3		per foot	$29.16		$0.00
5.1 HRSC 3-D Model		each	$4,363.20		$0.00
S. Report Prep & Project Management	12%	percent	($2,563.73)		($307.65)
TOTAL					($2,871.37)

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Date Received 4-2-26

Permit Number 05156

Project Manager Yusef Hussein

Name of Contractor Emerald Inc

Description GWS Report

Docket Number 90T

Scanned

Verified

Yusef

Emerald, Inc.

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REPORT OF GROUNDWATER SAMPLING
501 AMOCO
1432 US HIGHWAY 501
MYRTLE BEACH, SOUTH CAROLINA
UST PERMIT #05156
COST AGREEMENT #70983

Prepared For:

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Corrective Action and Field Support Section
Underground Storage Tank Management Division
South Carolina Department of Environmental Services
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Prepared By:

Emerald, Inc.
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April 1, 2026

Signature Page

This document entitled "Report of Groundwater Sampling", has been prepared for the South Carolina Department of Environmental Services (DES) to describe investigative activities initiated at the 501 Amoco site located in Myrtle Beach, South Carolina. It has been prepared under the direct supervision of William C. McClary, P.G. in accordance with the Underground Storage Tank (UST) Quality Assurance Division Plan Revision 4.0, Emerald, Inc. Annual Contractor Quality Assurance Plan, and the approved Site-Specific Work Plan (SSWP). All questions or comments concerning this report should be directed to William C. McClary, P.G., Emerald, Inc., at 803-469-5454.

Emerald, Inc.

Daniel C. Alexander
Project Manager

Emerald, Inc.

William C. McClary, P.G.
South Carolina Registration #2386
President

Report of Groundwater Sampling
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina

TABLE OF CONTENTS

Section **Page**

1.0 Introduction 1

2.0 Site Activities 1

2.1 Static Water Level Measurement 2

2.2 Groundwater Sampling 2

2.3 Surface Water Sampling 3

2.4 Analytical Results 4

3.0 Results, Conclusions, and Recommendations 4

Tables

Table 1) - Groundwater Elevations and Field Measurements
Table 2) - Groundwater Analytical Data
Table 3) - Groundwater Analytical Data (Oxygenates)

Figures

Figure 1) - USGS Topographic Map
Figure 2) - Site Map
Figure 3) - Potentiometric Surface Map
Figure 4) - Groundwater CoC Map
Figure 4A) - Benzene Contour Map
Figure 4B) - Toluene Contour Map
Figure 4C) - Ethylbenzene Contour Map
Figure 4D) - Total Xylenes Contour Map
Figure 4E) - Naphthalene Contour Map

Appendices

A) Purge Logs
B) Analytical Data Sheets
C) Disposal Manifests
D) QAPP Contractor's Checklist

1.0 Introduction

The 501 Amoco site (UST Permit #05156) is located at 1432 US Highway 501 in Myrtle Beach, South Carolina. Figure 1 contains an USGS topographic map for the surrounding area. The subject property is currently occupied by a used car lot. According to Horry County tax records, the site is currently owned by Todd Investment Properties LLC (220 Riverview Road, Athens, GA 30606).

The subject site formerly maintained 2-4,000 gallon gasoline USTs and 1-6,000 gallon gasoline UST. These USTs were abandoned by filling with concrete in October 1999. A release of petroleum product was reported in August 1991 and confirmed in March 1992. The responsible party for this release is Todd Investment Properties LLC (220 Riverview Road, Athens, GA 30606).

From 1991 through 2023, assessment work, groundwater sampling, and abatement activities were conducted by Southeastern Environmental and Kleen Sites Geoservices. This work included monitoring well installation, groundwater sampling and aggressive fluid vapor recovery (AFVR) events.

In December 2024, SCDES requested a site-specific work plan (SSWP) for additional assessment to better define the source area, an aggressive fluid vapor recovery event (AFVR), a comprehensive groundwater sampling event. During this work effort six additional monitoring wells were installed to better define the source area. After well installation, a 96-hour AFVR event was conducted followed by a comprehensive groundwater sampling event.

In January 2026 SCDES requested a site-specific work plan (SSWP) for a comprehensive groundwater sampling event. This report documents the findings of this work effort.

2.0 Site Activities

Emerald, Inc. personnel conducted a groundwater sampling event at the 501 Amoco site to monitor the contaminant plume plume. Field activities required to generate site-specific

information for the site are described in detail within this section. Figure 2 contains a site map presenting monitoring wells, receptors, relevant structures, and utilities.

2.1 Static Water Level Measurement

Prior to well purging, sample collection, or gauging of the monitoring wells, water levels were recorded to the nearest 0.01 foot using a graduated electronic interface probe. Measurable free product was encountered in five monitoring wells. Five monitoring wells contained at least one constituent exceeding solubility limits, indicating free product may be present in the well.

The following table documents free product detected during the sampling event:

Monitoring Well	Product Thickness
05156 MW-2	Exceeds Solubility Limits
05156 MW-3	1.31 ft.
05156 MW-15	Exceeds Solubility Limits
05156 MW-16	Exceeds Solubility Limits
05156 MW-17	Exceeds Solubility Limits
05156 MW-19	Exceeds Solubility Limits
05156 RW-2	5.84 ft.
05156 RW-3	5.53 ft.
05156 RW-4	0.38 ft.
05156 RW-5	3.42 ft.

Measurements were recorded from the surveyed top of the well casing so they could be referenced to a common datum. Water levels and groundwater elevations are summarized in Table 1. Based upon the groundwater elevations recorded during this work effort, groundwater flow in the shallow aquifer is to the east and northeast. Figure 3 presents a potentiometric surface map for the shallow aquifer.

2.2 Groundwater Sampling

On March 9 and 10, 2026, groundwater samples were collected from sixteen (16) monitoring wells (MW-2, MW-6, MW-7, MW-8, MW-11 through MW-19, TW-1, TW-2, and RW-1) at the subject site. MW-3 and RW-2 through RW-5 contained free product and were not sampled. MW-1 has a bent standpipe and could not be sampled using a bailer or peristaltic pump. MW-4,

MW-9, and MW-10 could not be located. MW-5 could not be accessed due to an immobile car covering it. In addition to these groundwater samples, two duplicate samples (MW-16 and RW-1), two field blanks, and a trip blank were also collected. One trip blank was included in each cooler shipped to the laboratory. Each sample collected at the site was documented as to the cooler in which it was placed, and a dedicated trip blank was included in each cooler for quality control purposes.

Each monitoring well not containing free product was purged prior to sampling. Monitoring wells were purged until the dissolved oxygen, pH, conductivity, temperature readings were within 5%, and turbidity readings reached 10 ntu's or within 5%. A maximum of five well volumes were removed from each well. If the well went dry during purging, it was allowed to recharge for a minimum of three hours or 80% of the original water level before a sample was collected. Field data obtained during the purging of each well is presented in Appendix A.

Field equipment was properly calibrated prior to collecting data at the site. Following well purging or gauging, a groundwater sample was collected from each well using a disposable bailer. Downhole sampling equipment was properly decontaminated between each sampling location. Approximately 197.5 gallons of purge water was treated on-site using an activated carbon drum (See Appendix C for a copy of the disposal manifest). To ensure proper treatment of wastewater, a wastewater composite sample was collected.

Samples were immediately packed in crushed ice in the field ice chest and shipped to Pace Analytical, Inc. of Huntersville, NC (SC Certification #99006001) for laboratory analysis. Each sample was analyzed for BTEX, Naphthalene, MTBE, 1, 2 DCA, 8 Oxygenates (EPA Method 8260D), and EDB (EPA Method 8011). Analytical results for the groundwater samples are presented on Tables 2 and 3 with the laboratory reports in Appendix B.

2.3 Surface Water Sampling

On March 10, 2026, one surface water sample (SW-1) was collected from Crooked Creek (33.699221, -78.897183). This creek is located approximately 655 feet northeast of

MW-3. The sample was collected by lowering laboratory supplied sample containers into the surface water body to collect the sample.

The sample was immediately packed in crushed ice inside the field ice chest and shipped to Pace Analytical, Inc. of Huntersville, NC (SC Certification #99006001) for laboratory analysis. Each sample was analyzed for BTEX, Naphthalene, MTBE, 1-2 DCA, 8 Oxygenates (EPA Method 8260D), and EDB (EPA Method 8011). Analytical results for the surface water sample are presented on Tables 2 and 3, with the complete laboratory reports found in Appendix D.

2.4 Analytical Results

Tables 2 and 3 summarize the groundwater analytical results at the subject site and Appendix D contains a copy of the laboratory reports. Laboratory analytical reports indicate that the concentrations of chemicals of concern (CoC) have decreased since the last sampling event. Measurable free product was encountered in MW-3 (1.31 ft.), RW-2 (5.84 ft.), RW-3 (5.53 ft.), RW-4 (0.38 ft.), and RW-5 (3.42 ft.). During the March 2026 sampling event, a total of 16.48 ft. of free product was detected in monitoring wells at the site. Groundwater analytical results from MW-2, MW-15 through MW-18, and MW-19 exceeded solubility limits but did not contain measurable free product. Figure 4 presents a Groundwater CoC Map for the site. Figures 4A through 4E present iso-concentration maps for CoC's exceeding risk-based screening levels (RBSLs).

3.0 Results, Conclusions, and Recommendations

During this work effort, a comprehensive groundwater sampling event was performed. Analytical results from this sampling event indicate levels of petroleum CoCs have remained constant since the last sampling event. Measurable free product was detected in five monitoring wells during the sampling event, but analytical data from five additional monitoring wells exceeded solubility limits, indicating the true extent of free product may be larger. Data from this sampling

event indicates the direction of groundwater flow in the shallow aquifer is to the east and northeast.

Given the above findings during this Report of Groundwater Sampling at the site, Emerald, Inc. recommends additional long duration AFVR events to abate free product. The limited extent of free product and elevated dissolved CoC concentrations would appear to make AFVR an effective abatement technique. Once site-specific target levels are determined, a targeted scope remedial action may be required to remove free product.

TABLES

TABLE 1
GROUNDWATER ELEVATIONS
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156

Well Number	Sample Date	Screened Interval (Ft)	Depth to Product (Ft)	Depth to Water (Ft)	Product Thickness (Ft)	Well Head Elevation (Ft)	Groundwater Elevation (Ft)
05156 MW-1	6/1/21	3-13	---	8.86	---	20.87	12.01
	8/22/24		Bent Standpipe				
	3/3/25		Bent Standpipe				
	3/10/26		Bent Standpipe				
05156 MW-2	6/1/21	3-13	---	8.99	---	21.44	12.45
	8/22/24		---	6.80	---	21.44	14.64
	3/3/25		---	9.15	---	21.44	12.29
	3/9/26		---	5.63	---	21.44	15.81
05156 MW-3	6/1/21	3-13	8.13	8.65	0.52	21.44	13.17
	8/22/24		4.91	5.90	0.99	21.44	16.27
	3/3/25		8.07	8.47	0.40	21.44	13.27
	3/9/26		5.87	7.18	1.31	21.44	15.23
05156 MW-4	6/1/21	4-14	Not Located				
	8/22/24		Not Located				
	3/3/25		Not Located				
	3/9/26		Not Located				
05156 MW-5	6/1/21	5-15	No Access				
	8/22/24		No Access				
	3/3/25		No Access				
	3/9/26		No Access				
05156 MW-6	6/1/21	5-15	---	8.76	---	20.95	12.19
	8/23/24		---	5.26	---	20.95	15.69
	3/4/25		---	8.73	---	20.95	12.22
	3/10/26		---	6.31	---	20.95	14.64
05156 MW-7	6/1/21	5-15	---	8.69	---	22.16	13.47
	8/22/24		---	5.71	---	22.16	16.45
	3/4/25		---	8.80	---	22.16	13.36
	3/10/26		---	6.47	---	22.16	15.69
05156 MW-8	6/1/21	5-15	---	8.94	---	20.99	12.05
	8/22/24		---	6.77	---	20.99	14.22
	3/4/25		---	8.70	---	20.99	12.29
	3/10/26		---	6.67	---	20.99	14.32
05156 MW-9	6/1/21	5-15	Not Located				
	8/22/24		Not Located				
	3/4/25		Not Located				
	3/9/26		Not Located				
05156 MW-10	6/1/21	5-15	Not Located				
	8/22/24		Not Located				
	3/4/25		Not Located				
	3/9/26		Not Located				
05156 MW-11	6/1/21	6-16	---	7.42	---	19.70	12.28
	8/22/24		---	7.82	---	19.70	11.88
	3/4/25		---	8.96	---	19.70	10.74
	3/10/26		---	5.64	---	19.70	14.06
05156 MW-12	6/1/21	4-14	---	7.52	---	18.49	10.97
	8/23/24		---	6.47	---	18.49	12.02
	3/4/25		---	7.41	---	18.49	11.08
	3/10/26		---	5.73	---	18.49	12.76
05156 MW-13	6/1/21	4-14	---	7.88	---	20.13	12.25
	8/23/24		---	7.90	---	20.13	12.23
	3/3/25		---	7.88	---	20.13	12.25
	3/9/26		---	4.92	---	20.13	15.21
05156 MW-14	3/3/25	3-13	---	7.93	---		
	3/9/26		---	4.96	---		
05156 MW-15	3/3/25	3-13	---	8.70	---		
	3/9/26		---	5.76	---		
05156 MW-16	3/3/25	3-13	---	8.69	---		
	3/9/26		---	5.80	---		
05156 MW-17	3/3/25	3-13	---	7.54	---		
	3/9/26		---	5.39	---		
05156 MW-18	3/3/25	3-13	---	7.65	---		
	3/9/26		---	4.79	---		
05156 MW-19	3/3/25	3-13	---	8.32	---		
	3/9/26		---	5.61	---		
05156 TW-1	6/1/21	38-43	---	8.63	---	21.10	12.47
	8/22/24		---	8.33	---	21.10	12.77
	3/3/25		---	8.49	---	21.10	12.61
	3/9/26		---	6.79	---	21.10	14.31
05156 TW-2	6/1/21	33-40	---	8.76	---	20.85	12.09
	8/23/24		---	7.82	---	20.85	13.03
	3/4/25		---	8.74	---	20.85	12.11
	3/10/26		---	7.34	---	20.85	13.51
05156 RW-1	6/1/21	3-13	---	2.62	---	21.15	18.53
	8/22/24		No Access				
	3/3/25		---	3.14	---	21.15	18.01
	3/9/26		---	1.53	---	21.15	19.62
05156 RW-2	6/1/21	3-13	6.65	13.08	6.43	21.17	12.85
	8/22/24		4.74	11.11	6.37	21.17	14.77
	3/3/25		7.30	9.60	2.30	21.17	13.27
	3/9/26		4.78	10.62	5.84	21.17	14.87
05156 RW-3	12/2/21	3-13	---	8.20	---	21.13	12.93
	8/22/24		---	4.15	---	21.13	16.98
	3/3/25		7.10	9.17	2.07	21.13	13.49
	3/9/26		4.56	10.09	5.53	21.13	15.13
05156 RW-4	12/2/21	3-13	---	7.95	---	21.15	13.20
	8/22/24		5.67	5.70	0.03	21.15	15.47
	3/3/25		7.84	7.95	0.11	21.15	13.28
	3/9/26		4.93	5.31	0.38	21.15	16.12
05156 RW-5	12/2/21	3-13	8.11	8.17	0.06	21.28	13.15
	8/22/24		4.81	6.05	1.24	21.28	16.15
	3/3/25		7.90	8.37	0.47	21.28	13.26
	3/9/26		5.39	8.81	3.42	21.28	15.00

Notes:
1. Groundwater depths were measured from the top of the PVC riser pipe
2. Data Prior to August 2024 from SCDES Files
3. Groundwater Elevations corrected for free product using a specific gravity of 0.74 for fuel

TABLE 2
GROUNDWATER ANALYTICAL DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156
PAGE 1 OF 2

Well Number	Sample Date	CoC RBSL units	Benzene 5 (ug/l)	Toluene 1,000 (ug/l)	Ethylbenzene 700 (ug/l)	Total Xylenes 10,000 (ug/l)	MTBE 40 (ug/l)	Naphthalene 25 (ug/l)	1,2 DCA 5 (ug/l)	EDB 0.05 (ug/l)
05156 MW-1	8/3/04		Not Sampled							
	12/19/14		**3.3**	BDL	BDL	BDL	BDL	BDL	BDL	BDL
	8/26/19		Not Sampled							
	6/1/21		Not Sampled							
	8/22/24		Bent Standpipe							
	3/3/25		Bent Standpipe							
05156 MW-2	8/3/04		**10,500**	**99,300**	**1,430**	**7,430**	**4.66**	**704**	NT	**1.96**
	12/19/14		**5,100**	**75,000**	BDL	**5,400**	BDL	BDL	NT	**0.650**
	8/26/19		**6.91**	**151**	**2.74**	**14.6**	<2.50	<2.50	<2.50	**0.477**
	6/1/21		**3,800**	**86,000**	**1,400**	**8,000**	<1,000	**420J**	<1,000	NT
	8/22/24		**2,690**	**66,800**	**1,420**	**7,070**	<500	**551**	<500	<0.021
	3/3/25		**2,960**	**78,200**	**1,530**	**8,040**	<500	**661**	<500	**0.34**
	3/9/26		**2,290**	**66,600**	**1,210**	**5,830**	<500	<500	<500	<0.020
05156 DUP-1 (MW-2)	8/22/24		**2,420**	**59,300**	**1,300**	**6,430**	<500	**622**	<500	<0.020
05156 MW-3	8/3/04		**10,500**	**67,500**	**1,260**	**4,930**	**900**	713	NT	**0.413**
	12/19/14		1.14 ft. of Free Product							
	8/26/19		0.05 ft. of Free Product							
	6/1/21		0.52 ft. of Free Product							
	8/22/24		0.99 ft. of Free Product							
	3/3/25		0.40 ft. of Free Product							
	3/9/26		1.31 ft. of Free Product							
05156 MW-4	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		Not Located							
	6/1/21		Not Located							
	8/22/24		Not Located							
	3/3/25		Not Located							
05156 MW-5	8/3/04		**3.5**	**8.48**	**1.53**	**175**	BDL	BDL	NT	BDL
	12/19/14		**130**	**410**	**11**	**200**	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		No Access							
	8/22/24		No Access							
	3/3/25		No Access							
05156 MW-6	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/10/26		**33.2**	**1.5J**	**8.2**	**8.9**	**10.9**	**150**	<1.0	<0.020
05156 MW-7	8/3/04		BDL	BDL	BDL	BDL	**6.22**	BDL	NT	BDL
	12/19/14		**180**	**220**	**10**	**290**	BDL	**15**	NT	BDL
	8/26/19		22.2	<2.50	**6.74**	**2.54**	**7.52**	**8.48**	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	**6.9**	**8.4**	<1.0	NT
	8/22/24		**5.2**	<1.0	**1.1**	**2.1**	**1.3**	**10.7**	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/10/26		**30.1**	**0.88J**	**9.0**	**12.5**	**7.8**	**84.9**	<1.0	<0.021
05156 MW-8	8/3/04		**3,070**	**91.7**	**78.7**	**1,661**	**1.19**	**8.20**	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	**5.4**	<1.0	**1.5**	<1.0	**1.3**	<1.0	NT
	8/22/24		**0.42J**	**28.4**	**1.7**	**9.4**	<1.0	**2.1**	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/10/26		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		Not Located							
	6/1/21		Not Located							
	8/22/24		Not Located							
	3/4/25		Not Located							
	3/10/26		Not Located							
05156 MW-10	8/3/04		**107**	**1.59**	BDL	**5.51**	**5.0**	**13.0**	NT	NT
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	**4.07**	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
	6/1/21		Not Located							
	8/22/24		Not Located							
	3/4/25		Not Located							
	3/10/26		Not Located							
05156 MW-11	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	<0.020
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	**42.9**	<2.50	**9.13**	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	**0.80J**	<1.0	<1.0	<1.0	<1.0	<2.50	NT
	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/10/26		1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022
05156 MW-12	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	<0.020
	12/19/14		BDL	BDL	BDL	BDL	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/10/26		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022

Notes:
1. ug/l = micrograms per liter
2. "J" Values report detections below the Reporting Limit and greater than the Method Detection Limit
3. RBSL = Risk Based Screening Levels for Groundwater (SCDES Prgrammatic QAPP Revision 4.0)
4. Data prior to August 2024 from SCDES Files
5. NT = Not Tested
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TABLE 2
GROUNDWATER ANALYTICAL DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156
PAGE 2 OF 2

Well Number	Sample Date	CoC RBSL units	Benzene 5 (ug/l)	Toluene 1,000 (ug/l)	Ethylbenzene 700 (ug/l)	Total Xylenes 10,000 (ug/l)	MTBE 40 (ug/l)	Naphthalene 25 (ug/l)	1,2 DCA 5 (ug/l)	EDB 0.05 (ug/l)
05156 MW-13	8/3/04		BDL	BDL	BDL	BDL	BDL	BDL	NT	<0.020
	12/19/14		**20**	**550**	**12**	**59**	BDL	BDL	NT	BDL
	8/26/19		<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<0.0075
	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/3/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/9/26		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-14	3/3/25		**0.36J**	**1.7**	**0.74J**	**3.6**	<1.0	<1.0	<1.0	<0.021
	3/9/26		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-15	3/3/25		**1,530**	**47,500**	**872**	**5,780**	<400	**326J**	<400	<0.020
	3/9/26		**637**	**44,000**	**1,140**	**4,900**	<250	**324**	<250	<0.021
05156 MW-16	3/3/25		**11,600**	**112,000**	**1,760**	**9,380**	<1,000	<1,000	<1,000	**1.2**
	3/9/26		**4,930**	**47,400**	**961**	**4,520**	<500	<500	<500	<0.020
DUP-1 (MW-16)	3/9/26		**3,680**	**33,900**	**702**	**3,540**	<500	<500	<500	<0.020
05156 MW-17	3/3/25		**1,570**	**43,700**	**1,670**	**11,200**	<400	**560**	<400	<0.020
	3/9/26		**827**	**35,300**	**2,420**	**11,000**	<250	**398**	<250	<0.021
05156 MW-18	3/3/25		**736**	**41,700**	**1,750**	**9,190**	<400	**468**	<400	<0.020
	3/9/26		**263**	**4,590**	**593**	**2,500**	<40.0	**133**	<40.0	<0.021
05156 MW-18 DUP	3/3/25		**843**	**45,500**	**1,810**	**9,800**	<250	**395**	<250	**0.077**
05156 MW-19	3/3/25		**8,930**	**103,000**	**2,070**	**10,100**	<1,000	**823J**	<1,000	<0.020
	3/9/26		**5,220**	**56,900**	**2,270**	**8,500**	<400	**596**	<400	<0.020
05156 TW-1	8/3/04		**1.64**	**39.5**	**1.29**	**9.21**	BDL	BDL	NT	BDL
	12/19/14		**47**	**1,100**	BDL	**78**	BDL	BDL	NT	BDL
	8/26/19		<2.50	**32.3**	<2.50	**11.4**	<2.50	<2.50	<2.50	<0.0075
	6/1/21		**1.2**	**27**	**2.9**	**15**	<1.0	**5.8**	<1.0	NT
	8/22/24		<1.0	**2.0**	**0.46J**	**2.2**	<1.0	<1.0	<1.0	<0.020
	3/3/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/9/26		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/10/26		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	8/26/19		0.02 ft of Free Product							
	6/1/21		**1,200**	**2,200**	**1,300**	**3,300**	<50	**1,200**	<50	NT
	8/22/24		No Access							
	3/3/25		**377**	**24.8**	**620**	**70.6**	<5.0	**519**	<5.0	<0.020
	3/9/26		**344**	**36.5**	**228**	**31.0**	<5.0	**655**	<5.0	<0.020
05156 RW-1 DUP	6/1/21		**1,200**	**2,400**	**1,300**	**3,300**	<50	**1,200**	<50	NT
	3/3/25		**378**	**26.7**	**584**	**70.4**	<4.0	**483**	<4.0	<0.020
DUP-2	3/9/26		**363**	**43.4**	**225**	**30.7**	<5.0	**584**	<5.0	<0.019
05156 RW-2	8/26/19		5.81 ft of Free Product							
	6/1/21		6.43 ft of Free Product							
	8/22/24		6.37 ft. of Free Product							
	3/3/25		2.30 ft. of Free Product							
	3/9/26		5.84 ft. of Free Product							
05156 RW-3	8/22/24		**781**	**45.8**	**789**	**214**	<5.0	**703**	<5.0	<0.020
	3/3/25		2.07 ft. of Free Product							
	3/9/26		5.53 ft. of Free Product							
05156 RW-4	8/22/24		0.03 ft of Free Product							
	3/3/25		0.11 ft. of Free Product							
	3/9/26		0.38 ft. of Free Product							
05156 RW-5	12/2/21		0.06 ft of Free Product							
	8/22/24		1.24 ft. of Free Product							
	3/3/25		0.47 ft. of Free Product							
	3/9/26		3.42 ft. of Free Product							
05156 SW-1	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/10/26		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 FIELD BLANK	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/3/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/9/26		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 FIELD BLANK 2	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/10/26		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TRIP BLANK	6/1/21		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	8/22/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
	3/10/26		<1.0	**1.3**	<1.0	<1.0	<1.0	<1.0	<1.0	NT
05156 TRIP BLANK 2	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NT
Wastewater Composte	8/23/24		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/4/25		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
	3/9/26		<1.0	**1.6**	**0.37J**	**1.6**	<1.0	<1.0	<1.0	<0.020

