APPENDIX D

VOC HAP Emissions Data

D1. VOC HAP Calculations

D2. VOC HAP Analytical Reports

D1. VOC HAP Calculations

VOC HAP Emission Summary - Global South Portland Residual Oil Tank #3				
Page 1 of 2	Tank #3 - Run 1 SUMMA #2580			
Date	15-Apr-13			
Start	21:00			
Stop	22:30			
Compounds		ug/M3	lb/hr	ton/yr
Dichlorodifluoromethane (FREON 12)	<	190	1.82E-04	7.97E-04
1,2-Dichlorotetrafluoroethane	<	230	2.20E-04	9.64E-04
Chloromethane	<	120	1.15E-04	5.03E-04
Vinyl Chloride	<	87	8.33E-05	3.65E-04
Chloroethane	<	150	1.44E-04	6.29E-04
1,3-Butadiene	<	210	2.01E-04	8.80E-04
Trichlorofluoromethane (FREON 11)	<	210	2.01E-04	8.80E-04
Ethanol (ethyl alcohol)	<	1400	1.34E-03	5.87E-03
Trichlorotrifluoroethane	<	220	2.11E-04	9.22E-04
2-propanol	<	1400	1.34E-03	5.87E-03
2-Propanone	<	1400	1.34E-03	5.87E-03
Methyl Ethyl Ketone (2-Butanone)	<	1700	1.63E-03	7.13E-03
Methyl Isobutyl Ketone	<	2500	2.39E-03	1.05E-02
Methyl Butyl Ketone (2-Hexanone)	<	1600	1.53E-03	6.71E-03
Methyl t-butyl ether (MTBE)	<	140	1.34E-04	5.87E-04
Ethyl Acetate	<	1500	1.44E-03	6.29E-03
1,1-Dichloroethylene	<	190	1.82E-04	7.97E-04
cis-1,2-Dichloroethylene	<	140	1.34E-04	5.87E-04
trans-1,2-Dichloroethylene	<	150	1.44E-04	6.29E-04
Methylene Chloride(Dichloromethane)	<	1100	1.05E-03	4.61E-03
Chloroform	<	140	1.34E-04	5.87E-04
Carbon Tetrachloride	<	360	3.45E-04	1.51E-03
1,1-Dichloroethane	<	150	1.44E-04	6.29E-04
1,2-Dichloroethane	<	150	1.44E-04	6.29E-04
Ethylene Dibromide	<	250	2.39E-04	1.05E-03
1,1,1-Trichloroethane	<	310	2.97E-04	1.30E-03
1,1,2-Trichloroethane	<	160	1.53E-04	6.71E-04
1,1,2,2-Tetrachloroethane	<	260	2.49E-04	1.09E-03
cis-1,3-Dichloropropene	<	160	1.53E-04	6.71E-04
trans-1,3-Dichloropropene	<	150	1.44E-04	6.29E-04
1,2-Dichloropropane	<	350	3.35E-04	1.47E-03
Bromomethane	<	130	1.24E-04	5.45E-04
Bromoform	<	390	3.73E-04	1.64E-03
Bromodichloromethane	<	250	2.39E-04	1.05E-03
Dibromochloromethane	<	320	3.06E-04	1.34E-03
Trichloroethylene	<	310	2.97E-04	1.30E-03
Volumetric Flow (scfh)	15300			

VOC HAP Emission Summary - Global South Portland Residual Oil Tank #3				
Page 2 of 2	Tank #3 - Run 1 SUMMA #2580			
Date	15-Apr-13			
Start	21:00			
Stop	22:30			
Compounds		ug/M3	lb/hr	ton/yr
Tetrachloroethylene		693	6.63E-04	2.91E-03
Benzene		6040	5.78E-03	2.53E-02
Toluene		29600	2.83E-02	1.24E-01
Ethylbenzene		7880	7.54E-03	3.30E-02
p+m-Xylene		25900	2.48E-02	1.09E-01
o-Xylene		9750	9.33E-03	4.09E-02
Styrene	<	160	1.53E-04	6.71E-04
4-ethyltoluene		2620	2.51E-03	1.10E-02
1,3,5-Trimethylbenzene		2760	2.64E-03	1.16E-02
1,2,4-Trimethylbenzene		7840	7.50E-03	3.29E-02
Chlorobenzene	<	170	1.63E-04	7.13E-04
Benzyl chloride	<	980	9.38E-04	4.11E-03
1,3-Dichlorobenzene	<	460	4.40E-04	1.93E-03
1,4-Dichlorobenzene	<	460	4.40E-04	1.93E-03
1,2-Dichlorobenzene	<	460	4.40E-04	1.93E-03
1,2,4-Trichlorobenzene	<	2800	2.68E-03	1.17E-02
Hexachlorobutadiene	<	6100	5.84E-03	2.56E-02
Hexane		24300	2.33E-02	1.02E-01
Heptane		23200	2.22E-02	9.73E-02
Cyclohexane		9450	9.05E-03	3.96E-02
Tetrahydrofuran	<	220	2.11E-04	9.22E-04
1,4-Dioxane	<	1400	1.34E-03	5.87E-03
Xylene (Total)		35700	3.42E-02	1.50E-01
Vinyl Bromide	<	170	1.63E-04	7.13E-04
Propene	<	5600	5.36E-03	2.35E-02
2,2,4-Trimethylpentane		1020	9.76E-04	4.28E-03
Carbon Disulfide	<	300	2.87E-04	1.26E-03
Vinyl Acetate	<	2100	2.01E-03	8.80E-03
Surrogate Recovery (%)				
Bromochloromethane	90			
D5-Chlorobenzene	84			
Difluorobenzene	91			
Volumetric Flow (scfh):	**15300**			
			lb/hr	**Tons/year**
Max Detected Compound: Xylene (Total)			**3.42E-02**	**1.50E-01**
Total Detected HAP:			**1.79E-01**	**7.83E-01**
Total Detected/Nondetected HAP:			**2.17E-01**	**9.50E-01**

VOC Tentitively Identified Compounds - Global S. Portland Residual Oil Tank #3			
Page 1 of 1	Tank #3 - Run 1 SUMMA #2580		
Date	15-Apr-13		
Start	21:00		
Stop	22:30		
Tentitively Identified Compounds	ug/M3	lb/hr	ton/yr
Isobutane	7010	6.71E-03	2.94E-02
1-Propene, 2-methyl-	3700	3.54E-03	1.55E-02
Butane, 2-methyl-	23400	2.24E-02	9.81E-02
Pentane	28400	2.72E-02	1.19E-01
Unknown hydrocarbon C5H10 Mol. Wt. 70	6150	5.89E-03	2.58E-02
Pentane, 2-methyl-	33200	3.18E-02	1.39E-01
Unknown hydrocarbon C6H12 Mol. Wt. 86	8380	8.02E-03	3.51E-02
Cyclopentane, methyl-	22100	2.12E-02	9.27E-02
Hexane, 3-methyl-	12300	1.18E-02	5.16E-02
Unknown hydrocarbon C7H14 Mol. Wt. 98	6890	6.59E-03	2.89E-02
Unknown hydrocarbon C7H14 Mol. Wt. 98	7130	6.82E-03	2.99E-02
Unknown hydrocarbon C7H14 Mol. Wt. 98	7860	7.52E-03	3.30E-02
Unknown cylcopentane, C8H16 Mol. Wt. 112	9400	9.00E-03	3.94E-02
Heptane, 2-methyl-	21300	2.04E-02	8.93E-02
Unknown cylcohexane, C8H16 Mol. Wt. 112	9190	8.80E-03	3.85E-02
Unknown aliphatic hydrocarbon	30500	2.92E-02	1.28E-01
Octane, 4-methyl-	9570	9.16E-03	4.01E-02
Nonane	11900	1.14E-02	4.99E-02
Unknown aromatic hydrocarbon	7980	7.64E-03	3.35E-02
Volumetric Flow (scfh)	15300		
Total TICs (tons/year)	1.12E+00		
Total TICs (lb/hr)	2.55E-01		

VOC HAP Emission Summary - Global South Portland Residual Oil Tank #3				
Page 1 of 2	Tank #3 - Run 2 (Vessel Transfer) SUMMA #T2562			
Date	16-Apr-13			
Start	9:22			
Stop	9:42			
Compounds		ug/M3	lb/hr	tons/transfer
Dichlorodifluoromethane (FREON 12)	<	490	4.18E-04	2.1919E-06
1,2-Dichlorotetrafluoroethane	<	590	5.03E-04	2.64E-06
Chloromethane	<	310	2.64E-04	1.39E-06
Vinyl Chloride	<	230	1.96E-04	1.03E-06
Chloroethane	<	400	3.41E-04	1.79E-06
1,3-Butadiene	<	550	4.69E-04	2.46E-06
Trichlorofluoromethane (FREON 11)	<	560	4.77E-04	2.51E-06
Ethanol (ethyl alcohol)	<	3900	3.32E-03	1.74E-05
Trichlorotrifluoroethane	<	570	4.86E-04	2.55E-06
2-propanol	<	3700	3.15E-03	1.66E-05
2-Propanone	<	3600	3.07E-03	1.61E-05
Methyl Ethyl Ketone (2-Butanone)	<	4400	3.75E-03	1.97E-05
Methyl Isobutyl Ketone	<	6600	5.62E-03	2.95E-05
Methyl Butyl Ketone (2-Hexanone)	<	4100	3.49E-03	1.83E-05
Methyl t-butyl ether (MTBE)	<	360	3.07E-04	1.61E-06
Ethyl Acetate	<	4000	3.41E-03	1.79E-05
1,1-Dichloroethylene	<	500	4.26E-04	2.24E-06
cis-1,2-Dichloroethylene	<	380	3.24E-04	1.70E-06
trans-1,2-Dichloroethylene	<	400	3.41E-04	1.79E-06
Methylene Chloride(Dichloromethane)	<	2400	2.04E-03	1.07E-05
Chloroform	<	370	3.15E-04	1.66E-06
Carbon Tetrachloride	<	940	8.01E-04	4.20E-06
1,1-Dichloroethane	<	400	3.41E-04	1.79E-06
1,2-Dichloroethane	<	400	3.41E-04	1.79E-06
Ethylene Dibromide	<	650	5.54E-04	2.91E-06
1,1,1-Trichloroethane	<	820	6.99E-04	3.67E-06
1,1,2-Trichloroethane	<	410	3.49E-04	1.83E-06
1,1,2,2-Tetrachloroethane	<	690	5.88E-04	3.09E-06
cis-1,3-Dichloropropene	<	410	3.49E-04	1.83E-06
trans-1,3-Dichloropropene	<	390	3.32E-04	1.74E-06
1,2-Dichloropropane	<	920	7.84E-04	4.12E-06
Bromomethane	<	350	2.98E-04	1.57E-06
Bromoform	<	1000	8.52E-04	4.47E-06
Bromodichloromethane	<	670	5.71E-04	3.00E-06
Dibromochloromethane	<	850	7.24E-04	3.80E-06
Trichloroethylene	<	810	6.90E-04	3.62E-06
Volumetric Flow (scfh)	13620			