Notes:
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4. Data prior to August 2024 from SCDES Files
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TABLE 3
GROUNDWATER ANALYTICAL DATA (OXYGENATES)
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156
PAGE 1 OF 3

Well Number	Sample Date	t-Amyl Alcohol (ug/l)	Tert-Amyl Methyl Ether (ug/l)	3,3-Dimethyl-1-Butanol (ug/l)	Tertiary Butyl Alcohol (ug/l)	tert-Butyl Formate (ug/l)	Diisopropyl Ether (ug/l)	Ethanol (ug/l)	Ethyl-tert-butyl Ether (ug/l)
05156 MW-1	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	Not Sampled							
	6/1/21	Not Sampled							
	8/22/24	Bent Standpipe							
	3/3/25	Bent Standpipe							
05156 MW-2	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20,000	<10,000	<20,000	**2,800J**	<5,000	<1,000	<100,000	<1,000
	8/22/24	<50,000	<5,000	<50,000	<50,000	<25,000	<500	<100,000	<5,000
	3/3/25	<50,000	<5,000	<50,000	**21,900J**	<25,000	<500	<100,000	<5,000
	3/9/26	<50,000	<5,000	<50,000	<50,000	<25,000	<500	<100,000	<5,000
DUP-1 (MW-2)	8/22/24	<50,000	<5,000	<50,000	<50,000	<25,000	<500	<100,000	<5,000
05156 MW-3	8/3/04	Not Tested							
	12/19/14	1.14 ft. of Free Product							
	8/26/19	0.05 ft. of Free Product							
	6/1/21	0.52 ft. of Free Product							
	8/22/24	0.99 ft. of Free Product							
	3/3/25	0.40 ft. of Free Product							
	3/9/26	1.31 ft. of Free Product							
05156 MW-4	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	Not Located							
	6/1/21	Not Located							
	8/22/24	Not Located							
	3/3/25	Not Located							
05156 MW-5	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	No Access							
	8/22/24	No Access							
	3/3/25	No Access							
05156 MW-6	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/10/26	<200	<20.0	<200	**260**	<100	<2.0	<400	<20.0
05156 MW-7	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	**31.0**	<2.50	<37.6	**100**	<2.50	<2.50	<125	<2.50
	6/1/21	**45**	<10	<20	**84**	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/10/26	**53.6J**	<10.0	<100	**173**	<50.0	<1.0	<200	<10.0
05156 MW-8	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/10/26	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0

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GROUNDWATER ANALYTICAL DATA (OXYGENATES)
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156
PAGE 2 OF 3

Well Number	Sample Date	t-Amyl Alcohol (ug/l)	Tert-Amyl Methyl Ether (ug/l)	3,3-Dimethyl-1-Butanol (ug/l)	Tertiary Butyl Alcohol (ug/l)	tert-Butyl Formate (ug/l)	Diisopropyl Ether (ug/l)	Ethanol (ug/l)	Ethyl-tert-butyl Ether (ug/l)
05156 MW-9	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	Not Tested							
	6/1/21	Not Tested							
	8/22/24	Not Located							
	3/4/25	Not Located							
05156 MW-10	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	Not Tested							
	8/22/24	Not Located							
	3/4/25	Not Located							
05156 MW-11	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/10/26	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-12	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/10/26	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-13	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/3/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/9/26	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 MW-14	3/3/25	<100	<10.0	<100	**51.1J**	<50.0	<1.0	<200	<10.0
	3/9/26	<100	<10.0	<100	**89.5J**	<50.0	<1.0	<200	<10.0
05156 MW-15	3/3/25	<40,000	<4,000	<40,000	<40,000	<20,000	<400	<80,000	<4,000
	3/9/26	<25,000	<2,500	<25,000	<25,000	<12,500	<250	<50,000	<2,500
05156 MW-16	3/3/25	**247,000**	<10,000	<100,000	**170,000**	<50,000	<1,000	<200,000	<10,000
	3/9/26	**100,000**	<5,000	<50,000	**86,100**	<25,000	<500	<100,000	<5,000
DUP-1 (MW-16)	3/9/26	**79,200**	<5,000	<50,000	**74,500**	<25,000	<500	<100,000	<5,000
05156 MW-17	3/3/25	<40,000	<4,000	<40,000	<40,000	<20,000	<400	<80,000	<4,000
	3/9/26	<25,000	<2,500	<25,000	<25,000	<12,500	<250	<50,000	<2,500
05156 MW-18	3/3/25	<40,000	<4,000	<40,000	<40,000	<20,000	<400	<80,000	<4,000
	3/9/26	<4,000	<400	<4,000	<4,000	<2,000	<40.0	<8,000	<400
05156 MW-18 DUP	3/3/25	<25,000	<2,500	<25,000	<25,000	<12,500	<250	<50,000	<2,500
05156 MW-19	3/3/25	<100,000	<10,000	<100,000	<100,000	<50,000	<1,000	<200,000	<10,000
	3/9/26	<40,000	<4,000	<40,000	<40,000	<20,000	<400	<80,000	<4,000

Notes:

1. ug/l = micrograms per liter
2. "J" Values report detections below the Reporting Limit and greater than the Method Detection Limit
3. RBSL = Risk Based Screening Levels for Groundwater (SCDES Prgrammatic QAPP Revision 4.0)
4. Data prior to August 2024 from SCDES Files
5. NS = Not Sampled
6. BDL = Below Detection Limit

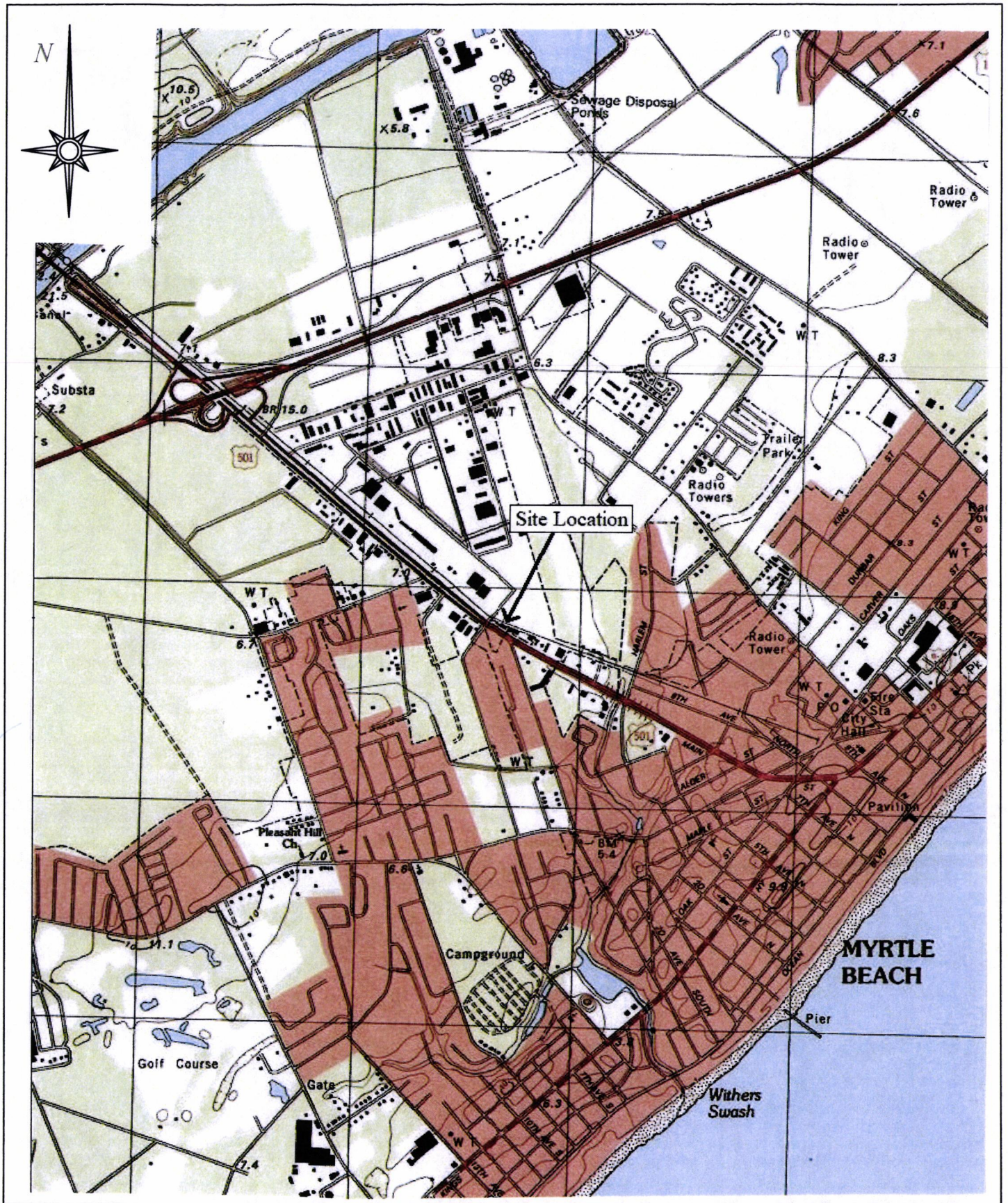
TABLE 3
GROUNDWATER ANALYTICAL DATA
FORMER 501 AMOCO
MYRTLE BEACH, SOUTH CAROLINA
SCDES ID #05156
PAGE 3 OF 3

Well Number	Sample Date	t-Amyl Alcohol (ug/l)	Tert-Amyl Methyl Ether (ug/l)	3,3-Dimethyl-1-Butanol (ug/l)	Tertiary Butyl Alcohol (ug/l)	tert-Butyl Formate (ug/l)	Diisopropyl Ether (ug/l)	Ethanol (ug/l)	Ethyl-tert-butyl Ether (ug/l)
05156 TW-1	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	**1.9J**	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/3/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/9/26	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 TW-2	8/3/04	Not Tested							
	12/19/14	Not Tested							
	8/26/19	<2.50	<2.50	<37.6	<50.0	<2.50	<2.50	<125	<2.50
	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/10/26	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
05156 RW-1	8/26/19	0.02 ft. of Free Product							
	6/1/21	**470J**	<500	<1,000	**1,200**	<250	<50	<5,000	<50
	8/22/24	No Access							
	3/3/25	**411J**	<50.0	<500	**1,020**	<250	<5.0	<1,000	<50.0
	3/9/26	**377J**	<50.0	<500	**1,200**	<250	<5.0	<1,000	<50.0
05156 RW-1 DUP	6/1/21	**470J**	<500	<1,000	**1,200**	<250	<50	<5,000	<50
	3/3/25	**403**	<40.0	<400	**837**	<200	<4.0	<800	<40.0
DUP-2	3/9/26	**420J**	<50.0	<500	**1,190**	<250	<5.0	<1,000	<50.0
05156 RW-2	8/26/19	5.81 ft. of Free Product							
	6/1/21	6.43 ft. of Free Product							
	8/22/24	6.37 ft. of Free Product							
	3/3/25	2.30 ft. of Free Product							
	3/9/26	5.84 ft. of Free Product							
05156 RW-3	8/22/24	<500	<50.0	<500	**1,130**	<250	<5.0	<1,000	<50.0
	3/3/25	2.07 ft. of Free Product							
	3/9/26	5.53 ft. of Free Product							
05156 RW-4	8/22/24	0.03 ft. of Free Product							
	3/3/25	0.11 ft. of Free Product							
	3/9/26	0.38 ft. of Free Product							
05156 RW-5	12/2/21	0.06 ft. of Free Product							
	8/22/24	1.24 ft. of Free Product							
	3/3/25	0.47 ft. of Free Product							
	3/9/26	3.42 ft. of Free Product							
05156 SW-1	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/10/26	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
FIELD BLANK	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/3/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/9/26	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
FIELD BLANK 2	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/10/26	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
TRIP BLANK	6/1/21	<20	<10	<20	<20	<5.0	<1.0	<100	<1.0
	8/22/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/10/26	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
TRIP BLANK 2	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
Wastewater	8/23/24	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/4/25	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0
	3/9/26	<100	<10.0	<100	<100	<50.0	<1.0	<200	<10.0

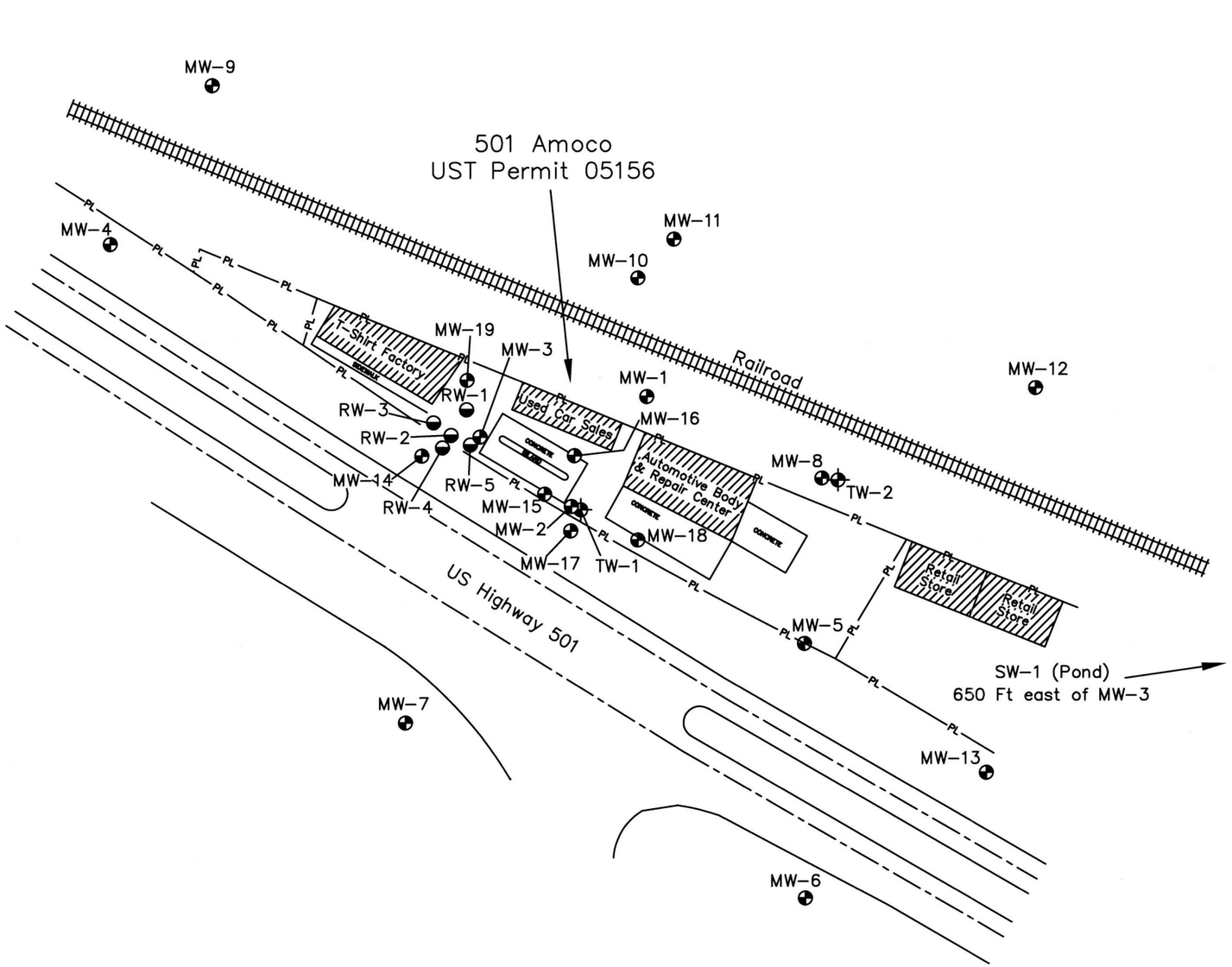
Notes:

1. ug/l = micrograms per liter
2. "J" Values report detections below the Reporting Limit and greater than the Method Detection Limit
3. RBSL = Risk Based Screening Levels for Groundwater (SCDES Prgrammatic QAPP Revision 4.0)
4. Data prior to August 2024 from SCDES Files
5. NS = Not Sampled
6. BDL = Below Detection Limit

FIGURES



PROJECT:	SHEET TITLE:	
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST Permit# 05156	Figure 1 USGS Topographic Map 7.5 Minute Series "Myrtle Beach, SC" Quadrangle Scale: 1 to 2,000 Contour Interval = 2 meters	EMERALD, INC. Sumter, SC



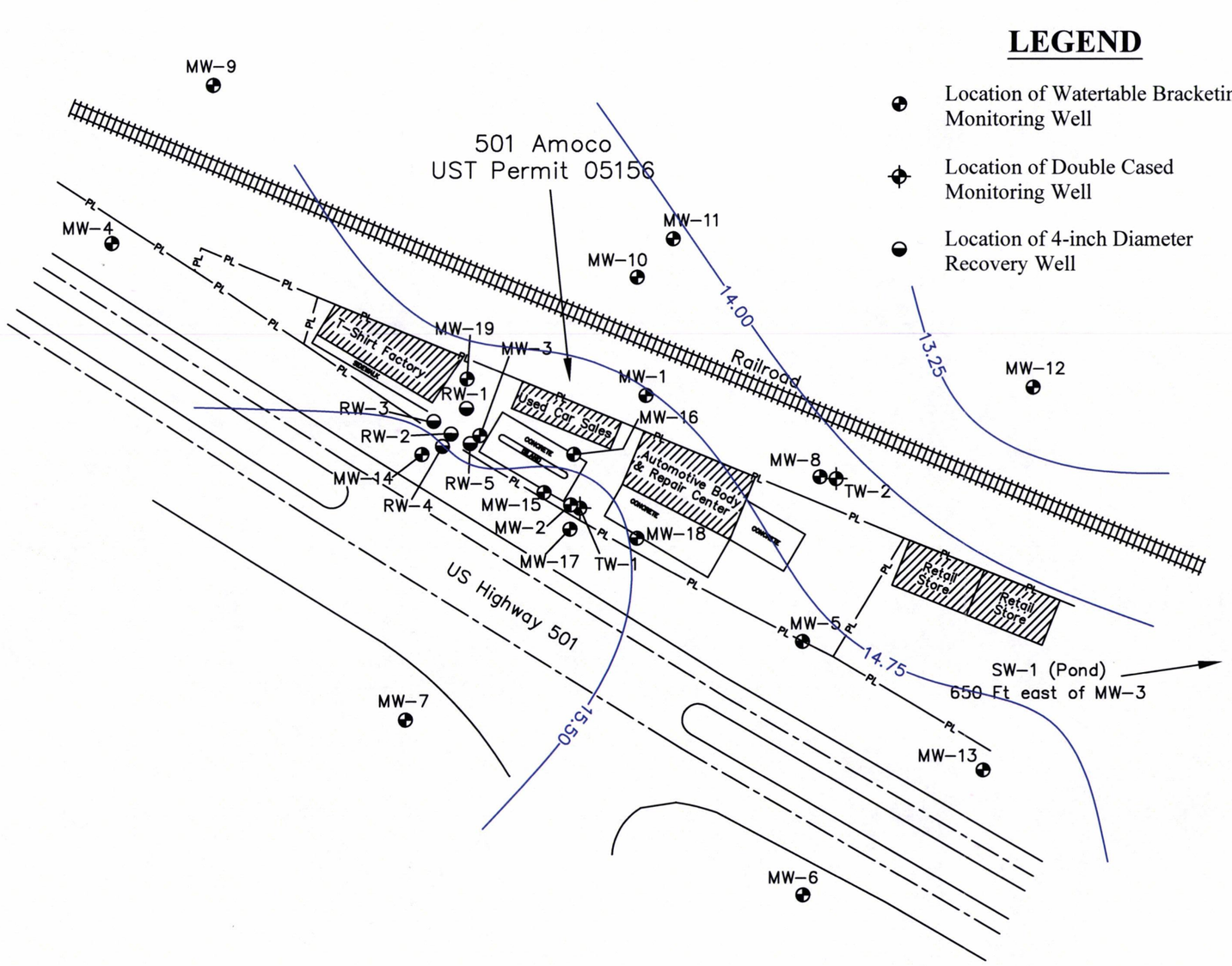
LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

SCALE
1 INCH = 80 FEET
0 80′ 160′

Map based Kleen Sites Geoservices Figure 4

PROJECT:	DATE:	Figure 2 - Site Map
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	4/1/26	EMERALD, INC. SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Well Number	Screened Interval (ft)	Depth to Product (ft)	Depth to Water (ft)	Product Thickness (ft)	Top of Casing Elevation (ft)	Groundwater Elevation (ft)
05156 MW-1	3-13	NS	NS	NS	20.87	NS
05156 MW-2	3-13	---	5.63	---	21.44	15.81
05156 MW-3	3-13	5.87	7.18	1.31	21.44	15.23
05156 MW-4	4-14	NL	NL	NL	21.32	NL
05156 MW-5	5-15	NL	NL	NL	20.15	NL
05156 MW-6	5-15	---	6.31	---	20.95	14.64
05156 MW-7	5-15	---	6.47	---	22.16	15.69
05156 MW-8	5-15	---	6.67	---	20.99	14.32
05156 MW-9	5-15	NL	NL	NL	19.62	NL
05156 MW-10	5-15	NL	NL	NL	19.09	NL
05156 MW-11	6-16	---	5.64	---	19.70	14.06
05156 MW-12	4-14	---	5.73	---	18.49	12.76
05156 MW-13	4-14	---	4.92	---	20.13	15.21
05156 MW-14	3-13	---	4.96	---	---	---
05156 MW-15	3-13	---	5.76	---	---	---
05156 MW-16	3-13	---	5.80	---	---	---
05156 MW-17	3-13	---	5.39	---	---	---
05156 MW-18	3-13	---	4.79	---	---	---
05156 MW-19	3-13	---	5.61	---	---	---
05156 TW-1	38-43	---	6.79	---	21.10	14.31
05156 TW-2	33-40	---	7.34	---	20.85	13.51
05156 RW-1	3-13	---	1.53	---	21.15	19.62
05156 RW-2	3-13	4.78	10.62	5.84	21.17	14.87
05156 RW-3	3-13	4.56	10.09	5.53	21.13	15.13
05156 RW-4	3-13	4.93	5.31	0.38	21.15	16.12
05156 RW-5	3-13	5.39	8.81	3.42	21.28	15.00

Notes: Contour Interval = 0.75 Feet

Depth to Water measured March 9 and 10, 2026

Shallow wells used in contouring

RW-1 and MW-6 not used in contouring

Groundwater Contours Produced using Surfer by Golden Graphics with modifications By Emerald, Inc. Personnel.