VOC HAP Emission Summary - Global South Portland Residual Oil Tank #3				
Page 2 of 2	Tank #3 - Run 2 (Vessel Transfer) SUMMA #T2562			
Date	16-Apr-13			
Start	9:22			
Stop	9:42			
Compounds		ug/M3	lb/hr	tons/transfer
Tetrachloroethylene	<	680	5.79E-04	3.04E-06
Benzene		15900	1.35E-02	7.11E-05
Toluene		55000	4.69E-02	2.46E-04
Ethylbenzene		11600	9.88E-03	5.19E-05
p+m-Xylene		39700	3.38E-02	1.78E-04
o-Xylene		15200	1.30E-02	6.80E-05
Styrene	<	430	3.66E-04	1.92E-06
4-ethyltoluene	<	5400	4.60E-03	2.42E-05
1,3,5-Trimethylbenzene		5830	4.97E-03	2.61E-05
1,2,4-Trimethylbenzene		17300	1.47E-02	7.74E-05
Chlorobenzene	<	460	3.92E-04	2.06E-06
Benzyl chloride	<	2600	2.22E-03	1.16E-05
1,3-Dichlorobenzene	<	1200	1.02E-03	5.37E-06
1,4-Dichlorobenzene	<	1200	1.02E-03	5.37E-06
1,2-Dichlorobenzene	<	1200	1.02E-03	5.37E-06
1,2,4-Trichlorobenzene	<	7400	6.31E-03	3.31E-05
Hexachlorobutadiene	<	16000	1.36E-02	7.16E-05
Hexane		77100	6.57E-02	3.45E-04
Heptane		60700	5.17E-02	2.72E-04
Cyclohexane		27100	2.31E-02	1.21E-04
Tetrahydrofuran	<	590	5.03E-04	2.64E-06
1,4-Dioxane	<	3600	3.07E-03	1.61E-05
Xylene (Total)		55000	4.69E-02	2.46E-04
Vinyl Bromide	<	440	3.75E-04	1.97E-06
Propene	<	26000	2.22E-02	1.16E-04
2,2,4-Trimethylpentane		3330	2.84E-03	1.49E-05
Carbon Disulfide	<	780	6.65E-04	3.49E-06
Vinyl Acetate	<	6300	5.37E-03	2.82E-05
Surrogate Recovery (%)				
Bromochloromethane	91			
D5-Chlorobenzene	89			
Difluorobenzene	92			
Volumetric Flow (scfh)	**13620**			
			lb/hr	**Tons/transfer**
Max Detected Compound: Hexane			**6.57E-02**	**3.45E-04**
Total Detected HAP:			**3.27E-01**	**1.72E-03**
Total Detected/Nondetected HAP:			**5.17E-04**	**2.26E-03**

VOC Tentitively Identified Compounds - Global S. Portland Residual Oil Tank #3			
Page 1 of 1	Tank #3 - Run 2 (Vessel Transfer) SUMMA #T2562		
Date	16-Apr-13		
Start	9:22		
Stop	9:42		
Tentitively Identified Compounds	ug/M3	lb/hr	ton/transfer
Isobutane	24600	2.10E-02	1.36E-04
1-Propene, 2-methyl-	15600	1.33E-02	8.64E-05
Butane, 2-methyl-	76900	6.55E-02	4.26E-04
Pentane	98900	8.43E-02	5.48E-04
Unknown hydrocarbon C5H10 Mol. Wt. 70	13300	1.13E-02	7.37E-05
Unknown hydrocarbon C5H10 Mol. Wt. 70	21500	1.83E-02	1.19E-04
Pentane, 2-methyl-	107000	9.12E-02	5.93E-04
Unknown hydrocarbon C6H12 Mol. Wt. 84	26600	2.27E-02	1.47E-04
Cyclopentane, methyl-	64700	5.51E-02	3.58E-04
Hexane, 3-methyl-	33400	2.85E-02	1.85E-04
Unknown hydrocarbon C7H14 Mol. Wt. 98	18300	1.56E-02	1.01E-04
Unknown hydrocarbon C7H14 Mol. Wt. 98	18100	1.54E-02	1.00E-04
Unknown hydrocarbon C7H14 Mol. Wt. 98	19000	1.62E-02	1.05E-04
Cyclopentane, 1,2,3-trimethyl-,(1.alpha,.2.alpha.,3.beta.)-	20700	1.76E-02	1.15E-04
Heptane, 2-methyl-	46700	3.98E-02	2.59E-04
Unknown hydrocarbon	61400	5.23E-02	3.40E-04
Nonane	24600	2.10E-02	1.36E-04
Volumetric Flow (scfh)	**13620**		
Total TIC (tons/transfer)	**3.83E-03**		
Total TIC (lb/hr)	**5.89E-01**		

VOC HAP Emission Summary - Global South Portland Residual Oil Tank #3				
Page 1 of 2	Tank #3 - Run 3 SUMMA #7813			
Date	23-Apr-13			
Start	16:05			
Stop	16:35			
Compounds		ug/M3	lb/hr	ton/yr
Dichlorodifluoromethane (FREON 12)	<	180	1.84E-04	8.05E-04
1,2-Dichlorotetrafluoroethane	<	210	2.14E-04	9.39E-04
Chloromethane	<	110	1.12E-04	4.92E-04
Vinyl Chloride	<	83	8.47E-05	3.71E-04
Chloroethane	<	140	1.43E-04	6.26E-04
1,3-Butadiene	<	200	2.04E-04	8.94E-04
Trichlorofluoromethane (FREON 11)	<	200	2.04E-04	8.94E-04
Ethanol (ethyl alcohol)		2810	2.87E-03	1.26E-02
Trichlorotrifluoroethane	<	210	2.14E-04	9.39E-04
2-propanol	<	1300	1.33E-03	5.81E-03
2-Propanone		3140	3.21E-03	1.40E-02
Methyl Ethyl Ketone (2-Butanone)	<	1600	1.63E-03	7.15E-03
Methyl Isobutyl Ketone	<	2400	2.45E-03	1.07E-02
Methyl Butyl Ketone (2-Hexanone)	<	1500	1.53E-03	6.71E-03
Methyl t-butyl ether (MTBE)	<	130	1.33E-04	5.81E-04
Ethyl Acetate	<	1400	1.43E-03	6.26E-03
1,1-Dichloroethylene	<	180	1.84E-04	8.05E-04
cis-1,2-Dichloroethylene	<	140	1.43E-04	6.26E-04
trans-1,2-Dichloroethylene	<	140	1.43E-04	6.26E-04
Methylene Chloride(Dichloromethane)		5280	5.39E-03	2.36E-02
Chloroform	<	130	1.33E-04	5.81E-04
Carbon Tetrachloride	<	340	3.47E-04	1.52E-03
1,1-Dichloroethane	<	150	1.53E-04	6.71E-04
1,2-Dichloroethane	<	150	1.53E-04	6.71E-04
Ethylene Dibromide	<	240	2.45E-04	1.07E-03
1,1,1-Trichloroethane	<	290	2.96E-04	1.30E-03
1,1,2-Trichloroethane	<	150	1.53E-04	6.71E-04
1,1,2,2-Tetrachloroethane	<	250	2.55E-04	1.12E-03
cis-1,3-Dichloropropene	<	150	1.53E-04	6.71E-04
trans-1,3-Dichloropropene	<	140	1.43E-04	6.26E-04
1,2-Dichloropropane	<	330	3.37E-04	1.48E-03
Bromomethane	<	130	1.33E-04	5.81E-04
Bromoform	<	370	3.78E-04	1.65E-03
Bromodichloromethane	<	240	2.45E-04	1.07E-03
Dibromochloromethane	<	310	3.16E-04	1.39E-03
Trichloroethylene	<	290	2.96E-04	1.30E-03
Volumetric Flow (scfh)	16320			