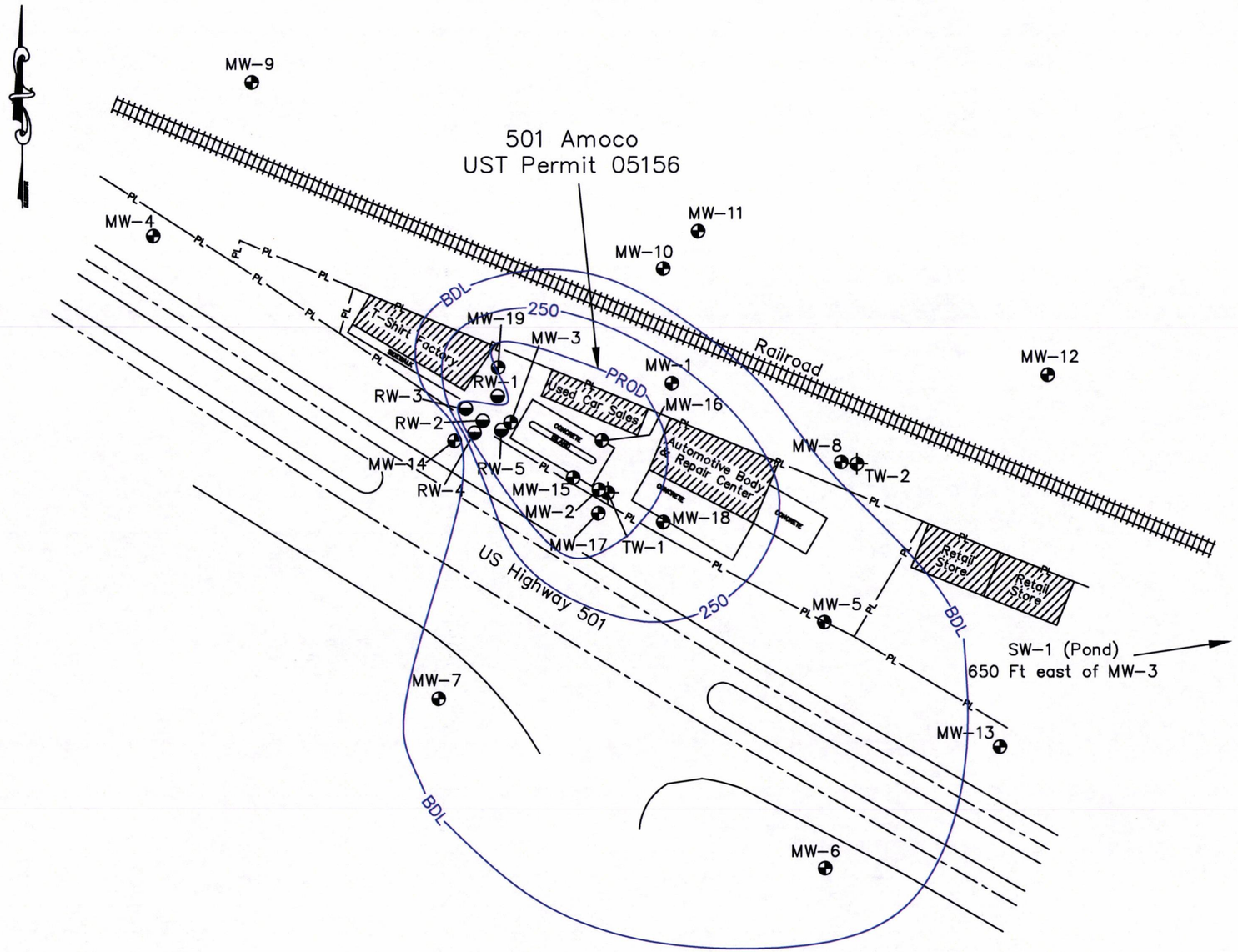
NS = Not Sampled

NL = Not Located

SCALE
1 INCH = 80 FEET
0 80' 160'

Map based Kleen Sites Geoservices Figure 4

PROJECT:	DATE:	Figure 3 - Potentiometric Surface Map
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	4/1/26	EMERALD, INC. SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,290	66,600	1,210	5,830	<500	<500	<500	<0.020
05156 MW-3	1.31 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	33.2	1.5J	8.2	8.9	10.9	150	<1.0	<0.020
05156 MW-7	30.1	0.88J	9.0	12.5	7.8	84.9	<1.0	<0.021
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-15	637	44,000	1,140	4,900	<250	324	<250	<0.021
05156 MW-16	4,930	47,400	961	4,520	<500	<500	<500	<0.020
DUP (MW-16)	3,680	33,900	702	3,540	<500	<500	<500	<0.020
05156 MW-17	827	35,300	2,420	11,000	<250	398	<250	<0.021
05156 MW-18	263	4,590	593	2,500	<40.0	133	<40.0	<0.021
05156 MW-19	5,220	56,900	2,270	8,500	<400	596	<400	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	344	36.5	228	31.0	<5.0	655	<5.0	<0.020
DUP (RW-1)	363	43.4	225	30.7	<5.0	584	<5.0	<0.019
05156 RW-2	5.84 ft. of Free Product							
05156 RW-3	5.53 ft. of Free Product							
05156 RW-4	0.38 ft. of Free Product							
05156 RW-5	3.42 ft. of Free Product							

Notes: Samples Collected on March 9 and 10, 2026

Contour Interval = 250 ug/l

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

SCALE
1 INCH = 80 FEET
0 80' 160'

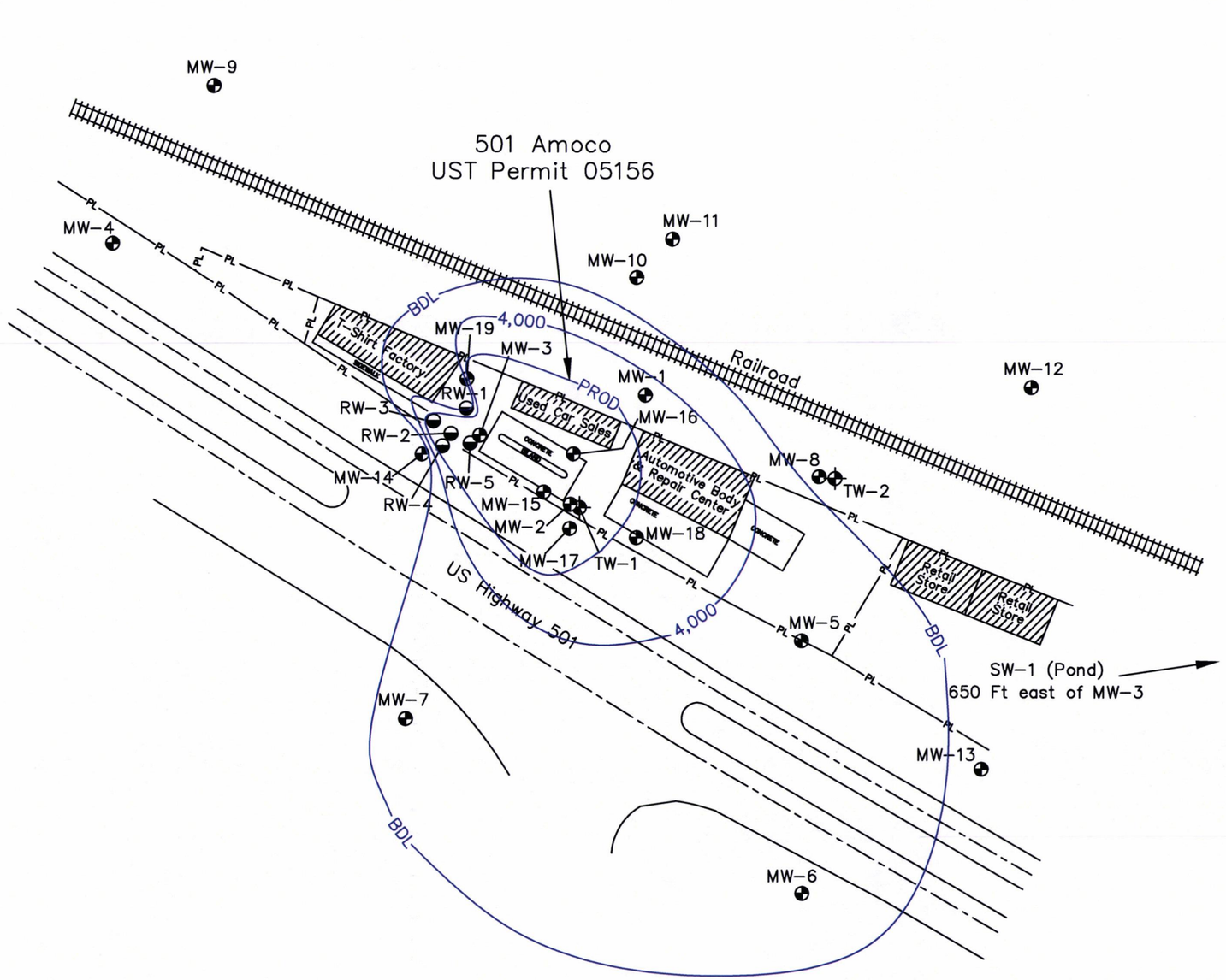
Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
4/1/26

Figure 4A - Benzene Contour Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,290	66,600	1,210	5,830	<500	<500	<500	<0.020
05156 MW-3	1.31 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	33.2	1.5J	8.2	8.9	10.9	150	<1.0	<0.020
05156 MW-7	30.1	0.88J	9.0	12.5	7.8	84.9	<1.0	<0.021
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-15	637	44,000	1,140	4,900	<250	324	<250	<0.021
05156 MW-16	4,930	47,400	961	4,520	<500	<500	<500	<0.020
DUP (MW-16)	3,680	33,900	702	3,540	<500	<500	<500	<0.020
05156 MW-17	827	35,300	2,420	11,000	<250	398	<250	<0.021
05156 MW-18	263	4,590	593	2,500	<40.0	133	<40.0	<0.021
05156 MW-19	5,220	56,900	2,270	8,500	<400	596	<400	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	344	36.5	228	31.0	<5.0	655	<5.0	<0.020
DUP (RW-1)	363	43.4	225	30.7	<5.0	584	<5.0	<0.019
05156 RW-2	5.84 ft. of Free Product							
05156 RW-3	5.53 ft. of Free Product							
05156 RW-4	0.38 ft. of Free Product							
05156 RW-5	3.42 ft. of Free Product							

Notes: Samples Collected on March 9 and 10, 2026

Contour Interval = 4,000 ug/l

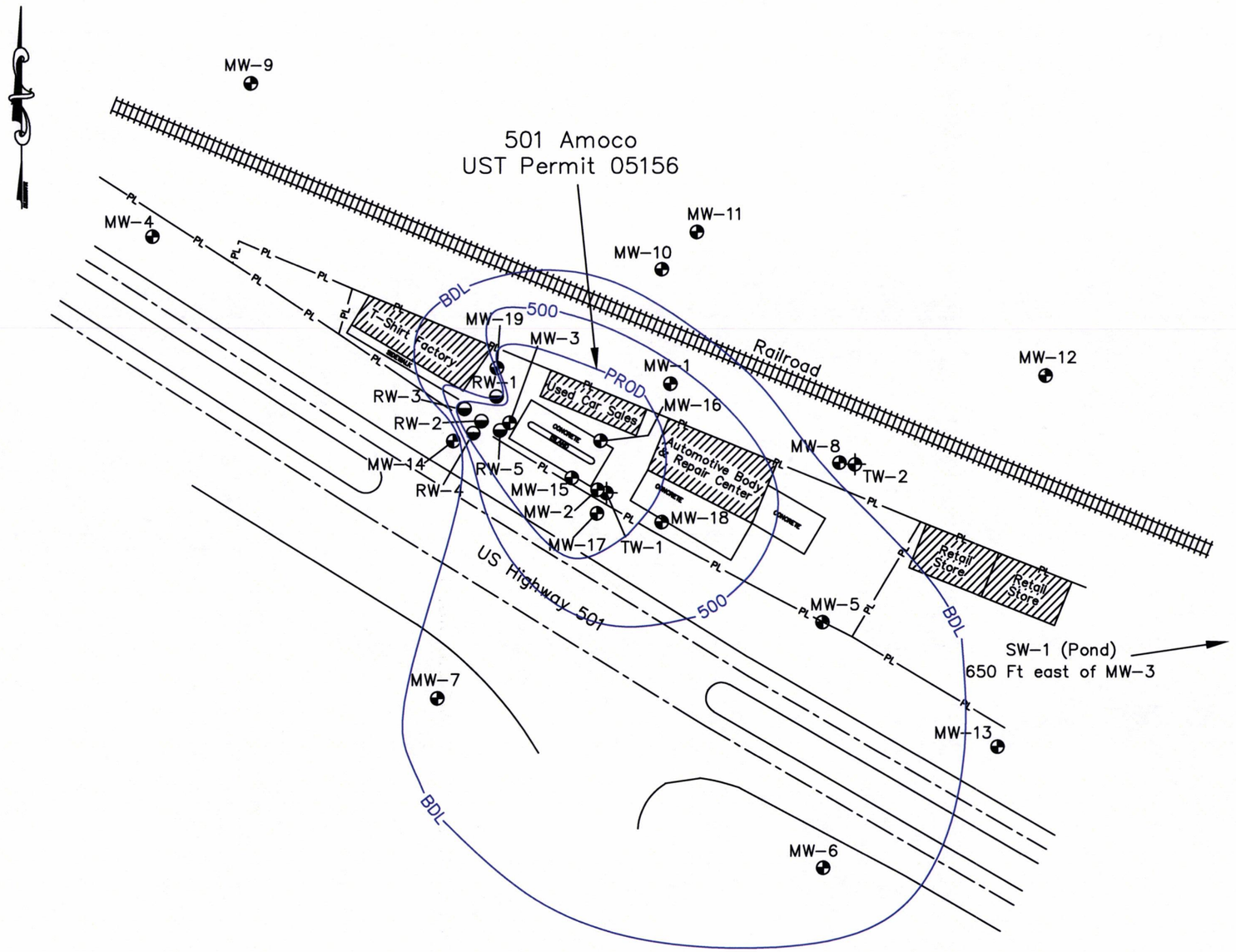
ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

SCALE
1 INCH = 80 FEET
0 80' 160'

Map based Kleen Sites Geoservices Figure 4

PROJECT:	DATE:	Figure 4B - Toluene Contour Map
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	4/1/26	EMERALD, INC. SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,290	66,600	1,210	5,830	<500	<500	<500	<0.020
05156 MW-3	1.31 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	33.2	1.5J	8.2	8.9	10.9	150	<1.0	<0.020
05156 MW-7	30.1	0.88J	9.0	12.5	7.8	84.9	<1.0	<0.021
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-15	637	44,000	1,140	4,900	<250	324	<250	<0.021
05156 MW-16	4,930	47,400	961	4,520	<500	<500	<500	<0.020
DUP (MW-16)	3,680	33,900	702	3,540	<500	<500	<500	<0.020
05156 MW-17	827	35,300	2,420	11,000	<250	398	<250	<0.021
05156 MW-18	263	4,590	593	2,500	<40.0	133	<40.0	<0.021
05156 MW-19	5,220	56,900	2,270	8,500	<400	596	<400	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	344	36.5	228	31.0	<5.0	655	<5.0	<0.020
DUP (RW-1)	363	43.4	225	30.7	<5.0	584	<5.0	<0.019
05156 RW-2	5.84 ft. of Free Product							
05156 RW-3	5.53 ft. of Free Product							
05156 RW-4	0.38 ft. of Free Product							
05156 RW-5	3.42 ft. of Free Product							

Notes: Samples Collected on March 9 and 10, 2026

Contour Interval = 500 ug/l

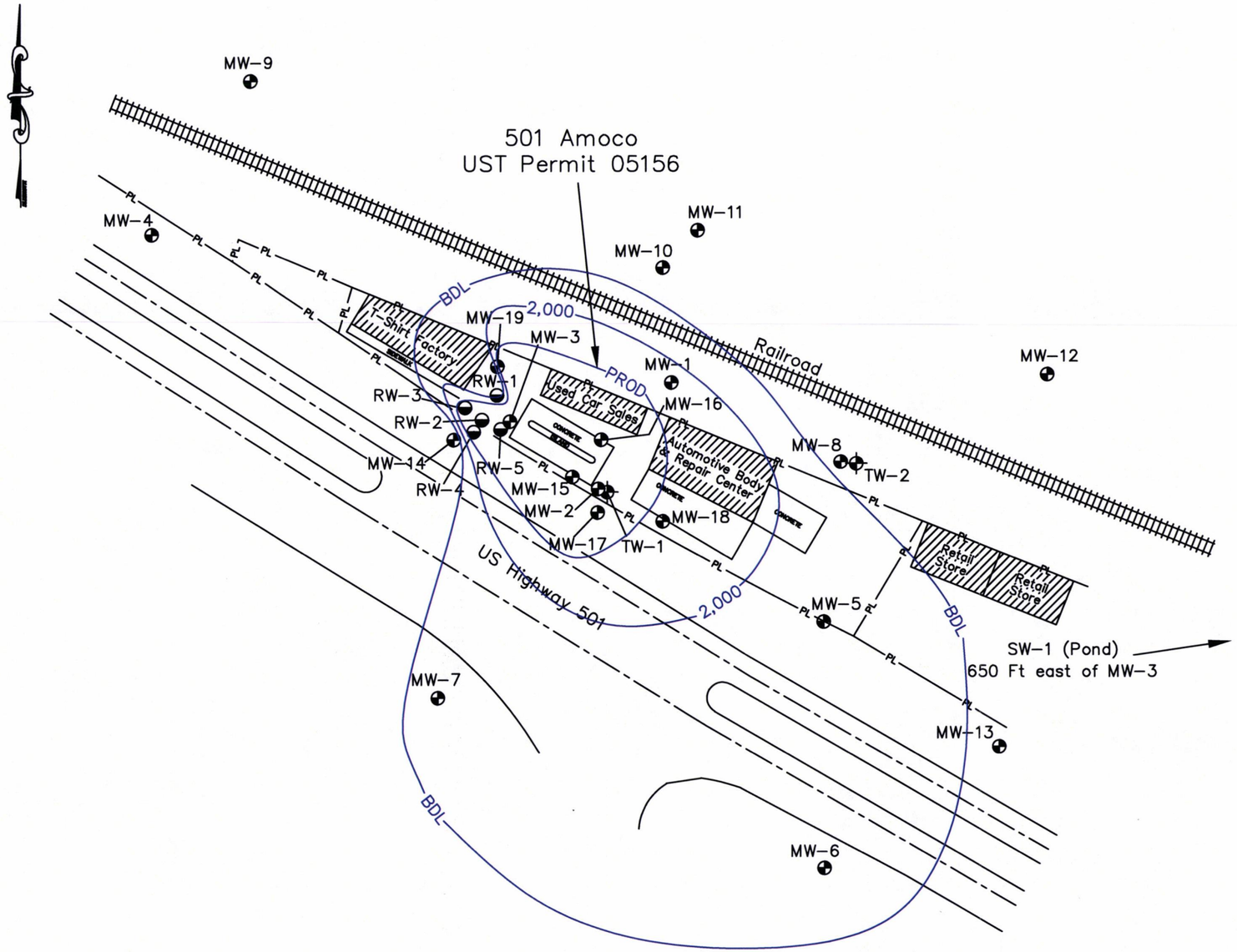
ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

SCALE
1 INCH = 80 FEET
0 80' 160'

Map based Kleen Sites Geoservices Figure 4

PROJECT:	DATE:	Figure 4C - Ethylbenzene Contour Map
501 Amoco 1432 US Highway 501 Myrtle Beach, South Carolina UST PERMIT # 05156	4/1/26	EMERALD, INC. SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,290	66,600	1,210	5,830	<500	<500	<500	<0.020
05156 MW-3	1.31 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	33.2	1.5J	8.2	8.9	10.9	150	<1.0	<0.020
05156 MW-7	30.1	0.88J	9.0	12.5	7.8	84.9	<1.0	<0.021
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-15	637	44,000	1,140	4,900	<250	324	<250	<0.021
05156 MW-16	4,930	47,400	961	4,520	<500	<500	<500	<0.020
DUP (MW-16)	3,680	33,900	702	3,540	<500	<500	<500	<0.020
05156 MW-17	827	35,300	2,420	11,000	<250	398	<250	<0.021
05156 MW-18	263	4,590	593	2,500	<40.0	133	<40.0	<0.021
05156 MW-19	5,220	56,900	2,270	8,500	<400	596	<400	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	344	36.5	228	31.0	<5.0	655	<5.0	<0.020
DUP (RW-1)	363	43.4	225	30.7	<5.0	584	<5.0	<0.019
05156 RW-2	5.84 ft. of Free Product							
05156 RW-3	5.53 ft. of Free Product							
05156 RW-4	0.38 ft. of Free Product							
05156 RW-5	3.42 ft. of Free Product							