VOC HAP Emission Summary - Global South Portland Residual Oil Tank #3				
Page 2 of 2	Tank #3 - Run 3 SUMMA #7813			
Date	23-Apr-13			
Start	16:05			
Stop	16:35			
Compounds		ug/M3	lb/hr	ton/yr
Tetrachloroethylene	<	240	2.45E-04	1.07E-03
Benzene		7510	7.67E-03	3.36E-02
Toluene		24300	2.48E-02	1.09E-01
Ethylbenzene		4920	5.02E-03	2.20E-02
p+m-Xylene		16600	1.69E-02	7.42E-02
o-Xylene		6110	6.24E-03	2.73E-02
Styrene	<	380	3.88E-04	1.70E-03
4-ethyltoluene	<	1900	1.94E-03	8.50E-03
1,3,5-Trimethylbenzene		1870	1.91E-03	8.36E-03
1,2,4-Trimethylbenzene		5130	5.24E-03	2.29E-02
Chlorobenzene	<	170	1.74E-04	7.60E-04
Benzyl chloride	<	930	9.49E-04	4.16E-03
1,3-Dichlorobenzene	<	430	4.39E-04	1.92E-03
1,4-Dichlorobenzene	<	430	4.39E-04	1.92E-03
1,2-Dichlorobenzene	<	430	4.39E-04	1.92E-03
1,2,4-Trichlorobenzene	<	2700	2.76E-03	1.21E-02
Hexachlorobutadiene	<	5800	5.92E-03	2.59E-02
Hexane		48600	4.96E-02	2.17E-01
Heptane		30200	3.08E-02	1.35E-01
Cyclohexane		12700	1.30E-02	5.68E-02
Tetrahydrofuran	<	210	2.14E-04	9.39E-04
1,4-Dioxane	<	1300	1.33E-03	5.81E-03
Xylene (Total)		22700	2.32E-02	1.02E-01
Vinyl Bromide	<	160	1.63E-04	7.15E-04
Propene	<	62000	6.33E-02	2.77E-01
2,2,4-Trimethylpentane		2490	2.54E-03	1.11E-02
Carbon Disulfide	<	280	2.86E-04	1.25E-03
Vinyl Acetate	<	3200	3.27E-03	1.43E-02
Surrogate Recovery (%)				
Bromochloromethane	85			
D5-Chlorobenzene	81			
Difluorobenzene	85			
Volumetric Flow (scfh)	**16320**			
			lb/hr	**Tons/year**
Max Detected Compound: Propene			**6.33E-02**	**2.77E-01**
Total Detected HAP:			**1.85E-01**	**8.12E-01**
Total Detected/Nondetected HAP:			**2.95E-01**	**1.29E+00**

VOC Tentitively Identified Compounds - Global S. Portland Residual Oil Tank #3			
Page 1 of 1	Tank #3 - Run 3 SUMMA #7813		
Date	23-Apr-13		
Start	16:05		
Stop	16:35		
Tentitively Identified Compounds	ug/M3	lb/hr	ton/yr
Isobutane	18900	1.93E-02	8.45E-02
1-Propene, 2-methyl	28600	2.92E-02	1.28E-01
Isomer of 2-Butene	8740	8.92E-03	3.91E-02
Isomer of 2-Butene	5700	5.82E-03	2.55E-02
Butane, 2-methyl	47400	4.84E-02	2.12E-01
1-Pentene	14100	1.44E-02	6.31E-02
Pentane	85000	8.68E-02	3.80E-01
Unknown hydrocarbon C5H10 Mol. Wt. 70	11400	1.16E-02	5.10E-02
Unknown hydrocarbon C5H10 Mol. Wt. 70	17000	1.74E-02	7.60E-02
Unknown mix of hydrocarbons	8870	9.06E-03	3.97E-02
Pentane, 2-methyl	63500	6.48E-02	2.84E-01
1-Hexene	17400	1.78E-02	7.78E-02
Unknown hydrocarbon C6H12 Mol. Wt. 84	15900	1.62E-02	7.11E-02
Cyclopentane, methyl	30600	3.12E-02	1.37E-01
Hexane, 3-methyl	14500	1.48E-02	6.48E-02
Heptane, 2-methyl	19400	1.98E-02	8.68E-02
Unknown hydrocarbon C8H16 Mol. Wt. 112	9610	9.81E-03	4.30E-02
Unknown hydrocarbon	26300	2.69E-02	1.18E-01
Volumetric Flow (scfh)	**16320**		
Total TIC (tons/year)	**1.98E+00**		
Total TIC (lb/hr)	**4.52E-01**		

VOC HAP Emission Summary - Global South Portland Residual Oil Tank #3				
Page 1 of 2	Tank #3 - Run 4 (Truck Loading) SUMMA #2758			
Date	2-Jul-13			
Start	15:55			
Stop	15:56			
Compounds		ug/M3	lb/hr	ton/transfer
Dichlorodifluoromethane (FREON 12)	<	2970	1.02E-03	2.20E-07
1,2-Dichlorotetrafluoroethane	<	3570	1.22E-03	2.65E-07
Chloromethane	<	1860	6.37E-04	1.38E-07
Vinyl Chloride	<	1380	4.72E-04	1.02E-07
Chloroethane	<	2370	8.11E-04	1.76E-07
1,3-Butadiene	<	3320	1.14E-03	2.46E-07
Trichlorofluoromethane (FREON 11)	<	3370	1.15E-03	2.50E-07
Ethanol (ethyl alcohol)	<	21500	7.36E-03	1.59E-06
Trichlorotrifluoroethane	<	3450	1.18E-03	2.56E-07
2-propanol	<	22100	7.57E-03	1.64E-06
2-Propanone	<	14300	4.90E-03	1.06E-06
Methyl Ethyl Ketone (2-Butanone)	<	136000	4.66E-02	1.01E-05
Methyl Isobutyl Ketone	<	39300	1.35E-02	2.91E-06
Methyl Butyl Ketone (2-Hexanone)	<	24600	8.42E-03	1.82E-06
Methyl t-butyl ether (MTBE)		2330	7.98E-04	1.73E-07
Ethyl Acetate	<	23800	8.15E-03	1.77E-06
1,1-Dichloroethylene	<	2970	1.02E-03	2.20E-07
cis-1,2-Dichloroethylene	<	2260	7.74E-04	1.68E-07
trans-1,2-Dichloroethylene	<	2380	8.15E-04	1.77E-07
Methylene Chloride(Dichloromethane)	<	93800	3.21E-02	6.96E-06
Chloroform	<	2200	7.53E-04	1.63E-07
Carbon Tetrachloride	<	5660	1.94E-03	4.20E-07
1,1-Dichloroethane	<	2430	8.32E-04	1.80E-07
1,2-Dichloroethane	<	2430	8.32E-04	1.80E-07
Ethylene Dibromide	<	3920	1.34E-03	2.91E-07
1,1,1-Trichloroethane	<	4910	1.68E-03	3.64E-07
1,1,2-Trichloroethane	<	2460	8.42E-04	1.82E-07
1,1,2,2-Tetrachloroethane	<	4120	1.41E-03	3.06E-07
cis-1,3-Dichloropropene	<	2450	8.39E-04	1.82E-07
trans-1,3-Dichloropropene	<	2310	7.91E-04	1.71E-07
1,2-Dichloropropane	<	5550	1.90E-03	4.12E-07
Bromomethane	<	2100	7.19E-04	1.56E-07
Bromoform	<	6200	2.12E-03	4.60E-07
Bromodichloromethane	<	4020	1.38E-03	2.98E-07
Dibromochloromethane	<	5110	1.75E-03	3.79E-07
Trichloroethylene	<	4840	1.66E-03	3.59E-07
Volumetric Flow (scfh)	5472			

VOC HAP Emission Summary - Global South Portland Residual Oil Tank #3				
Page 2 of 2	Tank #3 - Run 4 (Truck Loading) SUMMA #2758			
Date	2-Jul-13			
Start	15:55			
Stop	15:56			
Compounds		ug/M3	lb/transfer	ton/transfer
Tetrachloroethylene	<	4070	1.39E-03	3.02E-07
Benzene		41600	1.42E-02	3.09E-06
Toluene		146000	5.00E-02	1.08E-05
Ethylbenzene		33900	1.16E-02	2.51E-06
p+m-Xylene		104000	3.56E-02	7.71E-06
o-Xylene		40300	1.38E-02	2.99E-06
Styrene		5410	1.85E-03	4.01E-07
4-ethyltoluene	<	32400	1.11E-02	2.40E-06
1,3,5-Trimethylbenzene		12800	4.38E-03	9.49E-07
1,2,4-Trimethylbenzene		38400	1.31E-02	2.85E-06
Chlorobenzene	<	2760	9.45E-04	2.05E-07
Benzyl chloride	<	15500	5.31E-03	1.15E-06
1,3-Dichlorobenzene	<	7210	2.47E-03	5.35E-07
1,4-Dichlorobenzene	<	7210	2.47E-03	5.35E-07
1,2-Dichlorobenzene	<	7210	2.47E-03	5.35E-07
1,2,4-Trichlorobenzene	<	44500	1.52E-02	3.30E-06
Hexachlorobutadiene	<	96000	3.29E-02	7.12E-06
Hexane		284000	9.72E-02	2.11E-05
Heptane		235000	8.04E-02	1.74E-05
Cyclohexane		79200	2.71E-02	5.87E-06
Tetrahydrofuran	<	3540	1.21E-03	2.63E-07
1,4-Dioxane	<	21600	7.39E-03	1.60E-06
Xylene (Total)		144000	4.93E-02	1.07E-05
Vinyl Bromide	<	2620	8.97E-04	1.94E-07
Propene		172000	5.89E-02	1.28E-05
2,2,4-Trimethylpentane		19500	6.68E-03	1.45E-06
Carbon Disulfide	<	4670	1.60E-03	3.46E-07
Vinyl Acetate	<	18000	6.16E-03	1.34E-06
Surrogate Recovery (%)				
Bromochloromethane	81			
D5-Chlorobenzene	83			
Difluorobenzene	84			
Volumetric Flow (scfh)	**5472**			
			lb/transfer	**tons/transfer**
Max Detected Compound: Hexane			**9.72E-02**	**2.11E-05**
Total Detected HAP:			**4.65E-01**	**1.01E-04**
Total Detected/Nondetected HAP:			**3.54E-05**	**1.55E-04**

VOC Tentitively Identified Compounds - Global S. Portland Residual Oil Tank #3			
Page 1 of 1	Tank #3 - Run 4 (Truck Loading) SUMMA #2758		
Date	2-Jul-13		
Start	15:55		
Stop	15:56		
Tentitively Identified Compounds	ug/M3	lb/transfer	ton/transfer
Isobutane	72400	5.78E-03	6.75E-07
Unknown, likely methanol	31000	2.48E-03	2.89E-07
2-methyl -1-propene	104000	8.31E-03	9.69E-07
2-methyl butane	208000	1.66E-02	1.94E-06
1-Pentene	39100	3.12E-03	3.64E-07
Unknown hydrocarbon C5H10 Mol. Wt.70	52800	4.22E-03	4.92E-07
Pentane	338000	2.70E-02	3.15E-06
2-methyl-2-butene	49200	3.93E-03	4.58E-07
Unknown hydrocarbon C5H10 Mol. Wt.70	78300	6.25E-03	7.30E-07
Unknown hydrocarbon C6H14 Mol. Wt.86	336000	2.68E-02	3.13E-06
1-hexene	72400	5.78E-03	6.75E-07
Unknown hydrocarbon C6H12 Mol. Wt. 84	57600	4.60E-03	5.37E-07
methyl cyclopentane	178000	1.42E-02	1.66E-06
3-methyl hexane	106000	8.47E-03	9.88E-07
2-methyl- heptane	145000	1.16E-02	1.35E-06
Unknown hydrocarbon C9H20 Mol. Wt. 128	257000	2.05E-02	2.39E-06
Nonane	99700	7.96E-03	9.29E-07
Unknown hydrocarbon C13H28 Mol. Wt. 184	128000	1.02E-02	1.19E-06
Volumetric Flow (scfh)	**5472**		
Total TIC (tons/transfer)	**2.19E-05**		
Total TIC (lb/transfer)	**1.88E-01**		

D2. VOC HAP Analytical Reports

Maxxam

Success Through Science®

Your Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3
Your C.O.C. #: na

Attention: Anthony Stratton

Eastmount Environmental Services
2 New Pasture Road
Unit 5
Newburyport, MA
USA 1950

Report Date: 2013/05/08

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B362815
Received: 2013/04/26, 11:55

Sample Matrix: AIR
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	2	N/A	2013/04/29	BRL SOP-00304	EPA TO-15
Canister Pressure (TO-15)	1	N/A	2013/05/01	BRL SOP-00304	EPA TO-15
Light Hydrocarbons	3	N/A	2013/05/03	CAM SOP-00227	GC/FID
Volatile Organics in Air (ug/m3)	2	N/A	2013/05/02	BRL SOP-00304	EPA TO15 Calculated
Volatile Organics in Air (ug/m3)	1	N/A	2013/05/03	BRL SOP-00304	EPA TO15 Calculated
Volatile Organics in Air (TO-15) (1)	2	N/A	2013/04/29	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	1	N/A	2013/05/01	BRL SOP-00304	EPA TO-15

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Ancy Sebastian
08 May 2013 15:37:22 -04:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Ancy Sebastian, C.Tech., Senior Project Manager, Air Toxics
Email: ASebastian@maxxam.ca
Phone# (905) 817-5831

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam

Success Through Science®

Maxxam Job #: B362815
Report Date: 2013/05/08

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3

RESULTS OF ANALYSES OF AIR

Maxxam ID		RH6449	RH6449		RH6450			RH6451		
Sampling Date		2013/04/15 21:00	2013/04/15 21:00		2013/04/16 09:00			2013/04/23 16:05		
COC Number		na	na		na			na		
	Units	**RESIDUAL OIL SUMMA RUN 1 / 2580**	**RESIDUAL OIL SUMMA RUN 1 / 2580 Lab-Dup**	**RDL**	**RESIDUAL OIL SUMMA RUN 2 (VESSEL) / T2562**	**RDL**	**QC Batch**	**RESIDUAL OIL SUMMA RUN 3 / 7813**	**RDL**	**QC Batch**
Ethane	ppm	2.8	3.1	0.19	21	0.2	3201422	72	0.18	3201422
Pressure on Receipt	psig	(-2.9)	N/A	N/A	(-1.9)	N/A	3199570	0	N/A	3200863

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B362815
Report Date: 2013/05/08

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		RH6449		RH6450			RH6451		
Sampling Date		2013/04/15 21:00		2013/04/16 09:00			2013/04/23 16:05		
COC Number		na		na			na		
	Units	RESIDUAL OIL SUMMA RUN 1 / 2580	RDL	RESIDUAL OIL SUMMA RUN 2 (VESSEL) / T2562	RDL	QC Batch	RESIDUAL OIL SUMMA RUN 3 / 7813	RDL	QC Batch
Dichlorodifluoromethane (FREON 12)	ppbv	<38	38	<100	100	3199736	<36	36	3200869
1,2-Dichlorotetrafluoroethane	ppbv	<32	32	<85	85	3199736	<31	31	3200869
Chloromethane	ppbv	<57	57	<150	150	3199736	<54	54	3200869
Vinyl Chloride	ppbv	<34	34	<90	90	3199736	<32	32	3200869
Chloroethane	ppbv	<57	57	<150	150	3199736	<54	54	3200869
1,3-Butadiene	ppbv	<95	95	<250	250	3199736	<90	90	3200869
Trichlorofluoromethane (FREON 11)	ppbv	<38	38	<100	100	3199736	<36	36	3200869
Ethanol (ethyl alcohol)	ppbv	<760	760	<2100	2100	3199736	1490	410	3200869
Trichlorotrifluoroethane	ppbv	<29	29	<75	75	3199736	<27	27	3200869
2-propanol	ppbv	<570	570	<1500	1500	3199736	<540	540	3200869
2-Propanone	ppbv	<590	590	<1500	1500	3199736	1320	140	3200869
Methyl Ethyl Ketone (2-Butanone)	ppbv	<570	570	<1500	1500	3199736	<540	540	3200869
Methyl Isobutyl Ketone	ppbv	<610	610	<1600	1600	3199736	<580	580	3200869
Methyl Butyl Ketone (2-Hexanone)	ppbv	<380	380	<1000	1000	3199736	<360	360	3200869
Methyl t-butyl ether (MTBE)	ppbv	<38	38	<100	100	3199736	<36	36	3200869
Ethyl Acetate	ppbv	<420	420	<1100	1100	3199736	<400	400	3200869
1,1-Dichloroethylene	ppbv	<48	48	<130	130	3199736	<45	45	3200869
cis-1,2-Dichloroethylene	ppbv	<36	36	<95	95	3199736	<34	34	3200869
trans-1,2-Dichloroethylene	ppbv	<38	38	<100	100	3199736	<36	36	3200869
Methylene Chloride(Dichloromethane)	ppbv	<300	300	<700	700	3199736	1520	140	3200869
Chloroform	ppbv	<29	29	<75	75	3199736	<27	27	3200869
Carbon Tetrachloride	ppbv	<57	57	<150	150	3199736	<54	54	3200869
1,1-Dichloroethane	ppbv	<38	38	<100	100	3199736	<36	36	3200869
1,2-Dichloroethane	ppbv	<38	38	<100	100	3199736	<36	36	3200869
Ethylene Dibromide	ppbv	<32	32	<85	85	3199736	<31	31	3200869
1,1,1-Trichloroethane	ppbv	<57	57	<150	150	3199736	<54	54	3200869
1,1,2-Trichloroethane	ppbv	<29	29	<75	75	3199736	<27	27	3200869
1,1,2,2-Tetrachloroethane	ppbv	<38	38	<100	100	3199736	<36	36	3200869
cis-1,3-Dichloropropene	ppbv	<34	34	<90	90	3199736	<32	32	3200869
trans-1,3-Dichloropropene	ppbv	<32	32	<85	85	3199736	<31	31	3200869
1,2-Dichloropropane	ppbv	<76	76	<200	200	3199736	<72	72	3200869

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B362815
Report Date: 2013/05/08

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		RH6449		RH6450			RH6451		
Sampling Date		2013/04/15 21:00		2013/04/16 09:00			2013/04/23 16:05		
COC Number		na		na			na		
	Units	**RESIDUAL OIL SUMMA RUN 1 / 2580**	**RDL**	**RESIDUAL OIL SUMMA RUN 2 (VESSEL) / T2562**	**RDL**	**QC Batch**	**RESIDUAL OIL SUMMA RUN 3 / 7813**	**RDL**	**QC Batch**
Bromomethane	ppbv	<34	34	<90	90	3199736	<32	32	3200869
Bromoform	ppbv	<38	38	<100	100	3199736	<36	36	3200869
Bromodichloromethane	ppbv	<38	38	<100	100	3199736	<36	36	3200869
Dibromochloromethane	ppbv	<38	38	<100	100	3199736	<36	36	3200869
Trichloroethylene	ppbv	<57	57	<150	150	3199736	<54	54	3200869
Tetrachloroethylene	ppbv	102	38	<100	100	3199736	<36	36	3200869
Benzene	ppbv	1890	34	4980	90	3199736	2350	32	3200869
Toluene	ppbv	7880	38	14600	100	3199736	6460	36	3200869
Ethylbenzene	ppbv	1810	38	2680	100	3199736	1130	36	3200869
p+m-Xylene	ppbv	5970	70	9150	190	3199736	3830	67	3200869
o-Xylene	ppbv	2240	38	3510	100	3199736	1410	36	3200869
Styrene	ppbv	<38	38	<100	100	3199736	<90	90	3200869
4-ethyltoluene	ppbv	533	420	<1100	1100	3199736	<400	400	3200869
1,3,5-Trimethylbenzene	ppbv	561	95	1190	250	3199736	380	90	3200869
1,2,4-Trimethylbenzene	ppbv	1590	95	3530	250	3199736	1040	90	3200869
Chlorobenzene	ppbv	<38	38	<100	100	3199736	<36	36	3200869
Benzyl chloride	ppbv	<190	190	<500	500	3199736	<180	180	3200869
1,3-Dichlorobenzene	ppbv	<76	76	<200	200	3199736	<72	72	3200869
1,4-Dichlorobenzene	ppbv	<76	76	<200	200	3199736	<72	72	3200869
1,2-Dichlorobenzene	ppbv	<76	76	<200	200	3199736	<72	72	3200869
1,2,4-Trichlorobenzene	ppbv	<380	380	<1000	1000	3199736	<360	360	3200869
Hexachlorobutadiene	ppbv	<570	570	<1500	1500	3199736	<540	540	3200869
Hexane	ppbv	6890	57	21900	150	3199736	13800	54	3200869
Heptane	ppbv	5660	57	14800	150	3199736	7370	54	3200869
Cyclohexane	ppbv	2750	38	7880	100	3199736	3680	36	3200869
Tetrahydrofuran	ppbv	<76	76	<200	200	3199736	<72	72	3200869
1,4-Dioxane	ppbv	<380	380	<1000	1000	3199736	<360	360	3200869
Xylene (Total)	ppbv	8220	110	12700	300	3199736	5230	110	3200869
Vinyl Bromide	ppbv	<38	38	<100	100	3199736	<36	36	3200869
Propene	ppbv	<3200	3200	<15000	15000	3199736	<36000	36000	3200869
2,2,4-Trimethylpentane	ppbv	219	38	714	100	3199736	533	36	3200869