Notes: Samples Collected on March 9 and 10, 2026

Contour Interval = 2,000 ug/l

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

SCALE
1 INCH = 80 FEET
0 80′ 160′

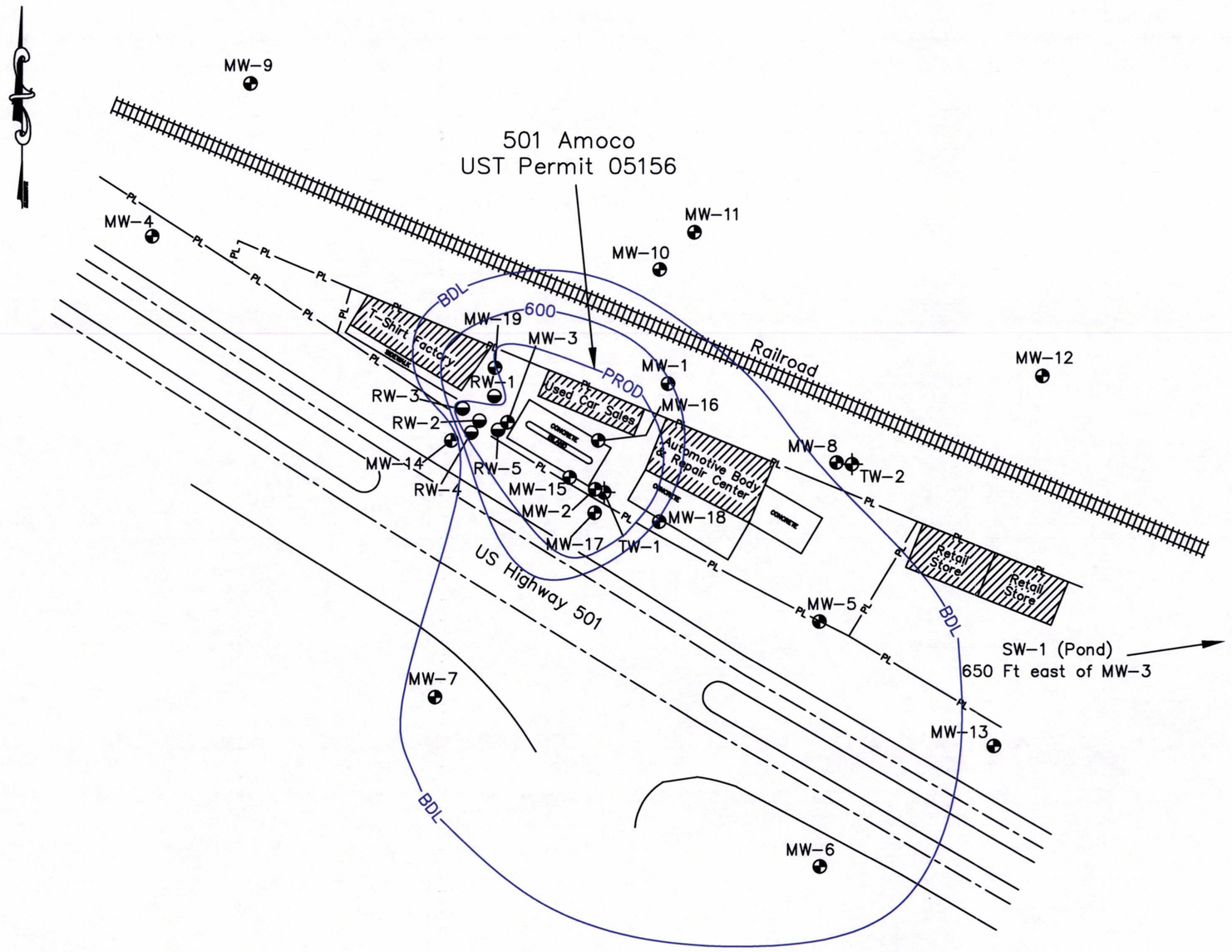
Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
4/1/26

Figure 4D - Total Xylenes Contour Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA



LEGEND

- Location of Watertable Bracketing Monitoring Well
- Location of Double Cased Monitoring Well
- Location of 4-inch Diameter Recovery Well

Sample Number	Benzene (ug/l)	Toulune (ug/l)	Ethylbenzene (ug/l)	Total Xylenes (ug/l)	MTBE (ug/l)	Naphthalene (ug/l)	1,2 DCA (ug/l)	EDB (ug/l)
05156 MW-1	Bent Standpipe							
05156 MW-2	2,290	66,600	1,210	5,830	<500	<500	<500	<0.020
05156 MW-3	1.31 ft. of Free Product							
05156 MW-4	Not Located							
05156 MW-5	No Access							
05156 MW-6	33.2	1.5J	8.2	8.9	10.9	150	<1.0	<0.020
05156 MW-7	30.1	0.88J	9.0	12.5	7.8	84.9	<1.0	<0.021
05156 MW-8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 MW-9	Not Located							
05156 MW-10	Not Located							
05156 MW-11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022
05156 MW-12	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.022
05156 MW-13	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.021
05156 MW-15	637	44,000	1,140	4,900	<250	324	<250	<0.021
05156 MW-16	4,930	47,400	961	4,520	<500	<500	<500	<0.020
DUP (MW-16)	3,680	33,900	702	3,540	<500	<500	<500	<0.020
05156 MW-17	827	35,300	2,420	11,000	<250	398	<250	<0.021
05156 MW-18	263	4,590	593	2,500	<40.0	133	<40.0	<0.021
05156 MW-19	5,220	56,900	2,270	8,500	<400	596	<400	<0.020
05156 TW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 TW-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 SW-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.020
05156 RW-1	344	36.5	228	31.0	<5.0	655	<5.0	<0.020
DUP (RW-1)	363	43.4	225	30.7	<5.0	584	<5.0	<0.019
05156 RW-2	5.84 ft. of Free Product							
05156 RW-3	5.53 ft. of Free Product							
05156 RW-4	0.38 ft. of Free Product							
05156 RW-5	3.42 ft. of Free Product							

Notes: Samples Collected on March 9 and 10, 2026

Contour Interval = 600 ug/l

ug/l = micrograms per liter

"J" Values report detections below the Reporting Limit and greater than the Method Detection Limit

SCALE
1 INCH = 80 FEET
0 80' 160'

Map based Kleen Sites Geoservices Figure 4

PROJECT:
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
UST PERMIT # 05156

DATE:
4/1/26

Figure 4E - Naphthalene Contour Map

EMERALD, INC.
SUMTER, SOUTH CAROLINA

APPENDIX A

Purge Logs

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-1

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 13.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.119 x 5 = 10.6 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/10/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Sampled
3rd						Standpipe bent - will not allow bailer to pass
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-3

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 7.18 Ft.

WATER HEIGHT (Hw): 5.82 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.949 x 5 = 4.7 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/9/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Depth to Product - 5.87 ft.
3rd						Depth to Water - 7.18 ft.
4th						1.31 ft. of Product
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-11

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 6-16 Ft.

STATIC WATER LEVEL: 5.64 Ft.

WATER HEIGHT (Hw): 10.36 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.689 x 5 = 8.4 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 10.0 Gallons

DATE: 3/10/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	4.27	18.0	6.73	648.0	64.81	Clear, No Petroleum Odor
1st	3.91	18.4	6.81	653.0	261.3	Slightly Cloudy, No Petroleum Odor
2nd	3.53	18.9	6.77	348.7	407.4	Slightly Cloudy, No Petroleum Odor
3rd	3.27	19.2	6.68	357.2	521.9	Slightly Cloudy, No Petroleum Odor
4th	3.05	19.6	6.71	349.1	687.0	Cloudy, Petroleum Odor
5th	2.71	20.3	6.79	317.2	1,021	Cloudy, Petroleum Odor
Sample collected at 1050						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-12

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	4-14 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	5.73 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	8.27 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.348 x 5 = 6.7 Gallons
		PURGE VOLUME:	7.5 Gallons
DATE:	3/10/26	**EMERALD, INC. PERSONNEL:**	Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	2.36	17.7	6.03	223.3	48.30	Clear, No Petroleum Odor
1st	2.14	18.1	5.86	217.1	193.9	Clear, No Petroleum Odor
2nd	2.01	18.3	5.72	206.4	372.4	Slightly Cloudy, No Petroleum Odor
3rd	1.76	18.6	5.79	193.7	487.1	Slightly Cloudy, No Petroleum Odor
4th	1.58	19.0	5.67	209.0	593.9	Cloudy, No Petroleum Odor
5th	1.39	19.3	5.54	217.2	707.2	Cloudy, No Petroleum Odor
Sample collected at 1120						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-15

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	5.76 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	7.24 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.18 x 5 = 5.9 Gallons
		PURGE VOLUME:	7.5 Gallons
DATE:	3/9/26	**EMERALD, INC. PERSONNEL:**	Steve Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	2.21	19.0	5.09	158.1	83.31	Clear, Petroleum Odor
1st	1.86	19.3	5.16	164.5	195.3	Clear, Petroleum Odor
2nd	2.03	19.7	5.07	169.2	371.6	Slightly Cloudy, Petroleum Odor
3rd	2.46	20.1	4.95	173.4	499.0	Slightly Cloudy, Petroleum Odor
4th	2.59	20.4	4.86	158.8	507.4	Cloudy, Petroleum Odor
5th	2.38	20.9	4.93	166.1	1,021	Cloudy, Petroleum Odor
Sample collected at 1045						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-1

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

DATE: 3/10/26

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 13.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.119 x 5 = 10.6 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Sampled
3rd						Standpipe bent - will not allow bailer to pass
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-2

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	5.63 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	7.37 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.201 x 5 = 6.0 Gallons
		PURGE VOLUME:	7.5 Gallons
DATE:	3/9/26	**EMERALD, INC. PERSONNEL:**	Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.43	18.9	6.50	119.9	80.16	Clear, Petroleum Odor
1st	1.29	19.2	6.32	106.2	196.4	Clear, Petroleum Odor
2nd	1.36	19.7	6.01	93.6	291.2	Slightly Cloudy, Petroleum Odor
3rd	1.22	20.0	5.47	84.8	423.1	Slightly Cloudy, Petroleum Odor
4th	1.17	20.2	5.08	77.2	507.9	Slightly Cloudy, Petroleum Odor
5th	1.03	20.6	4.99	68.5	709.3	Cloudy, Petroleum Odor
Sample collected at 1020						
Duplicate colleced at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-3

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 7.18 Ft.

WATER HEIGHT (Hw): 5.82 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.949 x 5 = 4.7 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/9/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Depth to Product - 5.87 ft.
3rd						Depth to Water - 7.18 ft.
4th						1.31 ft. of Product
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-4

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 4-14 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 14.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.282 x 5 = 11.4 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/16/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Located
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-5

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 15.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.445 x 5 = 12.2 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/16/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						No Access, under car
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 00808 MW-6

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: 6.31 Ft.

WATER HEIGHT (Hw): 8.69 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.416 x 5 = 7.1 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 7.5 Gallons

DATE: 3/10/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	3.17	18.9	5.73	123.7	71.36	Clear, No Petroleum Odor
1st	3.24	19.3	6.01	110.2	186.4	Clear, No Petroleum Odor
2nd	3.09	19.7	5.94	98.4	391.2	Slightly Cloudy, No Petroleum Odor
3rd	2.76	20.1	5.88	86.2	523.7	Slightly Cloudy,No Petroleum Odor
4th	2.41	20.3	5.79	81.0	607.1	Cloudy, No Petroleum Odor
5th	2.17	20.8	5.70	77.3	649.4	Cloudy, No Petroleum Odor
Sample collected at 1245						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-7

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: 6.47 Ft.

WATER HEIGHT (Hw): 8.53 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.39 x 5 = 7.0 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 7.5 Gallons

DATE: 3/10/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Partly Cloudy, 73-90°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	4.22	18.5	6.13	141.4	161.5	Clear, No Petroleum Odor
1st	3.49	18.9	6.22	131.7	327.1	Slightly Cloudy, No Petroleum Odor
2nd	3.57	19.3	6.16	143.6	476.4	Slightly Cloudy, No Petroleum Odor
3rd	3.18	19.5	6.09	167.1	531.7	Slightly Cloudy, No Petroleum Odor
4th	2.76	19.9	6.13	184.5	603.2	Cloudy, No Petroleum Odor
5th	2.43	20.1	6.24	193.2	779.3	Cloudy, No Petroleum Odor
Sample collected at 1210						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-8

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

DATE: 3/10/26

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: 6.67 Ft.

WATER HEIGHT (Hw): 8.33 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.358 x 5 = 6.8 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 7.5 Gallons

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.59	17.1	6.83	473.0	48.24	Clear, No Petroleum Odor
1st	1.37	17.6	6.74	415.8	261.3	Slightly Cloudy, No Petroleum Odor
2nd	1.48	18.1	6.62	386.2	307.2	Slightly Cloudy, No Petroleum Odor
3rd	1.62	18.5	6.53	361.4	394.6	Slightly Cloudy, No Petroleum Odor
4th	1.81	19.0	6.39	379.3	568.1	Slightly Cloudy, No Petroleum Odor
5th	2.04	19.6	6.18	354.8	613.0	Cloudy, No Petroleum Odor
Sample collected at 1005						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-9

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 15.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.445 x 5 = 12.2 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/10/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Located
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-10

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 5-15 Ft.

STATIC WATER LEVEL: Ft.

WATER HEIGHT (Hw): 15.00 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 2.445 x 5 = 12.2 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/10/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						
2nd						Not Located
3rd						
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-11

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 6-16 Ft.

STATIC WATER LEVEL: 5.64 Ft.

WATER HEIGHT (Hw): 10.36 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.689 x 5 = 8.4 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 10.0 Gallons

DATE: 3/10/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	4.27	18.0	6.73	648.0	64.81	Clear, No Petroleum Odor
1st	3.91	18.4	6.81	653.0	261.3	Slightly Cloudy, No Petroleum Odor
2nd	3.53	18.9	6.77	348.7	407.4	Slightly Cloudy, No Petroleum Odor
3rd	3.27	19.2	6.68	357.2	521.9	Slightly Cloudy, No Petroleum Odor
4th	3.05	19.6	6.71	349.1	687.0	Cloudy, Petroleum Odor
5th	2.71	20.3	6.79	317.2	1,021	Cloudy, Petroleum Odor
Sample collected at 1050						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-12

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 4-14 Ft.

STATIC WATER LEVEL: 5.73 Ft.

WATER HEIGHT (Hw): 8.27 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.348 x 5 = 6.7 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 7.5 Gallons

DATE: 3/10/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	2.36	17.7	6.03	223.3	48.30	Clear, No Petroleum Odor
1st	2.14	18.1	5.86	217.1	193.9	Clear, No Petroleum Odor
2nd	2.01	18.3	5.72	206.4	372.4	Slightly Cloudy, No Petroleum Odor
3rd	1.76	18.6	5.79	193.7	487.1	Slightly Cloudy, No Petroleum Odor
4th	1.58	19.0	5.67	209.0	593.9	Cloudy, No Petroleum Odor
5th	1.39	19.3	5.54	217.2	707.2	Cloudy, No Petroleum Odor
Sample collected at 1120						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-13

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	4-14 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	4.92 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	9.08 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.48 x 5 = 7.4 Gallons
		PURGE VOLUME:	7.5 Gallons
DATE:	3/9/26	**EMERALD, INC. PERSONNEL:**	Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	3.18	18.9	5.16	215.2	203.1	Cloudy, No Petroleum Odor
1st	2.97	19.5	5.23	221.6	370.6	Slightly Cloudy, No Petroleum Odor
2nd	3.09	19.8	5.42	235.3	433.3	Slightly Cloudy, No Petroleum Odor
3rd	3.24	20.2	5.54	251.7	571.2	Slightly Cloudy, No Petroleum Odor
4th	3.16	20.4	5.81	240.8	638.9	Cloudy,No Petroleum Odor
5th	3.34	20.7	6.02	352.6	102.1	Cloudy,No Petroleum Odor
Sample collected at 810						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-14

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	4.96 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	8.04 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.311 x 5 = 6.6 Gallons
		PURGE VOLUME:	7.5 Gallons
DATE:	3/9/26	**EMERALD, INC. PERSONNEL:**	Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	2.51	19.4	5.82	256.1	154.7	Clear, Petroleum Odor
1st	2.23	19.7	5.96	272.3	304.1	Slightly Cloudy, Petroleum Odor
2nd	2.47	20.1	6.02	239.7	393.4	Slightly Cloudy, Petroleum Odor
3rd	2.83	20.5	6.14	206.4	509.8	Slightly Cloudy, Petroleum Odor
4th	3.04	20.7	6.26	192.5	671.2	Cloudy, Petroleum Odor
5th	3.16	21.0	6.17	206.4	784.6	Cloudy, Petroleum Odor
Sample collected at 1135						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-15

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

DATE: 3/9/26

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 5.76 Ft.

WATER HEIGHT (Hw): 7.24 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.18 x 5 = 5.9 Gallons
$V = (0.02)\ (Dw^2)\ (Hw)$

PURGE VOLUME: 7.5 Gallons

EMERALD, INC. PERSONNEL: Steve Brown

Field Equipment

		Serial Number
Interface Probe		02-0759(SM.01L)
Water Level Indicator		
Turbidity		201309052
Ph, Conductivity Meter		12B100627
DO Meter		11K00954

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	2.21	19.0	5.09	158.1	83.31	Clear, Petroleum Odor
1st	1.86	19.3	5.16	164.5	195.3	Clear, Petroleum Odor
2nd	2.03	19.7	5.07	169.2	371.6	Slightly Cloudy, Petroleum Odor
3rd	2.46	20.1	4.95	173.4	499.0	Slightly Cloudy, Petroleum Odor
4th	2.59	20.4	4.86	158.8	507.4	Cloudy, Petroleum Odor
5th	2.38	20.9	4.93	166.1	1,021	Cloudy, Petroleum Odor
Sample collected at 1045						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-16

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	5.80 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	7.20 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.174 x 5 = 5.9 Gallons
		PURGE VOLUME:	7.5 Gallons
DATE:	3/9/26	**EMERALD, INC. PERSONNEL:**	Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.43	18.5	5.81	289.7	102.6	Clear, Petroleum Odor
1st	1.18	19.1	5.70	294.1	316.4	Slightly Cloudy, Petroleum Odor
2nd	1.29	19.7	5.84	309.4	591.3	Slightly Cloudy, Petroleum Odor
3rd	1.41	20.2	5.97	321.6	627.9	Cloudy, Petroleum Odor
4th	1.65	20.5	6.04	358.5	741.5	Cloudy, Petroleum Odor
5th	1.77	20.8	6.13	341.9	>1,111	Cloudy, Petroleum Odor
Sample collected at 1110						
Duplicate collected at 1113						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-17

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 5.39 Ft.

WATER HEIGHT (Hw): 7.61 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.24 x 5 = 6.2 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 7.5 Gallons

DATE: 3/9/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.71	18.6	5.14	112.5	54.76	Clear, Petroleum Odor
1st	1.49	18.9	5.06	107.9	179.4	Clear, Petroleum Odor
2nd	1.54	19.1	4.99	95.3	271.8	Slightly Cloudy, Petroleum Odor
3rd	1.63	19.4	5.03	87.4	387.2	Slightly Cloudy, Petroleum Odor
4th	1.68	19.7	5.09	91.3	604.5	Cloudy, Petroleum Odor
5th	1.77	20.0	5.17	100.7	1,021	Cloudy, Petroleum Odor
Sample collected at 900						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-18

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 4.79 Ft.

WATER HEIGHT (Hw): 8.21 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.338 x 5 = 6.7 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 7.5 Gallons

DATE: 3/9/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.61	18.8	5.81	300.2	86.32	Clear, Petroleum Odor
1st	1.42	19.1	5.93	312.7	179.6	Cloudy, Petroleum Odor
2nd	1.57	19.4	5.89	304.1	268.9	Slightly Cloudy, Petroleum Odor
3rd	1.71	19.7	5.76	268.4	402.6	Slightly Cloudy, Petroleum Odor
4th	1.84	20.0	5.68	244.2	654.9	Cloudy, Petroleum Odor
5th	2.01	20.2	5.49	238.7	>1,111	Cloudy, Petroleum Odor
Sample collected at 830						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 MW-19

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 5.61 Ft.

WATER HEIGHT (Hw): 7.39 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.205 x 5 = 6.0 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 7.5 Gallons

DATE: 3/9/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.92	17.3	6.88	123.6	91.23	Clear, Petroleum Odor
1st	1.36	17.9	6.67	118.7	231.7	Clear, Petroleum Odor
2nd	1.17	18.4	6.53	105.3	440.0	Slightly Cloudy, Petroleum Odor
3rd	1.08	18.8	6.71	84.7	579.6	Slightly Cloudy, Petroleum Odor
4th	0.94	19.3	6.84	78.9	693.9	Cloudy, Petroleum Odor
5th	0.86	19.9	6.95	81.2	1,021	Cloudy, Petroleum Odor
Sample collected at 1235						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 TW-1

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 38-43 Ft.

STATIC WATER LEVEL: 6.79 Ft.

WATER HEIGHT (Hw): 36.21 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 5.902 x 5 = 29.5 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 30.0 Gallons

DATE: 3/9/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

		Serial Number
Interface Probe		02-0759(SM.01L)
Water Level Indicator		
Turbidity		201309052
Ph, Conductivity Meter		12B100627
DO Meter		11K00954

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	6.41	18.6	11.52	267.8	47.38	Clear, No Petroleum Odor
1st	5.72	19.0	11.67	398.2	98.17	Clear, No Petroleum Odor
2nd	6.07	19.3	11.43	417.6	224.3	Clear, No Petroleum Odor
3rd	5.64	19.8	11.26	384.5	298.2	Slightly Cloudy, No Petroleum Odor
4th	4.87	20.2	10.97	357.2	349.6	Slightly Cloudy, No Petroleum Odor
5th	4.61	20.7	10.71	329.6	287.9	Slightly Cloudy, No Petroleum Odor
Sample collected at 950						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 TW-2

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	35-40 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	7.34 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	32.66 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	5.324 x 5 = 26.6 Gallons
		PURGE VOLUME:	30.0 Gallons
DATE:	3/10/26	**EMERALD, INC. PERSONNEL:**	Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	4.50	17.6	7.67	394.4	69.57	Clear, No Petroleum Odor
1st	3.94	18.0	7.44	381.7	138.2	Clear, No Petroleum Odor
2nd	3.49	18.5	7.38	412.2	179.6	Clear, No Petroleum Odor
3rd	3.31	19.1	7.46	446.7	281.4	Slightly Cloudy, No Petroleum Odor
4th	3.19	19.7	7.58	472.3	376.1	Slightly Cloudy, No Petroleum Odor
5th	2.86	20.8	7.69	481.5	299.8	Slightly Cloudy, No Petroleum Odor
Sample collected at 935						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-1

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	1.53 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	11.47 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.653 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	7.49 x 5 = 37.4 Gallons
		PURGE VOLUME:	37.5 Gallons
DATE:	3/9/26	**EMERALD, INC. PERSONNEL:**	Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial	1.84	17.9	6.72	801	94.06	Clear, Petroleum Odor
1st	1.69	18.3	6.91	793	276.3	Slightly Cloudy, Petroleum Odor
2nd	1.50	18.8	7.04	812	491.7	Slightly Cloudy, Petroleum Odor
3rd	1.37	19.2	6.93	865	684.2	Cloudy, Petroleum Odor
4th	1.14	19.7	6.87	893	1,021	Cloudy, Petroleum Odor
5th	1.02	20.1	6.95	859	>1,111	Cloudy, Petroleum Odor
Sample collected at 1215						
DUP 2 Collected at 1218						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-2

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 10.62 Ft.

WATER HEIGHT (Hw): 2.38 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.388 x 5 = 1.9 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/9/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						Depth to Product - 4.78 ft.
2nd						Depth to Water - 10.62ft.
3rd						5.84 ft. of Product
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-3

PROJECT:	Former 501 Amoco	**SCREENED INTERVAL**	3-13 Ft.
STREET:	1432 Hwy 501	**STATIC WATER LEVEL:**	10.09 Ft.
CITY:	Myrtle Beach	**WATER HEIGHT (Hw):**	2.91 Ft.
COUNTY:	Horry	**WELL DIAMETER (Dw):**	0.166 Ft.
STATE:	South Carolina	**WELL VOLUME (Vw):** $V = (0.02)(Dw^2)(Hw)$	1.9 x 5 = 9.5 Gallons
		PURGE VOLUME:	0.0 Gallons
DATE:	3/9/26	**EMERALD, INC. PERSONNEL:**	Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						Depth to Product - 4.56 ft.
2nd						Depth to Water - 10.09 ft.
3rd						5.53 ft. of Product
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-4

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 5.31 Ft.

WATER HEIGHT (Hw): 7.69 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 1.253 x 5 = 6.3 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/9/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						Depth to Product - 4.93 ft.
2nd						Depth to Water - 5.31 ft.
3rd						0.38 ft. of Product
4th						
5th						
Sample collected at						

EMERALD, INC.