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B362815
Report Date: 2013/05/08

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		RH6449		RH6450			RH6451		
Sampling Date		2013/04/15 21:00		2013/04/16 09:00			2013/04/23 16:05		
COC Number		na		na			na		
	Units	**RESIDUAL OIL SUMMA RUN 1 / 2580**	**RDL**	**RESIDUAL OIL SUMMA RUN 2 (VESSEL) / T2562**	**RDL**	**QC Batch**	**RESIDUAL OIL SUMMA RUN 3 / 7813**	**RDL**	**QC Batch**
Carbon Disulfide	ppbv	<95	95	<250	250	3199736	<90	90	3200869
Vinyl Acetate	ppbv	<610	610	<1800	1800	3199736	<920	920	3200869
Surrogate Recovery (%)									
Bromochloromethane	%	90	N/A	91	N/A	3199736	85	N/A	3200869
D5-Chlorobenzene	%	84	N/A	89	N/A	3199736	81	N/A	3200869
Difluorobenzene	%	91	N/A	92	N/A	3199736	85	N/A	3200869

N/A = Not Applicable
RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B362815
Report Date: 2013/05/08

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3

CALCULATED VOLATILE ORGANICS (AIR)

Maxxam ID		RH6449		RH6450		RH6451		
Sampling Date		2013/04/15 21:00		2013/04/16 09:00		2013/04/23 16:05		
COC Number		na		na		na		
	Units	**RESIDUAL OIL SUMMA RUN 1 / 2580**	**RDL**	**RESIDUAL OIL SUMMA RUN 2 (VESSEL) / T2562**	**RDL**	**RESIDUAL OIL SUMMA RUN 3 / 7813**	**RDL**	**QC Batch**
Dichlorodifluoromethane (FREON 12)	ug/m3	<190	190	<490	490	<180	180	3195835
1,2-Dichlorotetrafluoroethane	ug/m3	<230	230	<590	590	<210	210	3195835
Chloromethane	ug/m3	<120	120	<310	310	<110	110	3195835
Vinyl Chloride	ug/m3	<87	87	<230	230	<83	83	3195835
Chloroethane	ug/m3	<150	150	<400	400	<140	140	3195835
1,3-Butadiene	ug/m3	<210	210	<550	550	<200	200	3195835
Trichlorofluoromethane (FREON 11)	ug/m3	<210	210	<560	560	<200	200	3195835
Ethanol (ethyl alcohol)	ug/m3	<1400	1400	<3900	3900	2810	780	3195835
Trichlorotrifluoroethane	ug/m3	<220	220	<570	570	<210	210	3195835
2-propanol	ug/m3	<1400	1400	<3700	3700	<1300	1300	3195835
2-Propanone	ug/m3	<1400	1400	<3600	3600	3140	340	3195835
Methyl Ethyl Ketone (2-Butanone)	ug/m3	<1700	1700	<4400	4400	<1600	1600	3195835
Methyl Isobutyl Ketone	ug/m3	<2500	2500	<6600	6600	<2400	2400	3195835
Methyl Butyl Ketone (2-Hexanone)	ug/m3	<1600	1600	<4100	4100	<1500	1500	3195835
Methyl t-butyl ether (MTBE)	ug/m3	<140	140	<360	360	<130	130	3195835
Ethyl Acetate	ug/m3	<1500	1500	<4000	4000	<1400	1400	3195835
1,1-Dichloroethylene	ug/m3	<190	190	<500	500	<180	180	3195835
cis-1,2-Dichloroethylene	ug/m3	<140	140	<380	380	<140	140	3195835
trans-1,2-Dichloroethylene	ug/m3	<150	150	<400	400	<140	140	3195835
Methylene Chloride(Dichloromethane)	ug/m3	<1100	1100	<2400	2400	5280	500	3195835
Chloroform	ug/m3	<140	140	<370	370	<130	130	3195835
Carbon Tetrachloride	ug/m3	<360	360	<940	940	<340	340	3195835
1,1-Dichloroethane	ug/m3	<150	150	<400	400	<150	150	3195835
1,2-Dichloroethane	ug/m3	<150	150	<400	400	<150	150	3195835
Ethylene Dibromide	ug/m3	<250	250	<650	650	<240	240	3195835
1,1,1-Trichloroethane	ug/m3	<310	310	<820	820	<290	290	3195835
1,1,2-Trichloroethane	ug/m3	<160	160	<410	410	<150	150	3195835
1,1,2,2-Tetrachloroethane	ug/m3	<260	260	<690	690	<250	250	3195835
cis-1,3-Dichloropropene	ug/m3	<160	160	<410	410	<150	150	3195835
trans-1,3-Dichloropropene	ug/m3	<150	150	<390	390	<140	140	3195835
1,2-Dichloropropane	ug/m3	<350	350	<920	920	<330	330	3195835

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B362815
Report Date: 2013/05/08

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3

CALCULATED VOLATILE ORGANICS (AIR)

Maxxam ID		RH6449		RH6450		RH6451		
Sampling Date		2013/04/15 21:00		2013/04/16 09:00		2013/04/23 16:05		
COC Number		na		na		na		
	Units	**RESIDUAL OIL SUMMA RUN 1 / 2580**	**RDL**	**RESIDUAL OIL SUMMA RUN 2 (VESSEL) / T2562**	**RDL**	**RESIDUAL OIL SUMMA RUN 3 / 7813**	**RDL**	**QC Batch**
Bromomethane	ug/m3	<130	130	<350	350	<130	130	3195835
Bromoform	ug/m3	<390	390	<1000	1000	<370	370	3195835
Bromodichloromethane	ug/m3	<250	250	<670	670	<240	240	3195835
Dibromochloromethane	ug/m3	<320	320	<850	850	<310	310	3195835
Trichloroethylene	ug/m3	<310	310	<810	810	<290	290	3195835
Tetrachloroethylene	ug/m3	693	260	<680	680	<240	240	3195835
Benzene	ug/m3	6040	110	15900	290	7510	100	3195835
Toluene	ug/m3	29600	140	55000	380	24300	140	3195835
Ethylbenzene	ug/m3	7880	170	11600	430	4920	160	3195835
p+m-Xylene	ug/m3	25900	310	39700	800	16600	290	3195835
o-Xylene	ug/m3	9750	170	15200	430	6110	160	3195835
Styrene	ug/m3	<160	160	<430	430	<380	380	3195835
4-ethyltoluene	ug/m3	2620	2100	<5400	5400	<1900	1900	3195835
1,3,5-Trimethylbenzene	ug/m3	2760	470	5830	1200	1870	440	3195835
1,2,4-Trimethylbenzene	ug/m3	7840	470	17300	1200	5130	440	3195835
Chlorobenzene	ug/m3	<170	170	<460	460	<170	170	3195835
Benzyl chloride	ug/m3	<980	980	<2600	2600	<930	930	3195835
1,3-Dichlorobenzene	ug/m3	<460	460	<1200	1200	<430	430	3195835
1,4-Dichlorobenzene	ug/m3	<460	460	<1200	1200	<430	430	3195835
1,2-Dichlorobenzene	ug/m3	<460	460	<1200	1200	<430	430	3195835
1,2,4-Trichlorobenzene	ug/m3	<2800	2800	<7400	7400	<2700	2700	3195835
Hexachlorobutadiene	ug/m3	<6100	6100	<16000	16000	<5800	5800	3195835
Hexane	ug/m3	24300	200	77100	530	48600	190	3195835
Heptane	ug/m3	23200	230	60700	610	30200	220	3195835
Cyclohexane	ug/m3	9450	130	27100	340	12700	120	3195835
Tetrahydrofuran	ug/m3	<220	220	<590	590	<210	210	3195835
1,4-Dioxane	ug/m3	<1400	1400	<3600	3600	<1300	1300	3195835
Xylene (Total)	ug/m3	35700	500	55000	1300	22700	470	3195835
Vinyl Bromide	ug/m3	<170	170	<440	440	<160	160	3195835
Propene	ug/m3	<5600	5600	<26000	26000	<62000	62000	3195835
2,2,4-Trimethylpentane	ug/m3	1020	180	3330	470	2490	170	3195835

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Maxxam Job #: B362815
Report Date: 2013/05/08

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3

CALCULATED VOLATILE ORGANICS (AIR)

Maxxam ID		RH6449		RH6450		RH6451		
Sampling Date		2013/04/15 21:00		2013/04/16 09:00		2013/04/23 16:05		
COC Number		na		na		na		
	Units	**RESIDUAL OIL SUMMA RUN 1 / 2580**	**RDL**	**RESIDUAL OIL SUMMA RUN 2 (VESSEL) / T2562**	**RDL**	**RESIDUAL OIL SUMMA RUN 3 / 7813**	**RDL**	**QC Batch**
Carbon Disulfide	ug/m3	<300	300	<780	780	<280	280	3195835
Vinyl Acetate	ug/m3	<2100	2100	<6300	6300	<3200	3200	3195835