GROUNDWATER MONITORING WELL PURGE LOG

WELL NUMBER - 05156 RW-5

PROJECT: Former 501 Amoco

STREET: 1432 Hwy 501

CITY: Myrtle Beach

COUNTY: Horry

STATE: South Carolina

SCREENED INTERVAL 3-13 Ft.

STATIC WATER LEVEL: 8.81 Ft.

WATER HEIGHT (Hw): 4.19 Ft.

WELL DIAMETER (Dw): 0.166 Ft.

WELL VOLUME (Vw): 0.683 x 5 = 3.4 Gallons
$V = (0.02) (Dw^2) (Hw)$

PURGE VOLUME: 0.0 Gallons

DATE: 3/9/26

EMERALD, INC. PERSONNEL: Steven Brown

Field Equipment

	Serial Number		Serial Number		Serial Number
Interface Probe	02-0759(SM.01L)	Water Level Indicator		Turbidity	201309052
Ph, Conductivity Meter	12B100627	DO Meter	11K00954		

Conditions: Clear, 50-70°F

WELL VOLUME	DISSOLVED OXYGEN	TEMP. (°C)	pH (STU)	CONDUCTIVITY (us/cm)	TURBIDITY (NTU)	NOTES
Initial						
1st						Depth to Product - 5.39 ft.
2nd						Depth to Water - 8.81 ft.
3rd						3.42 ft. of Product
4th						
5th						
Sample collected at						

APPENDIX B

Analytical Data Sheets

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 20, 2026

Chad McClary
Emerald, Inc.
2520 Tahoe Drive
Sumter, SC 29150

RE: Project: 501 AMOCO #05156
Pace Project No.: 92848767

Dear Chad McClary:

Enclosed are the analytical results for sample(s) received by the laboratory on March 11, 2026. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Charlotte

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Anna Johnson
anna.johnson@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Dan Alexander, Emerald
Lynn Haley, Emerald, Inc.
Dalton Reames, Emerald, Inc.

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CERTIFICATIONS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Pace Analytical Services Charlotte

South Carolina Laboratory ID: 99006
9800 Kincey Ave. Ste 100, Huntersville, NC 28078
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Laboratory ID: 99006
South Carolina Certification #: 99006001
South Carolina Drinking Water Cert. #: 99006003
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Louisiana DoH Drinking Water #: LA029
Virginia/VELAP Certification #: 460221

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92848767001	05156 MW-2	Water	03/09/26 10:20	03/11/26 12:30
92848767002	05156 MW-6	Water	03/10/26 12:45	03/11/26 12:30
92848767003	05156 MW-7	Water	03/10/26 12:10	03/11/26 12:30
92848767004	05156 MW-8	Water	03/10/26 10:05	03/11/26 12:30
92848767005	05156 MW-11	Water	03/10/26 10:50	03/11/26 12:30
92848767006	05156 MW-12	Water	03/10/26 11:20	03/11/26 12:30
92848767007	05156 MW-13	Water	03/09/26 08:10	03/11/26 12:30
92848767008	05156 MW-14	Water	03/09/26 11:35	03/11/26 12:30
92848767009	05156 MW-15	Water	03/09/26 10:45	03/11/26 12:30
92848767010	05156 MW-16	Water	03/09/26 11:10	03/11/26 12:30
92848767011	05156 DUP-1	Water	03/09/26 11:13	03/11/26 12:30
92848767012	05156 MW-17	Water	03/09/26 09:00	03/11/26 12:30
92848767013	05156 MW-18	Water	03/09/26 08:30	03/11/26 12:30
92848767014	05156 MW-19	Water	03/09/26 12:35	03/11/26 12:30
92848767015	05156 TW-1	Water	03/09/26 09:50	03/11/26 12:30
92848767016	05156 TW-2	Water	03/10/26 09:35	03/11/26 12:30
92848767017	05156 RW-1	Water	03/09/26 12:15	03/11/26 12:30
92848767018	05156 DUP-2	Water	03/09/26 12:18	03/11/26 12:30
92848767019	05156 SW-1	Water	03/10/26 11:40	03/11/26 12:30
92848767020	05156 WWC	Water	03/09/26 13:50	03/11/26 12:30
92848767021	05156 FB	Water	03/09/26 07:50	03/11/26 12:30
92848767022	05156 FB	Water	03/10/26 08:45	03/11/26 12:30
92848767023	05156 TB	Water	03/10/26 00:00	03/11/26 12:30

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SAMPLE ANALYTE COUNT

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92848767001	**05156 MW-2**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767002	**05156 MW-6**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767003	**05156 MW-7**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767004	**05156 MW-8**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767005	**05156 MW-11**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767006	**05156 MW-12**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767007	**05156 MW-13**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767008	**05156 MW-14**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767009	**05156 MW-15**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767010	**05156 MW-16**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767011	**05156 DUP-1**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767012	**05156 MW-17**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767013	**05156 MW-18**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92848767014	**05156 MW-19**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767015	**05156 TW-1**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	LMB	20	PASI-C
92848767016	**05156 TW-2**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767017	**05156 RW-1**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767018	**05156 DUP-2**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767019	**05156 SW-1**	EPA 8011	VJM	2	PASI-C

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SAMPLE ANALYTE COUNT

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8260D	SAS	20	PASI-C
92848767020	**05156 WWC**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SAS	20	PASI-C
92848767021	**05156 FB**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SR	20	PASI-C
92848767022	**05156 FB**	EPA 8011	VJM	2	PASI-C
		EPA 8260D	SR	20	PASI-C
92848767023	**05156 TB**	EPA 8260D	SR	20	PASI-C

PASI-C = Pace Analytical Services - Charlotte

REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
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SUMMARY OF DETECTION

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92848767001	**05156 MW-2**					
EPA 8260D	Benzene	2290	ug/L	500	03/14/26 05:34	
EPA 8260D	Ethylbenzene	1210	ug/L	500	03/14/26 05:34	
EPA 8260D	Toluene	66600	ug/L	500	03/14/26 05:34	
EPA 8260D	Xylene (Total)	5830	ug/L	500	03/14/26 05:34	
EPA 8260D	m&p-Xylene	3770	ug/L	1000	03/14/26 05:34	
EPA 8260D	o-Xylene	2060	ug/L	500	03/14/26 05:34	
92848767002	**05156 MW-6**					
EPA 8260D	Benzene	33.2	ug/L	2.0	03/14/26 07:24	
EPA 8260D	tert-Butyl Alcohol	260	ug/L	200	03/14/26 07:24	
EPA 8260D	Ethylbenzene	8.2	ug/L	2.0	03/14/26 07:24	
EPA 8260D	Methyl-tert-butyl ether	10.9	ug/L	2.0	03/14/26 07:24	
EPA 8260D	Naphthalene	150	ug/L	2.0	03/14/26 07:24	
EPA 8260D	Toluene	1.5J	ug/L	2.0	03/14/26 07:24	
EPA 8260D	Xylene (Total)	8.9	ug/L	2.0	03/14/26 07:24	
EPA 8260D	m&p-Xylene	7.9	ug/L	4.0	03/14/26 07:24	
EPA 8260D	o-Xylene	1.1J	ug/L	2.0	03/14/26 07:24	
92848767003	**05156 MW-7**					
EPA 8260D	tert-Amyl Alcohol	53.6J	ug/L	100	03/14/26 00:04	
EPA 8260D	Benzene	30.1	ug/L	1.0	03/14/26 00:04	
EPA 8260D	tert-Butyl Alcohol	173	ug/L	100	03/14/26 00:04	
EPA 8260D	Ethylbenzene	9.0	ug/L	1.0	03/14/26 00:04	
EPA 8260D	Methyl-tert-butyl ether	7.8	ug/L	1.0	03/14/26 00:04	
EPA 8260D	Naphthalene	84.9	ug/L	1.0	03/14/26 00:04	
EPA 8260D	Toluene	0.88J	ug/L	1.0	03/14/26 00:04	
EPA 8260D	Xylene (Total)	12.5	ug/L	1.0	03/14/26 00:04	
EPA 8260D	m&p-Xylene	11.0	ug/L	2.0	03/14/26 00:04	
EPA 8260D	o-Xylene	1.5	ug/L	1.0	03/14/26 00:04	
92848767008	**05156 MW-14**					
EPA 8260D	tert-Butyl Alcohol	89.5J	ug/L	100	03/14/26 00:41	
92848767009	**05156 MW-15**					
EPA 8260D	Benzene	637	ug/L	250	03/14/26 03:44	
EPA 8260D	Ethylbenzene	1140	ug/L	250	03/14/26 03:44	
EPA 8260D	Naphthalene	324	ug/L	250	03/14/26 03:44	
EPA 8260D	Toluene	44000	ug/L	250	03/14/26 03:44	
EPA 8260D	Xylene (Total)	4900	ug/L	250	03/14/26 03:44	
EPA 8260D	m&p-Xylene	3190	ug/L	500	03/14/26 03:44	
EPA 8260D	o-Xylene	1710	ug/L	250	03/14/26 03:44	
92848767010	**05156 MW-16**					
EPA 8260D	tert-Amyl Alcohol	100000	ug/L	50000	03/14/26 06:11	
EPA 8260D	Benzene	4930	ug/L	500	03/14/26 06:11	
EPA 8260D	tert-Butyl Alcohol	86100	ug/L	50000	03/14/26 06:11	
EPA 8260D	Ethylbenzene	961	ug/L	500	03/14/26 06:11	
EPA 8260D	Toluene	47400	ug/L	500	03/14/26 06:11	
EPA 8260D	Xylene (Total)	4520	ug/L	500	03/14/26 06:11	

REPORT OF LABORATORY ANALYSIS

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(704)875-9092

SUMMARY OF DETECTION

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92848767010	**05156 MW-16**					
EPA 8260D	m&p-Xylene	3010	ug/L	1000	03/14/26 06:11	
EPA 8260D	o-Xylene	1500	ug/L	500	03/14/26 06:11	
92848767011	**05156 DUP-1**					
EPA 8260D	tert-Amyl Alcohol	79200	ug/L	50000	03/14/26 06:47	
EPA 8260D	Benzene	3680	ug/L	500	03/14/26 06:47	
EPA 8260D	tert-Butyl Alcohol	74500	ug/L	50000	03/14/26 06:47	
EPA 8260D	Ethylbenzene	702	ug/L	500	03/14/26 06:47	
EPA 8260D	Toluene	33900	ug/L	500	03/14/26 06:47	
EPA 8260D	Xylene (Total)	3540	ug/L	500	03/14/26 06:47	
EPA 8260D	m&p-Xylene	2390	ug/L	1000	03/14/26 06:47	
EPA 8260D	o-Xylene	1150	ug/L	500	03/14/26 06:47	
92848767012	**05156 MW-17**					
EPA 8260D	Benzene	827	ug/L	250	03/14/26 03:07	
EPA 8260D	Ethylbenzene	2420	ug/L	250	03/14/26 03:07	
EPA 8260D	Naphthalene	398	ug/L	250	03/14/26 03:07	
EPA 8260D	Toluene	35300	ug/L	250	03/14/26 03:07	
EPA 8260D	Xylene (Total)	11000	ug/L	250	03/14/26 03:07	
EPA 8260D	m&p-Xylene	7210	ug/L	500	03/14/26 03:07	
EPA 8260D	o-Xylene	3830	ug/L	250	03/14/26 03:07	
92848767013	**05156 MW-18**					
EPA 8260D	Benzene	263	ug/L	40.0	03/18/26 15:29	
EPA 8260D	Ethylbenzene	593	ug/L	40.0	03/18/26 15:29	
EPA 8260D	Naphthalene	133	ug/L	40.0	03/18/26 15:29	v3
EPA 8260D	Toluene	4590	ug/L	40.0	03/18/26 15:29	
EPA 8260D	Xylene (Total)	2500	ug/L	40.0	03/18/26 15:29	
EPA 8260D	m&p-Xylene	1840	ug/L	80.0	03/18/26 15:29	
EPA 8260D	o-Xylene	667	ug/L	40.0	03/18/26 15:29	
92848767014	**05156 MW-19**					
EPA 8260D	Benzene	5220	ug/L	400	03/14/26 04:57	
EPA 8260D	Ethylbenzene	2270	ug/L	400	03/14/26 04:57	
EPA 8260D	Naphthalene	596	ug/L	400	03/14/26 04:57	
EPA 8260D	Toluene	56900	ug/L	400	03/14/26 04:57	
EPA 8260D	Xylene (Total)	8500	ug/L	400	03/14/26 04:57	
EPA 8260D	m&p-Xylene	5330	ug/L	800	03/14/26 04:57	
EPA 8260D	o-Xylene	3170	ug/L	400	03/14/26 04:57	
92848767017	**05156 RW-1**					
EPA 8260D	tert-Amyl Alcohol	377J	ug/L	500	03/14/26 08:37	
EPA 8260D	Benzene	344	ug/L	5.0	03/14/26 08:37	
EPA 8260D	tert-Butyl Alcohol	1200	ug/L	500	03/14/26 08:37	
EPA 8260D	Ethylbenzene	228	ug/L	5.0	03/14/26 08:37	
EPA 8260D	Naphthalene	655	ug/L	5.0	03/14/26 08:37	
EPA 8260D	Toluene	36.5	ug/L	5.0	03/14/26 08:37	
EPA 8260D	Xylene (Total)	31.0	ug/L	5.0	03/14/26 08:37	
EPA 8260D	m&p-Xylene	26.8	ug/L	10.0	03/14/26 08:37	

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SUMMARY OF DETECTION

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
92848767017	**05156 RW-1**					
EPA 8260D	o-Xylene	4.2J	ug/L	5.0	03/14/26 08:37	
92848767018	**05156 DUP-2**					
EPA 8260D	tert-Amyl Alcohol	420J	ug/L	500	03/14/26 08:01	
EPA 8260D	Benzene	363	ug/L	5.0	03/14/26 08:01	
EPA 8260D	tert-Butyl Alcohol	1190	ug/L	500	03/14/26 08:01	
EPA 8260D	Ethylbenzene	225	ug/L	5.0	03/14/26 08:01	
EPA 8260D	Naphthalene	584	ug/L	5.0	03/14/26 08:01	
EPA 8260D	Toluene	43.4	ug/L	5.0	03/14/26 08:01	
EPA 8260D	Xylene (Total)	30.7	ug/L	5.0	03/14/26 08:01	
EPA 8260D	m&p-Xylene	25.8	ug/L	10.0	03/14/26 08:01	
EPA 8260D	o-Xylene	4.9J	ug/L	5.0	03/14/26 08:01	
92848767020	**05156 WWC**					
EPA 8260D	Ethylbenzene	0.37J	ug/L	1.0	03/14/26 01:36	
EPA 8260D	Toluene	1.6	ug/L	1.0	03/14/26 01:36	
EPA 8260D	Xylene (Total)	1.6	ug/L	1.0	03/14/26 01:36	
EPA 8260D	m&p-Xylene	1.1J	ug/L	2.0	03/14/26 01:36	
EPA 8260D	o-Xylene	0.51J	ug/L	1.0	03/14/26 01:36	
92848767023	**05156 TB**					
EPA 8260D	Toluene	1.3	ug/L	1.0	03/12/26 16:44	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-2 **Lab ID: 92848767001** Collected: 03/09/26 10:20 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/12/26 08:24	03/14/26 12:10	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	107	%	60-140		1	03/12/26 08:24	03/14/26 12:10	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	50000	18200	500		03/14/26 05:34	75-85-4	
tert-Amylmethyl ether	ND	ug/L	5000	1330	500		03/14/26 05:34	994-05-8	
Benzene	**2290**	ug/L	500	172	500		03/14/26 05:34	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	50000	26000	500		03/14/26 05:34	624-95-3	v2
tert-Butyl Alcohol	ND	ug/L	50000	13400	500		03/14/26 05:34	75-65-0	
tert-Butyl Formate	ND	ug/L	25000	14700	500		03/14/26 05:34	762-75-4	
1,2-Dichloroethane	ND	ug/L	500	161	500		03/14/26 05:34	107-06-2	
Diisopropyl ether	ND	ug/L	500	154	500		03/14/26 05:34	108-20-3	
Ethanol	ND	ug/L	100000	36100	500		03/14/26 05:34	64-17-5	
Ethylbenzene	**1210**	ug/L	500	152	500		03/14/26 05:34	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	5000	1620	500		03/14/26 05:34	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	500	211	500		03/14/26 05:34	1634-04-4	
Naphthalene	ND	ug/L	500	322	500		03/14/26 05:34	91-20-3	
Toluene	**66600**	ug/L	500	242	500		03/14/26 05:34	108-88-3	
Xylene (Total)	**5830**	ug/L	500	169	500		03/14/26 05:34	1330-20-7	
m&p-Xylene	**3770**	ug/L	1000	354	500		03/14/26 05:34	179601-23-1	
o-Xylene	**2060**	ug/L	500	169	500		03/14/26 05:34	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		500		03/14/26 05:34	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130		500		03/14/26 05:34	17060-07-0	
Toluene-d8 (S)	100	%	70-130		500		03/14/26 05:34	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-6 **Lab ID: 92848767002** Collected: 03/10/26 12:45 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/12/26 08:24	03/13/26 13:21	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	100	%	60-140		1	03/12/26 08:24	03/13/26 13:21	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	200	72.8	2		03/14/26 07:24	75-85-4	
tert-Amylmethyl ether	ND	ug/L	20.0	5.3	2		03/14/26 07:24	994-05-8	
Benzene	**33.2**	ug/L	2.0	0.69	2		03/14/26 07:24	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	200	104	2		03/14/26 07:24	624-95-3	v2
tert-Butyl Alcohol	**260**	ug/L	200	53.6	2		03/14/26 07:24	75-65-0	
tert-Butyl Formate	ND	ug/L	100	58.8	2		03/14/26 07:24	762-75-4	
1,2-Dichloroethane	ND	ug/L	2.0	0.64	2		03/14/26 07:24	107-06-2	
Diisopropyl ether	ND	ug/L	2.0	0.62	2		03/14/26 07:24	108-20-3	
Ethanol	ND	ug/L	400	144	2		03/14/26 07:24	64-17-5	
Ethylbenzene	**8.2**	ug/L	2.0	0.61	2		03/14/26 07:24	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	20.0	6.5	2		03/14/26 07:24	637-92-3	
Methyl-tert-butyl ether	**10.9**	ug/L	2.0	0.84	2		03/14/26 07:24	1634-04-4	
Naphthalene	**150**	ug/L	2.0	1.3	2		03/14/26 07:24	91-20-3	
Toluene	**1.5J**	ug/L	2.0	0.97	2		03/14/26 07:24	108-88-3	
Xylene (Total)	**8.9**	ug/L	2.0	0.68	2		03/14/26 07:24	1330-20-7	
m&p-Xylene	**7.9**	ug/L	4.0	1.4	2		03/14/26 07:24	179601-23-1	
o-Xylene	**1.1J**	ug/L	2.0	0.68	2		03/14/26 07:24	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		2		03/14/26 07:24	460-00-4	D3
1,2-Dichloroethane-d4 (S)	103	%	70-130		2		03/14/26 07:24	17060-07-0	
Toluene-d8 (S)	101	%	70-130		2		03/14/26 07:24	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-7 **Lab ID: 92848767003** Collected: 03/10/26 12:10 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.021	0.0077	1	03/12/26 08:24	03/13/26 13:55	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	91	%	60-140		1	03/12/26 08:24	03/13/26 13:55	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	**53.6J**	ug/L	100	36.4	1		03/14/26 00:04	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/14/26 00:04	994-05-8	
Benzene	**30.1**	ug/L	1.0	0.34	1		03/14/26 00:04	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/14/26 00:04	624-95-3	v2
tert-Butyl Alcohol	**173**	ug/L	100	26.8	1		03/14/26 00:04	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/14/26 00:04	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/14/26 00:04	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/14/26 00:04	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/14/26 00:04	64-17-5	
Ethylbenzene	**9.0**	ug/L	1.0	0.30	1		03/14/26 00:04	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/14/26 00:04	637-92-3	
Methyl-tert-butyl ether	**7.8**	ug/L	1.0	0.42	1		03/14/26 00:04	1634-04-4	
Naphthalene	**84.9**	ug/L	1.0	0.64	1		03/14/26 00:04	91-20-3	
Toluene	**0.88J**	ug/L	1.0	0.48	1		03/14/26 00:04	108-88-3	
Xylene (Total)	**12.5**	ug/L	1.0	0.34	1		03/14/26 00:04	1330-20-7	
m&p-Xylene	**11.0**	ug/L	2.0	0.71	1		03/14/26 00:04	179601-23-1	
o-Xylene	**1.5**	ug/L	1.0	0.34	1		03/14/26 00:04	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		03/14/26 00:04	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		03/14/26 00:04	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		03/14/26 00:04	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-8 **Lab ID: 92848767004** Collected: 03/10/26 10:05 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/12/26 08:24	03/13/26 14:06	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	84	%	60-140		1	03/12/26 08:24	03/13/26 14:06	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/16/26 13:22	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/16/26 13:22	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/16/26 13:22	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/16/26 13:22	624-95-3	v2
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/16/26 13:22	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/16/26 13:22	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/16/26 13:22	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/16/26 13:22	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/16/26 13:22	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/16/26 13:22	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/16/26 13:22	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/16/26 13:22	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/16/26 13:22	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/16/26 13:22	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/16/26 13:22	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/16/26 13:22	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/16/26 13:22	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		03/16/26 13:22	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		03/16/26 13:22	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		03/16/26 13:22	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-11 **Lab ID: 92848767005** Collected: 03/10/26 10:50 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.022	0.0081	1	03/12/26 08:24	03/13/26 14:17	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	89	%	60-140		1	03/12/26 08:24	03/13/26 14:17	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/14/26 04:06	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/14/26 04:06	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/14/26 04:06	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/14/26 04:06	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/14/26 04:06	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/14/26 04:06	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/14/26 04:06	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/14/26 04:06	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/14/26 04:06	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/14/26 04:06	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/14/26 04:06	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/14/26 04:06	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/14/26 04:06	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/14/26 04:06	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/14/26 04:06	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/14/26 04:06	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/14/26 04:06	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	97	%	70-130		1		03/14/26 04:06	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	70-130		1		03/14/26 04:06	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		03/14/26 04:06	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-12 **Lab ID: 92848767006** Collected: 03/10/26 11:20 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.022	0.0082	1	03/12/26 08:24	03/13/26 14:28	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	93	%	60-140		1	03/12/26 08:24	03/13/26 14:28	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/14/26 04:24	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/14/26 04:24	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/14/26 04:24	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/14/26 04:24	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/14/26 04:24	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/14/26 04:24	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/14/26 04:24	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/14/26 04:24	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/14/26 04:24	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/14/26 04:24	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/14/26 04:24	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/14/26 04:24	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/14/26 04:24	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/14/26 04:24	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/14/26 04:24	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/14/26 04:24	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/14/26 04:24	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		03/14/26 04:24	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	70-130		1		03/14/26 04:24	17060-07-0	
Toluene-d8 (S)	102	%	70-130		1		03/14/26 04:24	2037-26-5	

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Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-13 **Lab ID: 92848767007** Collected: 03/09/26 08:10 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.021	0.0080	1	03/12/26 08:24	03/13/26 14:39	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	95	%	60-140		1	03/12/26 08:24	03/13/26 14:39	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/14/26 18:46	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/14/26 18:46	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/14/26 18:46	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/14/26 18:46	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/14/26 18:46	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/14/26 18:46	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/14/26 18:46	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/14/26 18:46	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/14/26 18:46	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/14/26 18:46	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/14/26 18:46	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/14/26 18:46	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/14/26 18:46	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/14/26 18:46	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/14/26 18:46	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/14/26 18:46	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/14/26 18:46	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		1		03/14/26 18:46	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130		1		03/14/26 18:46	17060-07-0	
Toluene-d8 (S)	98	%	70-130		1		03/14/26 18:46	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-14 **Lab ID: 92848767008** Collected: 03/09/26 11:35 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.021	0.0080	1	03/12/26 08:24	03/13/26 14:50	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	95	%	60-140		1	03/12/26 08:24	03/13/26 14:50	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/14/26 00:41	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/14/26 00:41	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/14/26 00:41	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/14/26 00:41	624-95-3	v2
tert-Butyl Alcohol	**89.5J**	ug/L	100	26.8	1		03/14/26 00:41	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/14/26 00:41	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/14/26 00:41	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/14/26 00:41	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/14/26 00:41	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/14/26 00:41	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/14/26 00:41	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/14/26 00:41	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/14/26 00:41	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/14/26 00:41	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/14/26 00:41	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/14/26 00:41	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/14/26 00:41	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		03/14/26 00:41	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130		1		03/14/26 00:41	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		03/14/26 00:41	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-15 **Lab ID: 92848767009** Collected: 03/09/26 10:45 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.021	0.0078	1	03/12/26 08:24	03/13/26 15:02	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	107	%	60-140		1	03/12/26 08:24	03/13/26 15:02	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	25000	9100	250		03/14/26 03:44	75-85-4	
tert-Amylmethyl ether	ND	ug/L	2500	665	250		03/14/26 03:44	994-05-8	
Benzene	**637**	ug/L	250	86.2	250		03/14/26 03:44	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	25000	13000	250		03/14/26 03:44	624-95-3	v2
tert-Butyl Alcohol	ND	ug/L	25000	6700	250		03/14/26 03:44	75-65-0	
tert-Butyl Formate	ND	ug/L	12500	7350	250		03/14/26 03:44	762-75-4	
1,2-Dichloroethane	ND	ug/L	250	80.5	250		03/14/26 03:44	107-06-2	
Diisopropyl ether	ND	ug/L	250	77.0	250		03/14/26 03:44	108-20-3	
Ethanol	ND	ug/L	50000	18000	250		03/14/26 03:44	64-17-5	
Ethylbenzene	**1140**	ug/L	250	76.0	250		03/14/26 03:44	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	2500	810	250		03/14/26 03:44	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	250	106	250		03/14/26 03:44	1634-04-4	
Naphthalene	**324**	ug/L	250	161	250		03/14/26 03:44	91-20-3	
Toluene	**44000**	ug/L	250	121	250		03/14/26 03:44	108-88-3	
Xylene (Total)	**4900**	ug/L	250	84.5	250		03/14/26 03:44	1330-20-7	
m&p-Xylene	**3190**	ug/L	500	177	250		03/14/26 03:44	179601-23-1	
o-Xylene	**1710**	ug/L	250	84.5	250		03/14/26 03:44	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		250		03/14/26 03:44	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	70-130		250		03/14/26 03:44	17060-07-0	
Toluene-d8 (S)	98	%	70-130		250		03/14/26 03:44	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-16 **Lab ID: 92848767010** Collected: 03/09/26 11:10 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0077	1	03/12/26 08:24	03/14/26 12:32	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	103	%	60-140		1	03/12/26 08:24	03/14/26 12:32	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	**100000**	ug/L	50000	18200	500		03/14/26 06:11	75-85-4	
tert-Amylmethyl ether	ND	ug/L	5000	1330	500		03/14/26 06:11	994-05-8	
Benzene	**4930**	ug/L	500	172	500		03/14/26 06:11	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	50000	26000	500		03/14/26 06:11	624-95-3	v2
tert-Butyl Alcohol	**86100**	ug/L	50000	13400	500		03/14/26 06:11	75-65-0	
tert-Butyl Formate	ND	ug/L	25000	14700	500		03/14/26 06:11	762-75-4	
1,2-Dichloroethane	ND	ug/L	500	161	500		03/14/26 06:11	107-06-2	
Diisopropyl ether	ND	ug/L	500	154	500		03/14/26 06:11	108-20-3	
Ethanol	ND	ug/L	100000	36100	500		03/14/26 06:11	64-17-5	
Ethylbenzene	**961**	ug/L	500	152	500		03/14/26 06:11	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	5000	1620	500		03/14/26 06:11	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	500	211	500		03/14/26 06:11	1634-04-4	
Naphthalene	ND	ug/L	500	322	500		03/14/26 06:11	91-20-3	
Toluene	**47400**	ug/L	500	242	500		03/14/26 06:11	108-88-3	
Xylene (Total)	**4520**	ug/L	500	169	500		03/14/26 06:11	1330-20-7	
m&p-Xylene	**3010**	ug/L	1000	354	500		03/14/26 06:11	179601-23-1	
o-Xylene	**1500**	ug/L	500	169	500		03/14/26 06:11	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		500		03/14/26 06:11	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130		500		03/14/26 06:11	17060-07-0	
Toluene-d8 (S)	100	%	70-130		500		03/14/26 06:11	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 DUP-1 **Lab ID: 92848767011** Collected: 03/09/26 11:13 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0076	1	03/12/26 08:24	03/14/26 12:43	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	94	%	60-140		1	03/12/26 08:24	03/14/26 12:43	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	**79200**	ug/L	50000	18200	500		03/14/26 06:47	75-85-4	
tert-Amylmethyl ether	ND	ug/L	5000	1330	500		03/14/26 06:47	994-05-8	
Benzene	**3680**	ug/L	500	172	500		03/14/26 06:47	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	50000	26000	500		03/14/26 06:47	624-95-3	v2
tert-Butyl Alcohol	**74500**	ug/L	50000	13400	500		03/14/26 06:47	75-65-0	
tert-Butyl Formate	ND	ug/L	25000	14700	500		03/14/26 06:47	762-75-4	
1,2-Dichloroethane	ND	ug/L	500	161	500		03/14/26 06:47	107-06-2	
Diisopropyl ether	ND	ug/L	500	154	500		03/14/26 06:47	108-20-3	
Ethanol	ND	ug/L	100000	36100	500		03/14/26 06:47	64-17-5	
Ethylbenzene	**702**	ug/L	500	152	500		03/14/26 06:47	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	5000	1620	500		03/14/26 06:47	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	500	211	500		03/14/26 06:47	1634-04-4	
Naphthalene	ND	ug/L	500	322	500		03/14/26 06:47	91-20-3	
Toluene	**33900**	ug/L	500	242	500		03/14/26 06:47	108-88-3	
Xylene (Total)	**3540**	ug/L	500	169	500		03/14/26 06:47	1330-20-7	
m&p-Xylene	**2390**	ug/L	1000	354	500		03/14/26 06:47	179601-23-1	
o-Xylene	**1150**	ug/L	500	169	500		03/14/26 06:47	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		500		03/14/26 06:47	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	70-130		500		03/14/26 06:47	17060-07-0	
Toluene-d8 (S)	102	%	70-130		500		03/14/26 06:47	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-17 **Lab ID: 92848767012** Collected: 03/09/26 09:00 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.021	0.0080	1	03/12/26 08:24	03/13/26 15:35	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	99	%	60-140		1	03/12/26 08:24	03/13/26 15:35	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	25000	9100	250		03/14/26 03:07	75-85-4	
tert-Amylmethyl ether	ND	ug/L	2500	665	250		03/14/26 03:07	994-05-8	
Benzene	**827**	ug/L	250	86.2	250		03/14/26 03:07	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	25000	13000	250		03/14/26 03:07	624-95-3	v2
tert-Butyl Alcohol	ND	ug/L	25000	6700	250		03/14/26 03:07	75-65-0	
tert-Butyl Formate	ND	ug/L	12500	7350	250		03/14/26 03:07	762-75-4	
1,2-Dichloroethane	ND	ug/L	250	80.5	250		03/14/26 03:07	107-06-2	
Diisopropyl ether	ND	ug/L	250	77.0	250		03/14/26 03:07	108-20-3	
Ethanol	ND	ug/L	50000	18000	250		03/14/26 03:07	64-17-5	
Ethylbenzene	**2420**	ug/L	250	76.0	250		03/14/26 03:07	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	2500	810	250		03/14/26 03:07	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	250	106	250		03/14/26 03:07	1634-04-4	
Naphthalene	**398**	ug/L	250	161	250		03/14/26 03:07	91-20-3	
Toluene	**35300**	ug/L	250	121	250		03/14/26 03:07	108-88-3	
Xylene (Total)	**11000**	ug/L	250	84.5	250		03/14/26 03:07	1330-20-7	
m&p-Xylene	**7210**	ug/L	500	177	250		03/14/26 03:07	179601-23-1	
o-Xylene	**3830**	ug/L	250	84.5	250		03/14/26 03:07	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		250		03/14/26 03:07	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130		250		03/14/26 03:07	17060-07-0	
Toluene-d8 (S)	100	%	70-130		250		03/14/26 03:07	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-18 **Lab ID: 92848767013** Collected: 03/09/26 08:30 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.021	0.0077	1	03/12/26 08:24	03/13/26 15:46	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	95	%	60-140		1	03/12/26 08:24	03/13/26 15:46	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	4000	1460	40		03/18/26 15:29	75-85-4	
tert-Amylmethyl ether	ND	ug/L	400	106	40		03/18/26 15:29	994-05-8	
Benzene	**263**	ug/L	40.0	13.8	40		03/18/26 15:29	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	4000	2080	40		03/18/26 15:29	624-95-3	
tert-Butyl Alcohol	ND	ug/L	4000	1070	40		03/18/26 15:29	75-65-0	
tert-Butyl Formate	ND	ug/L	2000	1180	40		03/18/26 15:29	762-75-4	
1,2-Dichloroethane	ND	ug/L	40.0	12.9	40		03/18/26 15:29	107-06-2	
Diisopropyl ether	ND	ug/L	40.0	12.3	40		03/18/26 15:29	108-20-3	
Ethanol	ND	ug/L	8000	2890	40		03/18/26 15:29	64-17-5	
Ethylbenzene	**593**	ug/L	40.0	12.2	40		03/18/26 15:29	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	400	130	40		03/18/26 15:29	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	40.0	16.9	40		03/18/26 15:29	1634-04-4	
Naphthalene	**133**	ug/L	40.0	25.8	40		03/18/26 15:29	91-20-3	v3
Toluene	**4590**	ug/L	40.0	19.4	40		03/18/26 15:29	108-88-3	
Xylene (Total)	**2500**	ug/L	40.0	13.5	40		03/18/26 15:29	1330-20-7	
m&p-Xylene	**1840**	ug/L	80.0	28.4	40		03/18/26 15:29	179601-23-1	
o-Xylene	**667**	ug/L	40.0	13.5	40		03/18/26 15:29	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	107	%	70-130		40		03/18/26 15:29	460-00-4	
1,2-Dichloroethane-d4 (S)	117	%	70-130		40		03/18/26 15:29	17060-07-0	
Toluene-d8 (S)	99	%	70-130		40		03/18/26 15:29	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 MW-19 **Lab ID: 92848767014** Collected: 03/09/26 12:35 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0076	1	03/12/26 08:24	03/13/26 15:57	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	94	%	60-140		1	03/12/26 08:24	03/13/26 15:57	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	40000	14600	400		03/14/26 04:57	75-85-4	
tert-Amylmethyl ether	ND	ug/L	4000	1060	400		03/14/26 04:57	994-05-8	
Benzene	**5220**	ug/L	400	138	400		03/14/26 04:57	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	40000	20800	400		03/14/26 04:57	624-95-3	v2
tert-Butyl Alcohol	ND	ug/L	40000	10700	400		03/14/26 04:57	75-65-0	
tert-Butyl Formate	ND	ug/L	20000	11800	400		03/14/26 04:57	762-75-4	
1,2-Dichloroethane	ND	ug/L	400	129	400		03/14/26 04:57	107-06-2	
Diisopropyl ether	ND	ug/L	400	123	400		03/14/26 04:57	108-20-3	
Ethanol	ND	ug/L	80000	28900	400		03/14/26 04:57	64-17-5	
Ethylbenzene	**2270**	ug/L	400	122	400		03/14/26 04:57	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	4000	1300	400		03/14/26 04:57	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	400	169	400		03/14/26 04:57	1634-04-4	
Naphthalene	**596**	ug/L	400	258	400		03/14/26 04:57	91-20-3	
Toluene	**56900**	ug/L	400	194	400		03/14/26 04:57	108-88-3	
Xylene (Total)	**8500**	ug/L	400	135	400		03/14/26 04:57	1330-20-7	
m&p-Xylene	**5330**	ug/L	800	284	400		03/14/26 04:57	179601-23-1	
o-Xylene	**3170**	ug/L	400	135	400		03/14/26 04:57	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		400		03/14/26 04:57	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	70-130		400		03/14/26 04:57	17060-07-0	
Toluene-d8 (S)	101	%	70-130		400		03/14/26 04:57	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 TW-1 **Lab ID: 92848767015** Collected: 03/09/26 09:50 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	03/12/26 08:24	03/13/26 16:09	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	91	%	60-140		1	03/12/26 08:24	03/13/26 16:09	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/18/26 15:11	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/18/26 15:11	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/18/26 15:11	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/18/26 15:11	624-95-3	
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/18/26 15:11	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/18/26 15:11	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/18/26 15:11	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/18/26 15:11	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/18/26 15:11	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/18/26 15:11	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/18/26 15:11	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/18/26 15:11	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/18/26 15:11	91-20-3	v2
Toluene	ND	ug/L	1.0	0.48	1		03/18/26 15:11	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/18/26 15:11	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/18/26 15:11	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/18/26 15:11	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	100	%	70-130		1		03/18/26 15:11	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	70-130		1		03/18/26 15:11	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		03/18/26 15:11	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 TW-2 **Lab ID: 92848767016** Collected: 03/10/26 09:35 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	03/12/26 08:24	03/13/26 16:20	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	89	%	60-140		1	03/12/26 08:24	03/13/26 16:20	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/14/26 00:59	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/14/26 00:59	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/14/26 00:59	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/14/26 00:59	624-95-3	v2
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/14/26 00:59	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/14/26 00:59	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/14/26 00:59	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/14/26 00:59	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/14/26 00:59	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/14/26 00:59	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/14/26 00:59	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/14/26 00:59	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/14/26 00:59	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/14/26 00:59	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/14/26 00:59	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/14/26 00:59	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/14/26 00:59	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	99	%	70-130		1		03/14/26 00:59	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	70-130		1		03/14/26 00:59	17060-07-0	
Toluene-d8 (S)	105	%	70-130		1		03/14/26 00:59	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 RW-1 **Lab ID: 92848767017** Collected: 03/09/26 12:15 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	03/16/26 08:06	03/17/26 14:09	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	65	%	60-140		1	03/16/26 08:06	03/17/26 14:09	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	**377J**	ug/L	500	182	5		03/14/26 08:37	75-85-4	
tert-Amylmethyl ether	ND	ug/L	50.0	13.3	5		03/14/26 08:37	994-05-8	
Benzene	**344**	ug/L	5.0	1.7	5		03/14/26 08:37	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	500	260	5		03/14/26 08:37	624-95-3	v2
tert-Butyl Alcohol	**1200**	ug/L	500	134	5		03/14/26 08:37	75-65-0	
tert-Butyl Formate	ND	ug/L	250	147	5		03/14/26 08:37	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.6	5		03/14/26 08:37	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	1.5	5		03/14/26 08:37	108-20-3	
Ethanol	ND	ug/L	1000	361	5		03/14/26 08:37	64-17-5	
Ethylbenzene	**228**	ug/L	5.0	1.5	5		03/14/26 08:37	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	50.0	16.2	5		03/14/26 08:37	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.1	5		03/14/26 08:37	1634-04-4	
Naphthalene	**655**	ug/L	5.0	3.2	5		03/14/26 08:37	91-20-3	
Toluene	**36.5**	ug/L	5.0	2.4	5		03/14/26 08:37	108-88-3	
Xylene (Total)	**31.0**	ug/L	5.0	1.7	5		03/14/26 08:37	1330-20-7	
m&p-Xylene	**26.8**	ug/L	10.0	3.5	5		03/14/26 08:37	179601-23-1	
o-Xylene	**4.2J**	ug/L	5.0	1.7	5		03/14/26 08:37	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	102	%	70-130		5		03/14/26 08:37	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		5		03/14/26 08:37	17060-07-0	
Toluene-d8 (S)	101	%	70-130		5		03/14/26 08:37	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 DUP-2 **Lab ID: 92848767018** Collected: 03/09/26 12:18 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.019	0.0072	1	03/12/26 08:24	03/13/26 16:42	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	91	%	60-140		1	03/12/26 08:24	03/13/26 16:42	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	**420J**	ug/L	500	182	5		03/14/26 08:01	75-85-4	
tert-Amylmethyl ether	ND	ug/L	50.0	13.3	5		03/14/26 08:01	994-05-8	
Benzene	**363**	ug/L	5.0	1.7	5		03/14/26 08:01	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	500	260	5		03/14/26 08:01	624-95-3	v2
tert-Butyl Alcohol	**1190**	ug/L	500	134	5		03/14/26 08:01	75-65-0	
tert-Butyl Formate	ND	ug/L	250	147	5		03/14/26 08:01	762-75-4	
1,2-Dichloroethane	ND	ug/L	5.0	1.6	5		03/14/26 08:01	107-06-2	
Diisopropyl ether	ND	ug/L	5.0	1.5	5		03/14/26 08:01	108-20-3	
Ethanol	ND	ug/L	1000	361	5		03/14/26 08:01	64-17-5	
Ethylbenzene	**225**	ug/L	5.0	1.5	5		03/14/26 08:01	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	50.0	16.2	5		03/14/26 08:01	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	5.0	2.1	5		03/14/26 08:01	1634-04-4	
Naphthalene	**584**	ug/L	5.0	3.2	5		03/14/26 08:01	91-20-3	
Toluene	**43.4**	ug/L	5.0	2.4	5		03/14/26 08:01	108-88-3	
Xylene (Total)	**30.7**	ug/L	5.0	1.7	5		03/14/26 08:01	1330-20-7	
m&p-Xylene	**25.8**	ug/L	10.0	3.5	5		03/14/26 08:01	179601-23-1	
o-Xylene	**4.9J**	ug/L	5.0	1.7	5		03/14/26 08:01	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	98	%	70-130		5		03/14/26 08:01	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	70-130		5		03/14/26 08:01	17060-07-0	
Toluene-d8 (S)	101	%	70-130		5		03/14/26 08:01	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 SW-1 **Lab ID: 92848767019** Collected: 03/10/26 11:40 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/16/26 08:06	03/17/26 14:20	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	68	%	60-140		1	03/16/26 08:06	03/17/26 14:20	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/14/26 01:17	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/14/26 01:17	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/14/26 01:17	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/14/26 01:17	624-95-3	v2
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/14/26 01:17	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/14/26 01:17	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/14/26 01:17	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/14/26 01:17	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/14/26 01:17	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/14/26 01:17	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/14/26 01:17	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/14/26 01:17	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/14/26 01:17	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/14/26 01:17	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/14/26 01:17	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/14/26 01:17	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/14/26 01:17	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		03/14/26 01:17	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	70-130		1		03/14/26 01:17	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		03/14/26 01:17	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 WWC **Lab ID: 92848767020** Collected: 03/09/26 13:50 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0076	1	03/12/26 12:30	03/12/26 20:04	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	99	%	60-140		1	03/12/26 12:30	03/12/26 20:04	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/14/26 01:36	75-85-4	
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/14/26 01:36	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/14/26 01:36	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/14/26 01:36	624-95-3	v2
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/14/26 01:36	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/14/26 01:36	762-75-4	
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/14/26 01:36	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/14/26 01:36	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/14/26 01:36	64-17-5	
Ethylbenzene	**0.37J**	ug/L	1.0	0.30	1		03/14/26 01:36	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/14/26 01:36	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/14/26 01:36	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/14/26 01:36	91-20-3	
Toluene	**1.6**	ug/L	1.0	0.48	1		03/14/26 01:36	108-88-3	
Xylene (Total)	**1.6**	ug/L	1.0	0.34	1		03/14/26 01:36	1330-20-7	
m&p-Xylene	**1.1J**	ug/L	2.0	0.71	1		03/14/26 01:36	179601-23-1	
o-Xylene	**0.51J**	ug/L	1.0	0.34	1		03/14/26 01:36	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	101	%	70-130		1		03/14/26 01:36	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	70-130		1		03/14/26 01:36	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		03/14/26 01:36	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 FB **Lab ID: 92848767021** Collected: 03/09/26 07:50 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0074	1	03/12/26 12:30	03/12/26 20:26	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	104	%	60-140		1	03/12/26 12:30	03/12/26 20:26	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/12/26 16:07	75-85-4	v2
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/12/26 16:07	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/12/26 16:07	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/12/26 16:07	624-95-3	v2
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/12/26 16:07	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/12/26 16:07	762-75-4	v2
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/12/26 16:07	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/12/26 16:07	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/12/26 16:07	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/12/26 16:07	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/12/26 16:07	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/12/26 16:07	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/12/26 16:07	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/12/26 16:07	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/12/26 16:07	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/12/26 16:07	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/12/26 16:07	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	92	%	70-130		1		03/12/26 16:07	460-00-4	
1,2-Dichloroethane-d4 (S)	81	%	70-130		1		03/12/26 16:07	17060-07-0	
Toluene-d8 (S)	101	%	70-130		1		03/12/26 16:07	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 FB **Lab ID: 92848767022** Collected: 03/10/26 08:45 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8011 GCS EDB and DBCP	Analytical Method: EPA 8011 Preparation Method: EPA 8011 Pace Analytical Services - Charlotte								
1,2-Dibromoethane (EDB)	ND	ug/L	0.020	0.0075	1	03/12/26 12:30	03/12/26 20:37	106-93-4	
Surrogates									
1-Chloro-2-bromopropane (S)	102	%	60-140		1	03/12/26 12:30	03/12/26 20:37	301-79-56	
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/12/26 16:25	75-85-4	v2
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/12/26 16:25	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/12/26 16:25	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/12/26 16:25	624-95-3	v2
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/12/26 16:25	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/12/26 16:25	762-75-4	v2
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/12/26 16:25	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/12/26 16:25	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/12/26 16:25	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/12/26 16:25	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/12/26 16:25	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/12/26 16:25	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/12/26 16:25	91-20-3	
Toluene	ND	ug/L	1.0	0.48	1		03/12/26 16:25	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/12/26 16:25	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/12/26 16:25	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/12/26 16:25	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		1		03/12/26 16:25	460-00-4	
1,2-Dichloroethane-d4 (S)	82	%	70-130		1		03/12/26 16:25	17060-07-0	
Toluene-d8 (S)	100	%	70-130		1		03/12/26 16:25	2037-26-5	