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B362815
Report Date: 2013/05/08

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3

Test Summary

Maxxam ID RH6449 **Collected** 2013/04/15
Sample ID RESIDUAL OIL SUMMA RUN 1 / 2580 **Shipped**
Matrix AIR **Received** 2013/04/26

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	3199570	N/A	2013/04/29	Diane Temniuk
Light Hydrocarbons	GC/FID	3201422	N/A	2013/05/03	Colm McNamara
Volatile Organics in Air (ug/m3)	GC/MS	3195835	N/A	2013/05/02	Ancy Sebastian
Volatile Organics in Air (TO-15)	GC/MS	3199736	N/A	2013/04/29	Diane Temniuk

Maxxam ID RH6449 Dup **Collected** 2013/04/15
Sample ID RESIDUAL OIL SUMMA RUN 1 / 2580 **Shipped**
Matrix AIR **Received** 2013/04/26

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Light Hydrocarbons	GC/FID	3201422	N/A	2013/05/03	Colm McNamara

Maxxam ID RH6450 **Collected** 2013/04/16
Sample ID RESIDUAL OIL SUMMA RUN 2 (VESSEL) / T2562 **Shipped**
Matrix AIR **Received** 2013/04/26

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	3199570	N/A	2013/04/29	Diane Temniuk
Light Hydrocarbons	GC/FID	3201422	N/A	2013/05/03	Colm McNamara
Volatile Organics in Air (ug/m3)	GC/MS	3195835	N/A	2013/05/02	Ancy Sebastian
Volatile Organics in Air (TO-15)	GC/MS	3199736	N/A	2013/04/29	Diane Temniuk

Maxxam ID RH6451 **Collected** 2013/04/23
Sample ID RESIDUAL OIL SUMMA RUN 3 / 7813 **Shipped**
Matrix AIR **Received** 2013/04/26

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	3200863	N/A	2013/05/01	Diane Temniuk
Light Hydrocarbons	GC/FID	3201422	N/A	2013/05/03	Colm McNamara
Volatile Organics in Air (ug/m3)	GC/MS	3195835	N/A	2013/05/03	Ancy Sebastian
Volatile Organics in Air (TO-15)	GC/MS	3200869	N/A	2013/05/01	Diane Temniuk

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Maxxam Job #: B362815
Report Date: 2013/05/08

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3

GENERAL COMMENTS

Light Hydrocarbon Analysis: Canisters were pressurized with Air/Helium to enable sampling. Results and DLs adjusted accordingly.

Sample RH6449-01: Sample was run at a 190x dilution, DLs adjusted accordingly. DLs raised further for Propene and Vinyl Acetate due to matrix interference, and for Ethanol, 2-Propanone, and Methylene Chloride due to possible background.

Sample RH6450-01: Sample was run at a 500x dilution, DLs adjusted accordingly. DLs raised further for Propene and Vinyl Acetate due to matrix interference, and for Ethanol, 2-Propanone, and Methylene Chloride due to possible background.

Sample RH6451-01: Sample was run at a 180x dilution. DLs adjusted accordingly. DLs raised further for Propene and Vinyl Acetate due to matrix interference, and for Styrene due to possible background.

Results relate only to the items tested.

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Eastmount Environmental Services
Attention: Anthony Stratton
Client Project #: 12-009
P.O. #:
Site Location: GLOBAL - RESIDUAL OIL TANK #3

Quality Assurance Report

Maxxam Job Number: GB362815

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
3199736 DVO	Spiked Blank	Bromochloromethane	2013/04/29		104	%	60 - 140
		D5-Chlorobenzene	2013/04/29		105	%	60 - 140
		Difluorobenzene	2013/04/29		106	%	60 - 140
		Dichlorodifluoromethane (FREON 12)	2013/04/29		105	%	70 - 130
		1,2-Dichlorotetrafluoroethane	2013/04/29		116	%	70 - 130
		Chloromethane	2013/04/29		93	%	70 - 130
		Vinyl Chloride	2013/04/29		97	%	70 - 130
		Chloroethane	2013/04/29		96	%	70 - 130
		1,3-Butadiene	2013/04/29		93	%	70 - 130
		Trichlorofluoromethane (FREON 11)	2013/04/29		106	%	70 - 130
		Ethanol (ethyl alcohol)	2013/04/29		80	%	70 - 130
		Trichlorotrifluoroethane	2013/04/29		104	%	70 - 130
		2-propanol	2013/04/29		88	%	70 - 130
		2-Propanone	2013/04/29		90	%	70 - 130
		Methyl Ethyl Ketone (2-Butanone)	2013/04/29		89	%	70 - 130
		Methyl Isobutyl Ketone	2013/04/29		89	%	70 - 130
		Methyl Butyl Ketone (2-Hexanone)	2013/04/29		90	%	70 - 130
		Methyl t-butyl ether (MTBE)	2013/04/29		96	%	70 - 130
		Ethyl Acetate	2013/04/29		89	%	70 - 130
		1,1-Dichloroethylene	2013/04/29		94	%	70 - 130
		cis-1,2-Dichloroethylene	2013/04/29		94	%	70 - 130
		trans-1,2-Dichloroethylene	2013/04/29		94	%	70 - 130
		Methylene Chloride(Dichloromethane)	2013/04/29		87	%	70 - 130
		Chloroform	2013/04/29		101	%	70 - 130
		Carbon Tetrachloride	2013/04/29		105	%	70 - 130
		1,1-Dichloroethane	2013/04/29		94	%	70 - 130
		1,2-Dichloroethane	2013/04/29		97	%	70 - 130
		Ethylene Dibromide	2013/04/29		107	%	70 - 130
		1,1,1-Trichloroethane	2013/04/29		105	%	70 - 130
		1,1,2-Trichloroethane	2013/04/29		105	%	70 - 130
		1,1,2,2-Tetrachloroethane	2013/04/29		96	%	70 - 130
		cis-1,3-Dichloropropene	2013/04/29		100	%	70 - 130
		trans-1,3-Dichloropropene	2013/04/29		101	%	70 - 130
		1,2-Dichloropropane	2013/04/29		95	%	70 - 130
		Bromomethane	2013/04/29		105	%	70 - 130
		Bromoform	2013/04/29		111	%	70 - 130
		Bromodichloromethane	2013/04/29		104	%	70 - 130
		Dibromochloromethane	2013/04/29		111	%	70 - 130
		Trichloroethylene	2013/04/29		108	%	70 - 130
		Tetrachloroethylene	2013/04/29		116	%	70 - 130
		Benzene	2013/04/29		100	%	70 - 130
		Toluene	2013/04/29		103	%	70 - 130
		Ethylbenzene	2013/04/29		101	%	70 - 130
		p+m-Xylene	2013/04/29		100	%	70 - 130
		o-Xylene	2013/04/29		100	%	70 - 130
		Styrene	2013/04/29		98	%	70 - 130
		4-ethyltoluene	2013/04/29		106	%	70 - 130
		1,3,5-Trimethylbenzene	2013/04/29		102	%	70 - 130
		1,2,4-Trimethylbenzene	2013/04/29		102	%	70 - 130
		Chlorobenzene	2013/04/29		107	%	70 - 130
		Benzyl chloride	2013/04/29		91	%	70 - 130
		1,3-Dichlorobenzene	2013/04/29		111	%	70 - 130
		1,4-Dichlorobenzene	2013/04/29		107	%	70 - 130
		1,2-Dichlorobenzene	2013/04/29		103	%	70 - 130
		1,2,4-Trichlorobenzene	2013/04/29		118	%	70 - 130

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Eastmount Environmental Services
Attention: Anthony Stratton
Client Project #: 12-009
P.O. #:
Site Location: GLOBAL - RESIDUAL OIL TANK #3

Quality Assurance Report (Continued)

Maxxam Job Number: GB362815

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
3199736 DVO	Spiked Blank	Hexachlorobutadiene	2013/04/29		114	%	70 - 130
		Hexane	2013/04/29		90	%	70 - 130
		Heptane	2013/04/29		87	%	70 - 130
		Cyclohexane	2013/04/29		93	%	70 - 130
		Tetrahydrofuran	2013/04/29		87	%	70 - 130
		1,4-Dioxane	2013/04/29		99	%	70 - 130
		Xylene (Total)	2013/04/29		100	%	70 - 130
		Vinyl Bromide	2013/04/29		105	%	70 - 130
		Propene	2013/04/29		86	%	70 - 130
		2,2,4-Trimethylpentane	2013/04/29		93	%	70 - 130
		Carbon Disulfide	2013/04/29		102	%	70 - 130
		Vinyl Acetate	2013/04/29		86	%	70 - 130
	Method Blank	Bromochloromethane	2013/04/29		94	%	60 - 140
		D5-Chlorobenzene	2013/04/29		91	%	60 - 140
		Difluorobenzene	2013/04/29		95	%	60 - 140
		Dichlorodifluoromethane (FREON 12)	2013/04/29	<0.20		ppbv	
		1,2-Dichlorotetrafluoroethane	2013/04/29	<0.17		ppbv	
		Chloromethane	2013/04/29	<0.30		ppbv	
		Vinyl Chloride	2013/04/29	<0.18		ppbv	
		Chloroethane	2013/04/29	<0.30		ppbv	
		1,3-Butadiene	2013/04/29	<0.50		ppbv	
		Trichlorofluoromethane (FREON 11)	2013/04/29	<0.20		ppbv	
		Ethanol (ethyl alcohol)	2013/04/29	<2.3		ppbv	
		Trichlorotrifluoroethane	2013/04/29	<0.15		ppbv	
		2-propanol	2013/04/29	<3.0		ppbv	
		2-Propanone	2013/04/29	<0.80		ppbv	
		Methyl Ethyl Ketone (2-Butanone)	2013/04/29	<3.0		ppbv	
		Methyl Isobutyl Ketone	2013/04/29	<3.2		ppbv	
		Methyl Butyl Ketone (2-Hexanone)	2013/04/29	<2.0		ppbv	
		Methyl t-butyl ether (MTBE)	2013/04/29	<0.20		ppbv	
		Ethyl Acetate	2013/04/29	<2.2		ppbv	
		1,1-Dichloroethylene	2013/04/29	<0.25		ppbv	
		cis-1,2-Dichloroethylene	2013/04/29	<0.19		ppbv	
		trans-1,2-Dichloroethylene	2013/04/29	<0.20		ppbv	
		Methylene Chloride(Dichloromethane)	2013/04/29	<0.80		ppbv	
		Chloroform	2013/04/29	<0.15		ppbv	
		Carbon Tetrachloride	2013/04/29	<0.30		ppbv	
		1,1-Dichloroethane	2013/04/29	<0.20		ppbv	
		1,2-Dichloroethane	2013/04/29	<0.20		ppbv	
		Ethylene Dibromide	2013/04/29	<0.17		ppbv	
		1,1,1-Trichloroethane	2013/04/29	<0.30		ppbv	
		1,1,2-Trichloroethane	2013/04/29	<0.15		ppbv	
		1,1,2,2-Tetrachloroethane	2013/04/29	<0.20		ppbv	
		cis-1,3-Dichloropropene	2013/04/29	<0.18		ppbv	
		trans-1,3-Dichloropropene	2013/04/29	<0.17		ppbv	
		1,2-Dichloropropane	2013/04/29	<0.40		ppbv	
		Bromomethane	2013/04/29	<0.18		ppbv	
		Bromoform	2013/04/29	<0.20		ppbv	
		Bromodichloromethane	2013/04/29	<0.20		ppbv	
		Dibromochloromethane	2013/04/29	<0.20		ppbv	
		Trichloroethylene	2013/04/29	<0.30		ppbv	
		Tetrachloroethylene	2013/04/29	<0.20		ppbv	
		Benzene	2013/04/29	<0.18		ppbv	
		Toluene	2013/04/29	<0.20		ppbv	
		Ethylbenzene	2013/04/29	<0.20		ppbv	

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Eastmount Environmental Services
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Client Project #: 12-009
P.O. #:
Site Location: GLOBAL - RESIDUAL OIL TANK #3

Quality Assurance Report (Continued)

Maxxam Job Number: GB362815

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
3199736 DVO	Method Blank	p+m-Xylene	2013/04/29	<0.37		ppbv	
		o-Xylene	2013/04/29	<0.20		ppbv	
		Styrene	2013/04/29	<0.20		ppbv	
		4-ethyltoluene	2013/04/29	<2.2		ppbv	
		1,3,5-Trimethylbenzene	2013/04/29	<0.50		ppbv	
		1,2,4-Trimethylbenzene	2013/04/29	<0.50		ppbv	
		Chlorobenzene	2013/04/29	<0.20		ppbv	
		Benzyl chloride	2013/04/29	<1.0		ppbv	
		1,3-Dichlorobenzene	2013/04/29	<0.40		ppbv	
		1,4-Dichlorobenzene	2013/04/29	<0.40		ppbv	
		1,2-Dichlorobenzene	2013/04/29	<0.40		ppbv	
		1,2,4-Trichlorobenzene	2013/04/29	<2.0		ppbv	
		Hexachlorobutadiene	2013/04/29	<3.0		ppbv	
		Hexane	2013/04/29	<0.30		ppbv	
		Heptane	2013/04/29	<0.30		ppbv	
		Cyclohexane	2013/04/29	<0.20		ppbv	
		Tetrahydrofuran	2013/04/29	<0.40		ppbv	
		1,4-Dioxane	2013/04/29	<2.0		ppbv	
		Xylene (Total)	2013/04/29	<0.60		ppbv	
		Vinyl Bromide	2013/04/29	<0.20		ppbv	
		Propene	2013/04/29	<0.30		ppbv	
		2,2,4-Trimethylpentane	2013/04/29	<0.20		ppbv	
		Carbon Disulfide	2013/04/29	<0.50		ppbv	
		Vinyl Acetate	2013/04/29	<0.20		ppbv	
3200869 DVO	Spiked Blank	Bromochloromethane	2013/05/01		99	%	60 - 140
		D5-Chlorobenzene	2013/05/01		99	%	60 - 140
		Difluorobenzene	2013/05/01		101	%	60 - 140
		Dichlorodifluoromethane (FREON 12)	2013/05/01		106	%	70 - 130
		1,2-Dichlorotetrafluoroethane	2013/05/01		118	%	70 - 130
		Chloromethane	2013/05/01		93	%	70 - 130
		Vinyl Chloride	2013/05/01		97	%	70 - 130
		Chloroethane	2013/05/01		95	%	70 - 130
		1,3-Butadiene	2013/05/01		93	%	70 - 130
		Trichlorofluoromethane (FREON 11)	2013/05/01		108	%	70 - 130
		Ethanol (ethyl alcohol)	2013/05/01		79	%	70 - 130
		Trichlorotrifluoroethane	2013/05/01		105	%	70 - 130
		2-propanol	2013/05/01		87	%	70 - 130
		2-Propanone	2013/05/01		90	%	70 - 130
		Methyl Ethyl Ketone (2-Butanone)	2013/05/01		89	%	70 - 130
		Methyl Isobutyl Ketone	2013/05/01		88	%	70 - 130
		Methyl Butyl Ketone (2-Hexanone)	2013/05/01		89	%	70 - 130
		Methyl t-butyl ether (MTBE)	2013/05/01		96	%	70 - 130
		Ethyl Acetate	2013/05/01		87	%	70 - 130
		1,1-Dichloroethylene	2013/05/01		94	%	70 - 130
		cis-1,2-Dichloroethylene	2013/05/01		94	%	70 - 130
		trans-1,2-Dichloroethylene	2013/05/01		95	%	70 - 130
		Methylene Chloride(Dichloromethane)	2013/05/01		87	%	70 - 130
		Chloroform	2013/05/01		101	%	70 - 130
		Carbon Tetrachloride	2013/05/01		106	%	70 - 130
		1,1-Dichloroethane	2013/05/01		94	%	70 - 130
		1,2-Dichloroethane	2013/05/01		97	%	70 - 130
		Ethylene Dibromide	2013/05/01		108	%	70 - 130
		1,1,1-Trichloroethane	2013/05/01		106	%	70 - 130
		1,1,2-Trichloroethane	2013/05/01		107	%	70 - 130
		1,1,2,2-Tetrachloroethane	2013/05/01		97	%	70 - 130

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Eastmount Environmental Services
Attention: Anthony Stratton
Client Project #: 12-009
P.O. #:
Site Location: GLOBAL - RESIDUAL OIL TANK #3

Quality Assurance Report (Continued)

Maxxam Job Number: GB362815

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
3200869 DVO	Spiked Blank	cis-1,3-Dichloropropene	2013/05/01		100	%	70 - 130
		trans-1,3-Dichloropropene	2013/05/01		102	%	70 - 130
		1,2-Dichloropropane	2013/05/01		96	%	70 - 130
		Bromomethane	2013/05/01		106	%	70 - 130
		Bromoform	2013/05/01		114	%	70 - 130
		Bromodichloromethane	2013/05/01		104	%	70 - 130
		Dibromochloromethane	2013/05/01		113	%	70 - 130
		Trichloroethylene	2013/05/01		110	%	70 - 130
		Tetrachloroethylene	2013/05/01		118	%	70 - 130
		Benzene	2013/05/01		99	%	70 - 130
		Toluene	2013/05/01		104	%	70 - 130
		Ethylbenzene	2013/05/01		103	%	70 - 130
		p+m-Xylene	2013/05/01		101	%	70 - 130
		o-Xylene	2013/05/01		102	%	70 - 130
		Styrene	2013/05/01		101	%	70 - 130
		4-ethyltoluene	2013/05/01		110	%	70 - 130
		1,3,5-Trimethylbenzene	2013/05/01		106	%	70 - 130
		1,2,4-Trimethylbenzene	2013/05/01		106	%	70 - 130
		Chlorobenzene	2013/05/01		109	%	70 - 130
		Benzyl chloride	2013/05/01		93	%	70 - 130
		1,3-Dichlorobenzene	2013/05/01		117	%	70 - 130
		1,4-Dichlorobenzene	2013/05/01		112	%	70 - 130
		1,2-Dichlorobenzene	2013/05/01		107	%	70 - 130
		1,2,4-Trichlorobenzene	2013/05/01		122	%	70 - 130
		Hexachlorobutadiene	2013/05/01		117	%	70 - 130
		Hexane	2013/05/01		89	%	70 - 130
		Heptane	2013/05/01		86	%	70 - 130
		Cyclohexane	2013/05/01		93	%	70 - 130
		Tetrahydrofuran	2013/05/01		87	%	70 - 130
		1,4-Dioxane	2013/05/01		101	%	70 - 130
		Xylene (Total)	2013/05/01		101	%	70 - 130
		Vinyl Bromide	2013/05/01		105	%	70 - 130
		Propene	2013/05/01		85	%	70 - 130
		2,2,4-Trimethylpentane	2013/05/01		93	%	70 - 130
		Carbon Disulfide	2013/05/01		102	%	70 - 130
		Vinyl Acetate	2013/05/01		84	%	70 - 130
	Method Blank	Bromochloromethane	2013/05/01		88	%	60 - 140
		D5-Chlorobenzene	2013/05/01		84	%	60 - 140
		Difluorobenzene	2013/05/01		89	%	60 - 140
		Dichlorodifluoromethane (FREON 12)	2013/05/01	<0.20		ppbv	
		1,2-Dichlorotetrafluoroethane	2013/05/01	<0.17		ppbv	
		Chloromethane	2013/05/01	<0.30		ppbv	
		Vinyl Chloride	2013/05/01	<0.18		ppbv	
		Chloroethane	2013/05/01	<0.30		ppbv	
		1,3-Butadiene	2013/05/01	<0.50		ppbv	
		Trichlorofluoromethane (FREON 11)	2013/05/01	<0.20		ppbv	
		Ethanol (ethyl alcohol)	2013/05/01	<2.3		ppbv	
		Trichlorotrifluoroethane	2013/05/01	<0.15		ppbv	
		2-propanol	2013/05/01	<3.0		ppbv	
		2-Propanone	2013/05/01	<0.80		ppbv	
		Methyl Ethyl Ketone (2-Butanone)	2013/05/01	<3.0		ppbv	
		Methyl Isobutyl Ketone	2013/05/01	<3.2		ppbv	
		Methyl Butyl Ketone (2-Hexanone)	2013/05/01	<2.0		ppbv	
		Methyl t-butyl ether (MTBE)	2013/05/01	<0.20		ppbv	
		Ethyl Acetate	2013/05/01	<2.2		ppbv	