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ANALYTICAL RESULTS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Sample: 05156 TB **Lab ID: 92848767023** Collected: 03/10/26 00:00 Received: 03/11/26 12:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Low Level SC	Analytical Method: EPA 8260D Pace Analytical Services - Charlotte								
tert-Amyl Alcohol	ND	ug/L	100	36.4	1		03/12/26 16:44	75-85-4	v2
tert-Amylmethyl ether	ND	ug/L	10.0	2.7	1		03/12/26 16:44	994-05-8	
Benzene	ND	ug/L	1.0	0.34	1		03/12/26 16:44	71-43-2	
3,3-Dimethyl-1-Butanol	ND	ug/L	100	51.9	1		03/12/26 16:44	624-95-3	v2
tert-Butyl Alcohol	ND	ug/L	100	26.8	1		03/12/26 16:44	75-65-0	
tert-Butyl Formate	ND	ug/L	50.0	29.4	1		03/12/26 16:44	762-75-4	v2
1,2-Dichloroethane	ND	ug/L	1.0	0.32	1		03/12/26 16:44	107-06-2	
Diisopropyl ether	ND	ug/L	1.0	0.31	1		03/12/26 16:44	108-20-3	
Ethanol	ND	ug/L	200	72.2	1		03/12/26 16:44	64-17-5	
Ethylbenzene	ND	ug/L	1.0	0.30	1		03/12/26 16:44	100-41-4	
Ethyl-tert-butyl ether	ND	ug/L	10.0	3.2	1		03/12/26 16:44	637-92-3	
Methyl-tert-butyl ether	ND	ug/L	1.0	0.42	1		03/12/26 16:44	1634-04-4	
Naphthalene	ND	ug/L	1.0	0.64	1		03/12/26 16:44	91-20-3	
Toluene	**1.3**	ug/L	1.0	0.48	1		03/12/26 16:44	108-88-3	
Xylene (Total)	ND	ug/L	1.0	0.34	1		03/12/26 16:44	1330-20-7	
m&p-Xylene	ND	ug/L	2.0	0.71	1		03/12/26 16:44	179601-23-1	
o-Xylene	ND	ug/L	1.0	0.34	1		03/12/26 16:44	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	93	%	70-130		1		03/12/26 16:44	460-00-4	
1,2-Dichloroethane-d4 (S)	85	%	70-130		1		03/12/26 16:44	17060-07-0	
Toluene-d8 (S)	103	%	70-130		1		03/12/26 16:44	2037-26-5	

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

QC Batch: 996447
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92848767021, 92848767022, 92848767023

METHOD BLANK: 5122807 Matrix: Water
Associated Lab Samples: 92848767021, 92848767022, 92848767023

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	03/12/26 12:23	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	03/12/26 12:23	v2
Benzene	ug/L	ND	1.0	0.34	03/12/26 12:23	
Diisopropyl ether	ug/L	ND	1.0	0.31	03/12/26 12:23	
Ethanol	ug/L	ND	200	72.2	03/12/26 12:23	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	03/12/26 12:23	
Ethylbenzene	ug/L	ND	1.0	0.30	03/12/26 12:23	
m&p-Xylene	ug/L	ND	2.0	0.71	03/12/26 12:23	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	03/12/26 12:23	
Naphthalene	ug/L	ND	1.0	0.64	03/12/26 12:23	
o-Xylene	ug/L	ND	1.0	0.34	03/12/26 12:23	
tert-Amyl Alcohol	ug/L	ND	100	36.4	03/12/26 12:23	v2
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	03/12/26 12:23	
tert-Butyl Alcohol	ug/L	ND	100	26.8	03/12/26 12:23	
tert-Butyl Formate	ug/L	ND	50.0	29.4	03/12/26 12:23	v2
Toluene	ug/L	ND	1.0	0.48	03/12/26 12:23	
Xylene (Total)	ug/L	ND	1.0	0.34	03/12/26 12:23	
1,2-Dichloroethane-d4 (S)	%	87	70-130		03/12/26 12:23	
4-Bromofluorobenzene (S)	%	93	70-130		03/12/26 12:23	
Toluene-d8 (S)	%	103	70-130		03/12/26 12:23	

LABORATORY CONTROL SAMPLE: 5122808

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	17.9	90	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	300	75	70-130	v3
Benzene	ug/L	20	20.8	104	70-130	
Diisopropyl ether	ug/L	20	16.9	84	70-130	
Ethanol	ug/L	800	666	83	70-130	
Ethyl-tert-butyl ether	ug/L	40	34.5	86	70-130	
Ethylbenzene	ug/L	20	20.6	103	70-130	
m&p-Xylene	ug/L	40	40.6	102	70-130	
Methyl-tert-butyl ether	ug/L	20	16.7	83	70-130	
Naphthalene	ug/L	20	20.7	103	70-130	
o-Xylene	ug/L	20	20.9	104	70-130	
tert-Amyl Alcohol	ug/L	400	333	83	70-130	v3
tert-Amylmethyl ether	ug/L	40	38.1	95	70-130	
tert-Butyl Alcohol	ug/L	200	160	80	70-130	
tert-Butyl Formate	ug/L	160	121	76	70-130	v3

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

LABORATORY CONTROL SAMPLE: 5122808

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	21.0	105	70-130	
Xylene (Total)	ug/L	60	61.5	103	70-130	
1,2-Dichloroethane-d4 (S)	%			83	70-130	
4-Bromofluorobenzene (S)	%			96	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE SAMPLE: 5122809

Parameter	Units	92848433011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	ND	20	23.5	117	70-137	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	346	87	39-157	
Benzene	ug/L	ND	20	25.8	129	70-151	
Diisopropyl ether	ug/L	ND	20	21.7	108	63-144	
Ethanol	ug/L	ND	800	884	110	39-176	
Ethyl-tert-butyl ether	ug/L	ND	40	43.6	109	66-137	
Ethylbenzene	ug/L	1.3	20	26.7	127	66-153	
m&p-Xylene	ug/L	ND	40	50.3	126	69-152	
Methyl-tert-butyl ether	ug/L	ND	20	21.9	109	54-156	
Naphthalene	ug/L	ND	20	25.3	127	61-148	
o-Xylene	ug/L	0.37J	20	26.3	130	70-148	
tert-Amyl Alcohol	ug/L	ND	400	431	108	54-153	
tert-Amylmethyl ether	ug/L	ND	40	46.3	116	69-139	
tert-Butyl Alcohol	ug/L	ND	200	232	116	43-188	
tert-Butyl Formate	ug/L	ND	160	110	69	10-170	v3
Toluene	ug/L	ND	20	26.3	130	59-148	
Xylene (Total)	ug/L	0.37J	60	76.6	127	63-158	
1,2-Dichloroethane-d4 (S)	%				89	70-130	
4-Bromofluorobenzene (S)	%				96	70-130	
Toluene-d8 (S)	%				99	70-130	

SAMPLE DUPLICATE: 5122810

Parameter	Units	92848433013 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane	ug/L	ND	ND		30	
3,3-Dimethyl-1-Butanol	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethanol	ug/L	ND	ND		30	
Ethyl-tert-butyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

SAMPLE DUPLICATE: 5122810

Parameter	Units	92848433013 Result	Dup Result	RPD	Max RPD	Qualifiers
tert-Amyl Alcohol	ug/L	ND	ND		30	
tert-Amylmethyl ether	ug/L	ND	ND		30	
tert-Butyl Alcohol	ug/L	ND	ND		30	
tert-Butyl Formate	ug/L	ND	ND		30	v2
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	88	87			
4-Bromofluorobenzene (S)	%	92	93			
Toluene-d8 (S)	%	101	100			

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

QC Batch: 996792
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte

Associated Lab Samples: 92848767007

METHOD BLANK: 5124879 Matrix: Water
Associated Lab Samples: 92848767007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	03/14/26 15:43	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	03/14/26 15:43	
Benzene	ug/L	ND	1.0	0.34	03/14/26 15:43	
Diisopropyl ether	ug/L	ND	1.0	0.31	03/14/26 15:43	
Ethanol	ug/L	ND	200	72.2	03/14/26 15:43	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	03/14/26 15:43	
Ethylbenzene	ug/L	ND	1.0	0.30	03/14/26 15:43	
m&p-Xylene	ug/L	ND	2.0	0.71	03/14/26 15:43	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	03/14/26 15:43	
Naphthalene	ug/L	ND	1.0	0.64	03/14/26 15:43	
o-Xylene	ug/L	ND	1.0	0.34	03/14/26 15:43	
tert-Amyl Alcohol	ug/L	ND	100	36.4	03/14/26 15:43	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	03/14/26 15:43	
tert-Butyl Alcohol	ug/L	ND	100	26.8	03/14/26 15:43	
tert-Butyl Formate	ug/L	ND	50.0	29.4	03/14/26 15:43	
Toluene	ug/L	ND	1.0	0.48	03/14/26 15:43	
Xylene (Total)	ug/L	ND	1.0	0.34	03/14/26 15:43	
1,2-Dichloroethane-d4 (S)	%	91	70-130		03/14/26 15:43	
4-Bromofluorobenzene (S)	%	97	70-130		03/14/26 15:43	
Toluene-d8 (S)	%	99	70-130		03/14/26 15:43	

LABORATORY CONTROL SAMPLE: 5124880

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	22.3	111	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	422	105	70-130	
Benzene	ug/L	20	24.1	121	70-130	
Diisopropyl ether	ug/L	20	20.7	103	70-130	
Ethanol	ug/L	800	795	99	70-130	
Ethyl-tert-butyl ether	ug/L	40	42.6	106	70-130	
Ethylbenzene	ug/L	20	25.0	125	70-130	
m&p-Xylene	ug/L	40	50.0	125	70-130	
Methyl-tert-butyl ether	ug/L	20	21.3	107	70-130	
Naphthalene	ug/L	20	19.9	99	70-130	
o-Xylene	ug/L	20	25.1	126	70-130	
tert-Amyl Alcohol	ug/L	400	416	104	70-130	
tert-Amylmethyl ether	ug/L	40	44.6	112	70-130	
tert-Butyl Alcohol	ug/L	200	184	92	70-130	
tert-Butyl Formate	ug/L	160	162	101	70-130	

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

LABORATORY CONTROL SAMPLE: 5124880

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	23.5	118	70-130	
Xylene (Total)	ug/L	60	75.1	125	70-130	
1,2-Dichloroethane-d4 (S)	%			92	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			96	70-130	

MATRIX SPIKE SAMPLE: 5124881

Parameter	Units	92848775019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	ND	20	25.1	125	70-137	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	434	109	39-157	
Benzene	ug/L	ND	20	24.4	122	70-151	
Diisopropyl ether	ug/L	ND	20	25.1	125	63-144	
Ethanol	ug/L	ND	800	1010	126	39-176	
Ethyl-tert-butyl ether	ug/L	ND	40	47.0	118	66-137	
Ethylbenzene	ug/L	ND	20	23.4	117	66-153	
m&p-Xylene	ug/L	ND	40	45.9	115	69-152	
Methyl-tert-butyl ether	ug/L	ND	20	23.3	117	54-156	
Naphthalene	ug/L	ND	20	24.0	120	61-148	
o-Xylene	ug/L	ND	20	24.0	120	70-148	
tert-Amyl Alcohol	ug/L	ND	400	472	118	54-153	
tert-Amylmethyl ether	ug/L	ND	40	47.3	118	69-139	
tert-Butyl Alcohol	ug/L	ND	200	346	173	43-188	
tert-Butyl Formate	ug/L	ND	160	ND	16	10-170	
Toluene	ug/L	ND	20	24.0	120	59-148	
Xylene (Total)	ug/L	ND	60	69.9	116	63-158	
1,2-Dichloroethane-d4 (S)	%				96	70-130	
4-Bromofluorobenzene (S)	%				101	70-130	
Toluene-d8 (S)	%				99	70-130	

SAMPLE DUPLICATE: 5124882

Parameter	Units	92848775023 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane	ug/L	ND	ND		30	
3,3-Dimethyl-1-Butanol	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethanol	ug/L	ND	ND		30	
Ethyl-tert-butyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

SAMPLE DUPLICATE: 5124882

Parameter	Units	92848775023 Result	Dup Result	RPD	Max RPD	Qualifiers
tert-Amyl Alcohol	ug/L	ND	ND		30	
tert-Amylmethyl ether	ug/L	ND	ND		30	
tert-Butyl Alcohol	ug/L	ND	ND		30	
tert-Butyl Formate	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	95	100			
4-Bromofluorobenzene (S)	%	96	98			
Toluene-d8 (S)	%	97	101			

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

QC Batch: 996794
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92848767005, 92848767006

METHOD BLANK: 5124889 Matrix: Water
Associated Lab Samples: 92848767005, 92848767006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	03/14/26 00:10	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	03/14/26 00:10	
Benzene	ug/L	ND	1.0	0.34	03/14/26 00:10	
Diisopropyl ether	ug/L	ND	1.0	0.31	03/14/26 00:10	
Ethanol	ug/L	ND	200	72.2	03/14/26 00:10	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	03/14/26 00:10	
Ethylbenzene	ug/L	ND	1.0	0.30	03/14/26 00:10	
m&p-Xylene	ug/L	ND	2.0	0.71	03/14/26 00:10	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	03/14/26 00:10	
Naphthalene	ug/L	ND	1.0	0.64	03/14/26 00:10	
o-Xylene	ug/L	ND	1.0	0.34	03/14/26 00:10	
tert-Amyl Alcohol	ug/L	ND	100	36.4	03/14/26 00:10	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	03/14/26 00:10	
tert-Butyl Alcohol	ug/L	ND	100	26.8	03/14/26 00:10	
tert-Butyl Formate	ug/L	ND	50.0	29.4	03/14/26 00:10	
Toluene	ug/L	ND	1.0	0.48	03/14/26 00:10	
Xylene (Total)	ug/L	ND	1.0	0.34	03/14/26 00:10	
1,2-Dichloroethane-d4 (S)	%	110	70-130		03/14/26 00:10	
4-Bromofluorobenzene (S)	%	100	70-130		03/14/26 00:10	
Toluene-d8 (S)	%	99	70-130		03/14/26 00:10	

LABORATORY CONTROL SAMPLE: 5124890

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	22.6	113	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	433	108	70-130	
Benzene	ug/L	20	23.2	116	70-130	
Diisopropyl ether	ug/L	20	22.2	111	70-130	
Ethanol	ug/L	800	907	113	70-130	
Ethyl-tert-butyl ether	ug/L	40	43.0	107	70-130	
Ethylbenzene	ug/L	20	22.1	111	70-130	
m&p-Xylene	ug/L	40	44.3	111	70-130	
Methyl-tert-butyl ether	ug/L	20	20.0	100	70-130	
Naphthalene	ug/L	20	19.6	98	70-130	
o-Xylene	ug/L	20	22.5	112	70-130	
tert-Amyl Alcohol	ug/L	400	404	101	70-130	
tert-Amylmethyl ether	ug/L	40	44.0	110	70-130	
tert-Butyl Alcohol	ug/L	200	208	104	70-130	
tert-Butyl Formate	ug/L	160	164	102	70-130	

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

LABORATORY CONTROL SAMPLE: 5124890

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	22.0	110	70-130	
Xylene (Total)	ug/L	60	66.8	111	70-130	
1,2-Dichloroethane-d4 (S)	%			106	70-130	
4-Bromofluorobenzene (S)	%			103	70-130	
Toluene-d8 (S)	%			105	70-130	

MATRIX SPIKE SAMPLE: 5124891

Parameter	Units	92849095011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	ND	20	23.2	116	70-137	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	445	111	39-157	
Benzene	ug/L	ND	20	25.4	127	70-151	
Diisopropyl ether	ug/L	ND	20	21.3	107	63-144	
Ethanol	ug/L	ND	800	788	99	39-176	
Ethyl-tert-butyl ether	ug/L	ND	40	44.5	111	66-137	
Ethylbenzene	ug/L	ND	20	26.0	130	66-153	
m&p-Xylene	ug/L	ND	40	52.3	131	69-152	
Methyl-tert-butyl ether	ug/L	ND	20	22.3	112	54-156	
Naphthalene	ug/L	ND	20	21.1	105	61-148	
o-Xylene	ug/L	ND	20	25.9	130	70-148	
tert-Amyl Alcohol	ug/L	ND	400	440	110	54-153	
tert-Amylmethyl ether	ug/L	ND	40	46.4	116	69-139	
tert-Butyl Alcohol	ug/L	ND	200	294	147	43-188	
tert-Butyl Formate	ug/L	ND	160	ND	14	10-170	
Toluene	ug/L	ND	20	25.0	125	59-148	
Xylene (Total)	ug/L	ND	60	78.2	130	63-158	
1,2-Dichloroethane-d4 (S)	%				95	70-130	
4-Bromofluorobenzene (S)	%				98	70-130	
Toluene-d8 (S)	%				96	70-130	

SAMPLE DUPLICATE: 5124892

Parameter	Units	92849095012 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane	ug/L	ND	ND		30	
3,3-Dimethyl-1-Butanol	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethanol	ug/L	ND	ND		30	
Ethyl-tert-butyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

SAMPLE DUPLICATE: 5124892

Parameter	Units	92849095012 Result	Dup Result	RPD	Max RPD	Qualifiers
tert-Amyl Alcohol	ug/L	ND	ND		30	
tert-Amylmethyl ether	ug/L	ND	ND		30	
tert-Butyl Alcohol	ug/L	ND	ND		30	
tert-Butyl Formate	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	108	95			
4-Bromofluorobenzene (S)	%	98	99			
Toluene-d8 (S)	%	103	98			

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

QC Batch: 996849
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92848767001, 92848767002, 92848767003, 92848767004, 92848767008, 92848767009, 92848767010, 92848767011, 92848767012, 92848767014, 92848767016, 92848767017, 92848767018, 92848767019, 92848767020

METHOD BLANK: 5125309
Matrix: Water
Associated Lab Samples: 92848767001, 92848767002, 92848767003, 92848767004, 92848767008, 92848767009, 92848767010, 92848767011, 92848767012, 92848767014, 92848767016, 92848767017, 92848767018, 92848767019, 92848767020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	03/13/26 23:46	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	03/13/26 23:46	v2
Benzene	ug/L	ND	1.0	0.34	03/13/26 23:46	
Diisopropyl ether	ug/L	ND	1.0	0.31	03/13/26 23:46	
Ethanol	ug/L	ND	200	72.2	03/13/26 23:46	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	03/13/26 23:46	
Ethylbenzene	ug/L	ND	1.0	0.30	03/13/26 23:46	
m&p-Xylene	ug/L	ND	2.0	0.71	03/13/26 23:46	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	03/13/26 23:46	
Naphthalene	ug/L	ND	1.0	0.64	03/13/26 23:46	
o-Xylene	ug/L	ND	1.0	0.34	03/13/26 23:46	
tert-Amyl Alcohol	ug/L	ND	100	36.4	03/13/26 23:46	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	03/13/26 23:46	
tert-Butyl Alcohol	ug/L	ND	100	26.8	03/13/26 23:46	
tert-Butyl Formate	ug/L	ND	50.0	29.4	03/13/26 23:46	
Toluene	ug/L	ND	1.0	0.48	03/13/26 23:46	
Xylene (Total)	ug/L	ND	1.0	0.34	03/13/26 23:46	
1,2-Dichloroethane-d4 (S)	%	96	70-130		03/13/26 23:46	
4-Bromofluorobenzene (S)	%	101	70-130		03/13/26 23:46	
Toluene-d8 (S)	%	104	70-130		03/13/26 23:46	

LABORATORY CONTROL SAMPLE: 5125310

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	21.7	108	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	305	76	70-130	v3
Benzene	ug/L	20	21.1	106	70-130	
Diisopropyl ether	ug/L	20	20.2	101	70-130	
Ethanol	ug/L	800	766	96	70-130	
Ethyl-tert-butyl ether	ug/L	40	42.6	107	70-130	
Ethylbenzene	ug/L	20	21.5	107	70-130	
m&p-Xylene	ug/L	40	43.2	108	70-130	
Methyl-tert-butyl ether	ug/L	20	21.5	107	70-130	
Naphthalene	ug/L	20	16.4	82	70-130	
o-Xylene	ug/L	20	21.9	110	70-130	

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

LABORATORY CONTROL SAMPLE: 5125310

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
tert-Amyl Alcohol	ug/L	400	362	90	70-130	
tert-Amylmethyl ether	ug/L	40	40.0	100	70-130	
tert-Butyl Alcohol	ug/L	200	186	93	70-130	
tert-Butyl Formate	ug/L	160	140	88	70-130	
Toluene	ug/L	20	21.1	105	70-130	
Xylene (Total)	ug/L	60	65.1	109	70-130	
1,2-Dichloroethane-d4 (S)	%			103	70-130	
4-Bromofluorobenzene (S)	%			99	70-130	
Toluene-d8 (S)	%			100	70-130	

MATRIX SPIKE SAMPLE: 5125311

Parameter	Units	92848767003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	ND	20	25.7	129	70-137	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	409	102	39-157	
Benzene	ug/L	30.1	20	51.7	108	70-151	
Diisopropyl ether	ug/L	ND	20	22.6	113	63-144	
Ethanol	ug/L	ND	800	1000	126	39-176	
Ethyl-tert-butyl ether	ug/L	ND	40	47.0	118	66-137	
Ethylbenzene	ug/L	9.0	20	32.8	119	66-153	
m&p-Xylene	ug/L	11.0	40	58.5	119	69-152	
Methyl-tert-butyl ether	ug/L	7.8	20	30.2	112	54-156	
Naphthalene	ug/L	84.9	20	103	92	61-148	
o-Xylene	ug/L	1.5	20	25.7	121	70-148	
tert-Amyl Alcohol	ug/L	53.6J	400	494	110	54-153	
tert-Amylmethyl ether	ug/L	ND	40	45.6	114	69-139	
tert-Butyl Alcohol	ug/L	173	200	469	148	43-188	
tert-Butyl Formate	ug/L	ND	160	45.9J	29	10-170	
Toluene	ug/L	0.88J	20	24.7	119	59-148	
Xylene (Total)	ug/L	12.5	60	84.1	119	63-158	
1,2-Dichloroethane-d4 (S)	%				100	70-130	
4-Bromofluorobenzene (S)	%				100	70-130	
Toluene-d8 (S)	%				100	70-130	

SAMPLE DUPLICATE: 5125312

Parameter	Units	92848767004 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dichloroethane	ug/L	ND	ND		30	
3,3-Dimethyl-1-Butanol	ug/L	ND	ND		30	
Benzene	ug/L	ND	ND		30	
Diisopropyl ether	ug/L	ND	ND		30	
Ethanol	ug/L	ND	ND		30	
Ethyl-tert-butyl ether	ug/L	ND	ND		30	
Ethylbenzene	ug/L	ND	ND		30	

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

SAMPLE DUPLICATE: 5125312

Parameter	Units	92848767004 Result	Dup Result	RPD	Max RPD	Qualifiers
m&p-Xylene	ug/L	ND	ND		30	
Methyl-tert-butyl ether	ug/L	ND	ND		30	
Naphthalene	ug/L	ND	ND		30	
o-Xylene	ug/L	ND	ND		30	
tert-Amyl Alcohol	ug/L	ND	ND		30	
tert-Amylmethyl ether	ug/L	ND	ND		30	
tert-Butyl Alcohol	ug/L	ND	ND		30	
tert-Butyl Formate	ug/L	ND	ND		30	
Toluene	ug/L	ND	ND		30	
Xylene (Total)	ug/L	ND	ND		30	
1,2-Dichloroethane-d4 (S)	%	98	98			
4-Bromofluorobenzene (S)	%	99	100			
Toluene-d8 (S)	%	102	100			

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

QC Batch: 997405
QC Batch Method: EPA 8260D
Analysis Method: EPA 8260D
Analysis Description: 8260 MSV Low Level SC
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92848767013, 92848767015

METHOD BLANK: 5127684 Matrix: Water
Associated Lab Samples: 92848767013, 92848767015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dichloroethane	ug/L	ND	1.0	0.32	03/18/26 09:48	
3,3-Dimethyl-1-Butanol	ug/L	ND	100	51.9	03/18/26 09:48	
Benzene	ug/L	ND	1.0	0.34	03/18/26 09:48	
Diisopropyl ether	ug/L	ND	1.0	0.31	03/18/26 09:48	
Ethanol	ug/L	ND	200	72.2	03/18/26 09:48	
Ethyl-tert-butyl ether	ug/L	ND	10.0	3.2	03/18/26 09:48	
Ethylbenzene	ug/L	ND	1.0	0.30	03/18/26 09:48	
m&p-Xylene	ug/L	ND	2.0	0.71	03/18/26 09:48	
Methyl-tert-butyl ether	ug/L	ND	1.0	0.42	03/18/26 09:48	
Naphthalene	ug/L	ND	1.0	0.64	03/18/26 09:48	v2
o-Xylene	ug/L	ND	1.0	0.34	03/18/26 09:48	
tert-Amyl Alcohol	ug/L	ND	100	36.4	03/18/26 09:48	
tert-Amylmethyl ether	ug/L	ND	10.0	2.7	03/18/26 09:48	
tert-Butyl Alcohol	ug/L	ND	100	26.8	03/18/26 09:48	
tert-Butyl Formate	ug/L	ND	50.0	29.4	03/18/26 09:48	
Toluene	ug/L	ND	1.0	0.48	03/18/26 09:48	
Xylene (Total)	ug/L	ND	1.0	0.34	03/18/26 09:48	
1,2-Dichloroethane-d4 (S)	%	110	70-130		03/18/26 09:48	
4-Bromofluorobenzene (S)	%	108	70-130		03/18/26 09:48	
Toluene-d8 (S)	%	103	70-130		03/18/26 09:48	

LABORATORY CONTROL SAMPLE: 5127685

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dichloroethane	ug/L	20	22.9	114	70-130	
3,3-Dimethyl-1-Butanol	ug/L	400	323	81	70-130	
Benzene	ug/L	20	22.2	111	70-130	
Diisopropyl ether	ug/L	20	20.4	102	70-130	
Ethanol	ug/L	800	948	118	70-130	
Ethyl-tert-butyl ether	ug/L	40	42.3	106	70-130	
Ethylbenzene	ug/L	20	20.2	101	70-130	
m&p-Xylene	ug/L	40	41.1	103	70-130	
Methyl-tert-butyl ether	ug/L	20	21.1	105	70-130	
Naphthalene	ug/L	20	14.2	71	70-130	v3
o-Xylene	ug/L	20	20.1	101	70-130	
tert-Amyl Alcohol	ug/L	400	374	94	70-130	
tert-Amylmethyl ether	ug/L	40	38.5	96	70-130	
tert-Butyl Alcohol	ug/L	200	184	92	70-130	
tert-Butyl Formate	ug/L	160	151	95	70-130	

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REPORT OF LABORATORY ANALYSIS

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9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

LABORATORY CONTROL SAMPLE: 5127685

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	20	20.0	100	70-130	
Xylene (Total)	ug/L	60	61.3	102	70-130	
1,2-Dichloroethane-d4 (S)	%			108	70-130	
4-Bromofluorobenzene (S)	%			101	70-130	
Toluene-d8 (S)	%			94	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5128134 5128135

Parameter	Units	92849504006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	20	20	25.9	23.4	129	117	70-137	10	30	
3,3-Dimethyl-1-Butanol	ug/L	ND	400	400	419	360	105	90	39-157	15	30	v3
Benzene	ug/L	ND	20	20	28.5	26.5	142	132	70-151	7	30	
Diisopropyl ether	ug/L	ND	20	20	25.0	22.7	125	114	63-144	10	30	
Ethanol	ug/L	ND	800	800	974	875	122	109	39-176	11	30	
Ethyl-tert-butyl ether	ug/L	ND	40	40	51.7	47.6	129	119	66-137	8	30	
Ethylbenzene	ug/L	ND	20	20	25.3	23.2	126	116	66-153	9	30	
m&p-Xylene	ug/L	ND	40	40	51.5	47.1	129	118	69-152	9	30	
Methyl-tert-butyl ether	ug/L	ND	20	20	25.4	23.6	127	118	54-156	7	30	
Naphthalene	ug/L	ND	20	20	18.9	18.4	95	92	61-148	3	30	
o-Xylene	ug/L	ND	20	20	26.4	24.6	132	123	70-148	7	30	
tert-Amyl Alcohol	ug/L	ND	400	400	456	398	114	99	54-153	14	30	
tert-Amylmethyl ether	ug/L	ND	40	40	48.7	45.3	122	113	69-139	7	30	
tert-Butyl Alcohol	ug/L	ND	200	200	265	236	132	118	43-188	12	30	
tert-Butyl Formate	ug/L	ND	160	160	109	82.9	68	52	10-170	27	30	
Toluene	ug/L	ND	20	20	27.9	25.6	139	128	59-148	8	30	
Xylene (Total)	ug/L	ND	60	60	77.9	71.7	130	120	63-158	8	30	
1,2-Dichloroethane-d4 (S)	%						91	89	70-130			
4-Bromofluorobenzene (S)	%						95	95	70-130			
Toluene-d8 (S)	%						99	100	70-130			

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

QC Batch: 996325
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92848767001, 92848767002, 92848767003, 92848767004, 92848767005, 92848767006, 92848767007, 92848767008, 92848767009, 92848767010, 92848767011, 92848767012, 92848767013, 92848767014, 92848767015, 92848767016, 92848767018

METHOD BLANK: 5122282 Matrix: Water
Associated Lab Samples: 92848767001, 92848767002, 92848767003, 92848767004, 92848767005, 92848767006, 92848767007, 92848767008, 92848767009, 92848767010, 92848767011, 92848767012, 92848767013, 92848767014, 92848767015, 92848767016, 92848767018

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	0.0074	03/13/26 12:14	
1-Chloro-2-bromopropane (S)	%	115	60-140		03/13/26 12:14	

LABORATORY CONTROL SAMPLE & LCSD: 5122283 5122284

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.25	0.30	0.28	120	113	60-140	6	20	
1-Chloro-2-bromopropane (S)	%				114	108	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5122286 5122287

Parameter	Units	92848767002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	0.26	0.26	0.28	0.26	107	102	60-140	4	20	
1-Chloro-2-bromopropane (S)	%						102	97	60-140			

SAMPLE DUPLICATE: 5122285

Parameter	Units	92848767001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.40		20	
1-Chloro-2-bromopropane (S)	%	107	125			

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

QC Batch: 996412
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92848767020, 92848767021, 92848767022

METHOD BLANK: 5122555 Matrix: Water
Associated Lab Samples: 92848767020, 92848767021, 92848767022

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	0.0075	03/12/26 15:58	
1-Chloro-2-bromopropane (S)	%	120	60-140		03/12/26 15:58	

LABORATORY CONTROL SAMPLE & LCSD: 5122556 5122557

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.24	0.23	0.22	95	90	60-140	4	20	
1-Chloro-2-bromopropane (S)	%				100	91	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5122558 5122559

Parameter	Units	92848769001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	0.25	0.25	0.42	0.25	169	102	60-140	49	20	M1,R1
1-Chloro-2-bromopropane (S)	%						123	123	60-140			

SAMPLE DUPLICATE: 5122560

Parameter	Units	92848767020 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	99	96			

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QUALITY CONTROL DATA

Project: 501 AMOCO #05156
Pace Project No.: 92848767

QC Batch: 997015
QC Batch Method: EPA 8011
Analysis Method: EPA 8011
Analysis Description: GCS 8011 EDB DBCP
Laboratory: Pace Analytical Services - Charlotte
Associated Lab Samples: 92848767017, 92848767019

METHOD BLANK: 5126011 Matrix: Water
Associated Lab Samples: 92848767017, 92848767019

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	0.020	0.0074	03/16/26 12:37	
1-Chloro-2-bromopropane (S)	%	144	60-140		03/16/26 12:37	S3

LABORATORY CONTROL SAMPLE & LCSD: 5126012 5126013

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	0.25	0.28	0.27	113	109	60-140	4	20	
1-Chloro-2-bromopropane (S)	%				110	105	60-140			

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 5126015 5126016

Parameter	Units	92849298002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dibromoethane (EDB)	ug/L	ND	0.26	0.26	0.24	0.24	94	94	60-140	0	20	
1-Chloro-2-bromopropane (S)	%						96	97	60-140			

SAMPLE DUPLICATE: 5126014

Parameter	Units	92849298001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	ND	ND		20	
1-Chloro-2-bromopropane (S)	%	92	118			

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QUALIFIERS

Project: 501 AMOCO #05156
Pace Project No.: 92848767

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.
S3	Surrogate recovery exceeded laboratory control limits. Analyte presence below reporting limits in associated sample.
v2	The continuing calibration verification was below the method acceptance limit. The analyte was not detected in the associated samples and the sensitivity of the instrument was verified with a reporting limit check standard.
v3	The continuing calibration verification was below the method acceptance limit. Any detection for the analyte in the associated samples may have low bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92848767001	05156 MW-2	EPA 8011	996325	EPA 8011	996379
92848767002	05156 MW-6	EPA 8011	996325	EPA 8011	996379
92848767003	05156 MW-7	EPA 8011	996325	EPA 8011	996379
92848767004	05156 MW-8	EPA 8011	996325	EPA 8011	996379
92848767005	05156 MW-11	EPA 8011	996325	EPA 8011	996379
92848767006	05156 MW-12	EPA 8011	996325	EPA 8011	996379
92848767007	05156 MW-13	EPA 8011	996325	EPA 8011	996379
92848767008	05156 MW-14	EPA 8011	996325	EPA 8011	996379
92848767009	05156 MW-15	EPA 8011	996325	EPA 8011	996379
92848767010	05156 MW-16	EPA 8011	996325	EPA 8011	996379
92848767011	05156 DUP-1	EPA 8011	996325	EPA 8011	996379
92848767012	05156 MW-17	EPA 8011	996325	EPA 8011	996379
92848767013	05156 MW-18	EPA 8011	996325	EPA 8011	996379
92848767014	05156 MW-19	EPA 8011	996325	EPA 8011	996379
92848767015	05156 TW-1	EPA 8011	996325	EPA 8011	996379
92848767016	05156 TW-2	EPA 8011	996325	EPA 8011	996379
92848767017	05156 RW-1	EPA 8011	997015	EPA 8011	997050
92848767018	05156 DUP-2	EPA 8011	996325	EPA 8011	996379
92848767019	05156 SW-1	EPA 8011	997015	EPA 8011	997050
92848767020	05156 WWC	EPA 8011	996412	EPA 8011	996475
92848767021	05156 FB	EPA 8011	996412	EPA 8011	996475
92848767022	05156 FB	EPA 8011	996412	EPA 8011	996475
92848767001	05156 MW-2	EPA 8260D	996849		
92848767002	05156 MW-6	EPA 8260D	996849		
92848767003	05156 MW-7	EPA 8260D	996849		
92848767004	05156 MW-8	EPA 8260D	996849		
92848767005	05156 MW-11	EPA 8260D	996794		
92848767006	05156 MW-12	EPA 8260D	996794		
92848767007	05156 MW-13	EPA 8260D	996792		
92848767008	05156 MW-14	EPA 8260D	996849		
92848767009	05156 MW-15	EPA 8260D	996849		
92848767010	05156 MW-16	EPA 8260D	996849		
92848767011	05156 DUP-1	EPA 8260D	996849		
92848767012	05156 MW-17	EPA 8260D	996849		
92848767013	05156 MW-18	EPA 8260D	997405		
92848767014	05156 MW-19	EPA 8260D	996849		
92848767015	05156 TW-1	EPA 8260D	997405		
92848767016	05156 TW-2	EPA 8260D	996849		
92848767017	05156 RW-1	EPA 8260D	996849		
92848767018	05156 DUP-2	EPA 8260D	996849		
92848767019	05156 SW-1	EPA 8260D	996849		
92848767020	05156 WWC	EPA 8260D	996849		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 501 AMOCO #05156
Pace Project No.: 92848767

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92848767021	**05156 FB**	EPA 8260D	996447		
92848767022	**05156 FB**	EPA 8260D	996447		
92848767023	**05156 TB**	EPA 8260D	996447		

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Effective Date: 05/24/2024

Laboratory receiving samples:

Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Sample Condition Upon Receipt

Client Name: Emrab

Project #: **WO# : 92848767**

92848767

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other:____

Custody Seal Present? ☐ Yes ☑ No Seals Intact? ☐ Yes ☐ No ☑ N/A

Date/Initials Person Examining Contents: JC 3.11.24

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer:

☐ IR Gun ID: 92683

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp: 2.7 Correction Factor: Add/Subtract (°C) 0

Temp should be above freezing to 6°C

☐ Samples out of temp criteria. Samples on ice, cooling process has begun

Cooler Temp Corrected (°C): 2.8

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☑ No	☐ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WT				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☑ No	☐ N/A	10.
Trip Blank Present?	☑ Yes	☐ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☑ Yes	☐ No	☐ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: _____ Date: _____

Project Manager SRF Review: _____ Date: _____

Pace

Effective Date: 05/24/2024

WO#: 92848767

PM: AMJ Due Date: 03/18/26

CLIENT: 92-EMERALD

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

**Bottom half of box is to list number of bottles

***Check all unpreserved Nitrates for chlorine

Project #

Laboratory Receiving Location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client Emerald Profile/EZ (Circle one) 3876-1 Notes

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (CL)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)		BP4S-125 mL Plastic H2SO4 (pH < 2) (CL)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (CL)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CL)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (CL)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG8A-40 mL Amber NH4Cl (N/A)(CL)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3R-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (CL)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC																	CH											
1																	6											
2																	6											
3																	6											
4																	6											
5																	6											
6																	6											
7																	6											
8																	C											
9																	6											
10																	C											
11																	6											
12																	C											

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace

Effective Date: 05/24/2024

*Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.
Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg
**Bottom half of box is to list number of bottles
***Check all unpreserved Nitrates for chlorine

Project #

Laboratory Receiving location: Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☒ Raleigh ☐ Mechanicsville ☐ Atlanta ☐ Kernersville ☐

Client Emerald Profile/EZ (Circle one) 3876-1 Notes

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (CL)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (CL)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic Zn Acetate & NaOH (>9)	BP4B-125 mL Plastic NaOH (pH > 12) (CL)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (CL)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (CL)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	DG9H-40 mL Amber NH4Cl (N/A)(CL)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unpreserved (N/A)	DG9V-40 mL VOA H3PO4 (N/A)	KP7U-50 mL Plastic Unpreserved (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A - lab)	SP2T-250 mL Sterile Plastic (N/A - lab)		BP3R-250 mL Plastic (NH4)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved (N/A) (CL)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
CC																CH													
1																6													
2																6													
3																6													
4																6													
5																6													
6																6													
7																6													
8																6													
9																6													
10																6													
11																2													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DENR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Emerald	Billing Information:
Address: PO Box 30503 Santee SC 29151	
Report To: CMcClary	Email To:
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: 501 Amoco	State: County/City: Time Zone Collected: SC / Myrtle Beach [ ] PT [ ] MT [ ] CT [ ] ET
Phone: Email: 803-469-5454	Site/Facility ID #: 05156
Collected By (print): S Brown	Purchase Order #: Quote #:
Collected By (signature):	Turnaround Date Required:
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [ ] Yes [ ] No

DW PWS ID #: DW Location Code:

Immediately Packed on Ice: [ ] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	BTEX NM DCA OXYS (8260)	EDB (8011)
05156 MW-2	GW	G			3/9/26	1020		6	X	X
MW-6					3/10/26	1245				
MW-7					3/10/26	1210				
MW-8					3/10/26	1005				
MW-11					3/10/26	1050				
MW-12					3/10/26	1120				
MW-13					3/9/26	0810				
MW-14					3/9/26	1135				
MW-15					3/9/26	1045				
05156 MW-16	GW	G			3/9/26	1110		6	X	X

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2792562

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____oC
Cooler 1 Therm Corr. Factor: _____oC
Cooler 1 Corrected Temp: _____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 3/10/26	Received by/Company: (Signature) Pace	Date/Time: 3/11/26 0950
Relinquished by/Company: (Signature)	Date/Time: 3/11/26 1230	Received by/Company: (Signature)	Date/Time: 3.11.26 1230
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 1 of: 3

Pace Analytical

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Emerald

Address: PO Box 3050 Sumter SC 29151

Report To: C McClacy

Copy To:

Customer Project Name/Number: 501 Amoco

Phone: Email: 803-469-5454

Collected By (print): S Brown

Collected By (signature): [signature]

Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____

Billing Information:

Email To:

Site Collection Info/Address:

State: SC County/City: Myrtle Beach Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Site/Facility ID #: 05156

Purchase Order #:
Quote #:

Turnaround Date Required:

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [ ] Yes [ ] No

DW PWS ID #:
DW Location Code:

Immediately Packed on Ice: [ ] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis: _____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID		Matrix *	Comp / Grab	Collected (or Composite Start) Date	Time	Composite End Date	Time	Res Cl	# of Ctns	BTEX NM DCH OXYS (8260D)	EDB (8011)
05156	Dup-1	GW	G			3/9/26	1113		6	X	X
	MW-17					3/9/26	0900				
	MW-18					3/9/26	0830				
	MW-19					3/9/26	1235				
	TW-1					3/9/26	0950				
	TW-2					3/10/26	0935				
	RW-1					3/9/26	1215				
	Dup-2					3/9/26	1218				
	SW-1					3/10/26	1140				
05156	WWC	GW	G			3/9/26	1350		6	X	X

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2792563

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____oC
Cooler 1 Therm Corr. Factor: _____oC
Cooler 1 Corrected Temp: _____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
[signature]	3/10/26	[signature]	3/11/26 0950
[signature]	3/11/26 1230	[signature]	3-11-26 1230

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 2 of: 3

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Emerald	Billing Information:
Address: PO Box 3050 Somtec SC 29151	
Report To: CMcClary	Email To:
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: 501 Amoco	State: SC County/City: Myrtle Beach Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: Email: 803.469-5454	Site/Facility ID #: 05156
Collected By (print): S Brown	Purchase Order #: Quote #:
Collected By (signature):	Turnaround Date Required:
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [ ] Yes [ ] No

DW PWS ID #: DW Location Code:

Immediately Packed on Ice: [ ] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: BTEX NM 124 DAYS (8260D)	Analyses: EDB (8011)
05156 FB	GW	G			3/9/26	0750		6	X	X
05156 FB	GW	G			3/10/26	0845		6	X	X
05156 TB	GW	G			3/10/26	—		2	X	

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2792564

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____oC
Cooler 1 Therm Corr. Factor: _____oC
Cooler 1 Corrected Temp: _____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time: 3/10/26	Received by/Company: (Signature) Date/Time: 3/11/26 0950
Relinquished by/Company: (Signature)	Date/Time: 3/11/26 1230	Received by/Company: (Signature) TC Date/Time: 3-11-26 1230
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature) Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: 3 of: 3

APPENDIX C

Disposal Manifests

Emerald, Inc.

CONSULTING AND ENGINEERING
SERVICES IN ENVIRONMENTAL AFFAIRS

2520 TAHOE DRIVE · POST OFFICE BOX 3050 · SUMTER, SOUTH CAROLINA 29151

WEBSITE:
www.emeraldinc-us.com

TELEPHONE (803) 469-5454
FAX (803) 469-5465

April 1, 2026

Mr. Yusef Hussein, Hydrogeologist
Corrective Action & Quality Assurance Section
Underground Storage Tank Management Division
South Carolina Department of Environmental Services
2600 Bull Street
Columbia, SC 29201-1708

RE: Purge Water Treatment
501 Amoco
1432 US Highway 501
Myrtle Beach, South Carolina
Horry County
UST Permit #05156

Mr. Hussein,

Emerald, Inc. is providing this letter to certify the on-site treatment of purge water at the subject site. This purge water was treated in compliance with the conditions set forth in "Proposed Conditions for use of Portable Activated Carbon Units for the Treatment of Small Volumes of Petroleum Hydrocarbon Contaminated Groundwater".

Applicability:

Groundwater to be treated is generated from well development and sampling.

Conditions:

1. The purge and development water is mixed prior to treatment by the activated carbon unit.
2. Free product was not detected in the purge water.
3. Groundwater analytical results from monitoring wells indicate average concentrations of hydrocarbons to be less than 5,000 parts per billion (ppb) Benzene and less than 20,000 ppb total BTEX.
4. The carbon filter material will be replaced after 5,000 gallons of treatment.

5. A record of usage will be maintained by the Contractor.
6. The manufacturer's recommendations have been adhered to.
7. Any SCDES recommendations and any conditions set forth by SCDES will be adhered to.

Purge waters were treated on-site by Emerald, Inc. personnel using a treatment drum loaded with approximately 50 pounds of activated carbon. This carbon will be loaded to a maximum amount of 3 pounds of total organic carbon or 5,000 gallons of development/purge water, whichever occurs first. Cumulative organic compounds absorbed by the activated carbon is tracked to ensure the capacity of the carbon is not exceeded.

Origin of Water	Treatment Date	Amount
Purge Water	3/9 and 3/10/26	197.5 Gallons

If you have any additional questions please contact Emerald, Inc. at your convenience. Emerald, Inc. can be reached at 803-469-5454.

Yours very truly,
EMERALD, INC.

William C. McClary, P.G.
Project Geologist

APPENDIX D

QAPP Contractor's Checklist

South Carolina
Underground Storage Tank Program

501 Amoco
SCDES ID #05156
April 1, 2026

Contractor Checklist

For each report submitted to the UST Management Division, the contractor will be required to verify that all data elements for the required scope of work have been provided. For items not required for the scope of work, the N/A box should be checked. For items required and not completed or provided, the No box should be checked and a thorough description of the reason must be provided.

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

Item #	Item	Yes	No	N/A
28	Are the site-conceptual model tables included? (Tier 1 Risk Evaluation)			X
29	Have the exposure pathways been analyzed? (Tier 2 Risk Evaluation)			X
30	Have the SSTLs for each compund and pathway been calculated? (Tier 2 Risk Evaluation)			X
31	Have recommendations for further action been provided and explained?	X		
32	Has the soil analytical data for the site been provided in tabular format?			X
33	Has the potentiometric data for the site been provided in tabular format? (Table 1)	X		
34	Has the current and historical laboratory data been provided in tabular format? (Table 2 and 3)	X		
35	Have the aquifer characteristics been provided and summarized on the appropriate form?			X
36	Have the Site conceptual model tables been included? (Tier 1 Risk Evaluation)			X
37	Has the topographic map been provided with all required elements?	X		
38	Has the site base map been provided with all required elements?	X		
39	Have the CoC site maps been provided? (Figure 4 through 4E)	X		
40	Has the site potentiometric map been provided? (Figure 3)	X		
41	Have the geologic cross-sections been provided?			X
42	Have maps showing the predicted migration of the CoCs through time been provided? (Tier 2 Risk Evaluation)			X
43	Has the site survey been provided and include all necessary elements?			X
44	Have the sampling logs, chain of custody forms, and the analytical data package been included with all required elements? (Appendix B)	X		
45	Is the laboratory performing the analyses properly certified?	X		
46	Has the tax map been included with all necessary elements?			X
47	Have the soil boring/field screening logs been provided?			X
48	Have the well completion logs and SCDES Form 1903 been provided?	X		
49	Have the aquifer evaluation forms, data, graphs, equation, etc. been provided?			X
50	Have the disposal manifests been provided? (Appendix C)	X		
51	Has a copy of the local zoning regulations been provided?			X
52	Has all fate and transport modeling been provided?			X
53	Have copies of all access agreements obtained by the contractor been provided?			X
54	Has a copy of this form been attached to the final report and are explanations for any missing or incomplete data been provided? (Appendix D)	X		