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Eastmount Environmental Services
Attention: Anthony Stratton
Client Project #: 12-009
P.O. #:
Site Location: GLOBAL - RESIDUAL OIL TANK #3

Quality Assurance Report (Continued)

Maxxam Job Number: GB362815

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
3200869 DVO	Method Blank	1,1-Dichloroethylene	2013/05/01	<0.25		ppbv	
		cis-1,2-Dichloroethylene	2013/05/01	<0.19		ppbv	
		trans-1,2-Dichloroethylene	2013/05/01	<0.20		ppbv	
		Methylene Chloride(Dichloromethane)	2013/05/01	<0.80		ppbv	
		Chloroform	2013/05/01	<0.15		ppbv	
		Carbon Tetrachloride	2013/05/01	<0.30		ppbv	
		1,1-Dichloroethane	2013/05/01	<0.20		ppbv	
		1,2-Dichloroethane	2013/05/01	<0.20		ppbv	
		Ethylene Dibromide	2013/05/01	<0.17		ppbv	
		1,1,1-Trichloroethane	2013/05/01	<0.30		ppbv	
		1,1,2-Trichloroethane	2013/05/01	<0.15		ppbv	
		1,1,2,2-Tetrachloroethane	2013/05/01	<0.20		ppbv	
		cis-1,3-Dichloropropene	2013/05/01	<0.18		ppbv	
		trans-1,3-Dichloropropene	2013/05/01	<0.17		ppbv	
		1,2-Dichloropropane	2013/05/01	<0.40		ppbv	
		Bromomethane	2013/05/01	<0.18		ppbv	
		Bromoform	2013/05/01	<0.20		ppbv	
		Bromodichloromethane	2013/05/01	<0.20		ppbv	
		Dibromochloromethane	2013/05/01	<0.20		ppbv	
		Trichloroethylene	2013/05/01	<0.30		ppbv	
		Tetrachloroethylene	2013/05/01	<0.20		ppbv	
		Benzene	2013/05/01	<0.18		ppbv	
		Toluene	2013/05/01	<0.20		ppbv	
		Ethylbenzene	2013/05/01	<0.20		ppbv	
		p+m-Xylene	2013/05/01	<0.37		ppbv	
		o-Xylene	2013/05/01	<0.20		ppbv	
		Styrene	2013/05/01	<0.20		ppbv	
		4-ethyltoluene	2013/05/01	<2.2		ppbv	
		1,3,5-Trimethylbenzene	2013/05/01	<0.50		ppbv	
		1,2,4-Trimethylbenzene	2013/05/01	<0.50		ppbv	
		Chlorobenzene	2013/05/01	<0.20		ppbv	
		Benzyl chloride	2013/05/01	<1.0		ppbv	
		1,3-Dichlorobenzene	2013/05/01	<0.40		ppbv	
		1,4-Dichlorobenzene	2013/05/01	<0.40		ppbv	
		1,2-Dichlorobenzene	2013/05/01	<0.40		ppbv	
		1,2,4-Trichlorobenzene	2013/05/01	<2.0		ppbv	
		Hexachlorobutadiene	2013/05/01	<3.0		ppbv	
		Hexane	2013/05/01	<0.30		ppbv	
		Heptane	2013/05/01	<0.30		ppbv	
		Cyclohexane	2013/05/01	<0.20		ppbv	
		Tetrahydrofuran	2013/05/01	<0.40		ppbv	
		1,4-Dioxane	2013/05/01	<2.0		ppbv	
		Xylene (Total)	2013/05/01	<0.60		ppbv	
		Vinyl Bromide	2013/05/01	<0.20		ppbv	
		Propene	2013/05/01	<0.30		ppbv	
		2,2,4-Trimethylpentane	2013/05/01	<0.20		ppbv	
		Carbon Disulfide	2013/05/01	<0.50		ppbv	
		Vinyl Acetate	2013/05/01	<0.20		ppbv	
	RPD - Sample/Sample Dup	Vinyl Chloride	2013/05/01	NC		%	25
		cis-1,2-Dichloroethylene	2013/05/01	NC		%	25
		trans-1,2-Dichloroethylene	2013/05/01	NC		%	25
		Trichloroethylene	2013/05/01	NC		%	25
		Tetrachloroethylene	2013/05/01	NC		%	25

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Eastmount Environmental Services
Attention: Anthony Stratton
Client Project #: 12-009
P.O. #:
Site Location: GLOBAL - RESIDUAL OIL TANK #3

Quality Assurance Report (Continued)

Maxxam Job Number: GB362815

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
3201422 CM5	Method Blank	Ethane	2013/05/03	<0.1		ppm	
	RPD - Sample/Sample Dup	Ethane	2013/05/03	8.7		%	20

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

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Validation Signature Page

Maxxam Job #: B362815

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

Ancy Sebastian, C.Tech., Senior Project Manager, Air Toxics

Tom Mitchell, B.Sc, Supervisor, Compressed Gases

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Volatile Organics Analysis Data Sheets
Tentatively Identified Compounds

SAMPLE#: Method Blank

Field ID#: Method Blank

Number of TICs found: 0

Concentration Units
ppbv

	CAS #	Compound Name	RT	Est. Conc.	Match %
1.		No compounds found			

Maxxam Analytical

Volatile Organics Analysis Data Sheets
Tentatively Identified Compounds

SAMPLE#: RH6449

Field ID#: Residual Oil Summa Run 1 / 2580

Concentration Units

Number of TICs found: 19

	CAS #	Compound Name	RT	Est. Conc. ppbv	Est. Conc. ug/m3	Match %
1.	000075-28-5	Isobutane	5.52	2960	7010	86
2.	000115-11-7	1-Propene, 2-methyl-	5.91	1620	3700	90
3.	000078-78-4	Butane, 2-methyl-	7.78	7950	23400	94
4.	000109-66-0	Pentane	8.54	9640	28400	90
5.	000107-83-5	Unknown hydrocarbon C5H10 Mol. Wt. 70	9.24	2150	6150	
6.	000107-83-5	Pentane, 2-methyl-	10.86	9430	33200	86
7.		Unknown hydrocarbon C6H12 Mol. Wt. 86	12.21	2440	8380	
8.	000096-37-7	Cyclopentane, methyl-	13.10	6430	22100	94
9.	000589-34-4	Hexane, 3-methyl-	14.55	3010	12300	94
10.		Unknown hydrocarbon C7H14 Mol. Wt. 98	15.08	1720	6890	
11.		Unknown hydrocarbon C7H14 Mol. Wt. 98	15.16	1780	7130	
12.		Unknown hydrocarbon C7H14 Mol. Wt. 98	16.26	1960	7860	
13.		Unknown cylcopentane, C8H16 Mol. Wt. 112	16.98	2050	9400	
14.	000592-27-8	Heptane, 2-methyl-	17.30	4560	21300	95
15.		Unknown cylcohexane, C8H16 Mol. Wt. 112	18.02	2010	9190	
16.		Unknown aliphatic hydrocarbon	18.29	5840	30500	
17.	002216-34-4	Octane, 4-methyl-	20.02	1830	9570	
18.	000111-84-2	Nonane	20.95	2270	11900	97
19.		Unknown aromatic hydrocarbon	22.78	1630	7980	

Maxxam Analytical

Volatile Organics Analysis Data Sheets
Tentatively Identified Compounds

SAMPLE#: RH6450

Field ID#: Residual Oil Summa Run 1 / T2562

Number of TICs found: 19

Concentration Units

	CAS #	Compound Name	RT	Est. Conc. ppbv	Est. Conc. ug/m3	Match %
1.	000075-28-5	Isobutane	5.52	10400	24600	86
2.	000115-11-7	1-Propene, 2-methyl-	5.91	6820	15600	90
3.	000078-78-4	Butane, 2-methyl-	7.77	26100	76900	94
4.		Pentane	8.54	33600	98900	91
5.		Unknown hydrocarbon C5H10 Mol. Wt. 70	8.82	4640	13300	
6.		Unknown hydrocarbon C5H10 Mol. Wt. 70	9.24	7500	21500	
7.	000107-83-5	Pentane, 2-methyl-	10.86	30400	107000	91
8.		Unknown hydrocarbon C6H12 Mol. Wt. 84	12.21	7740	26600	
9.	000096-37-7	Cyclopentane, methyl-	13.10	18800	64700	94
10.		Hexane, 3-methyl-	14.54	8160	33400	94
11.		Unknown hydrocarbon C7H14 Mol. Wt. 98	15.07	4570	18300	
12.		Unknown hydrocarbon C7H14 Mol. Wt. 98	15.16	4510	18100	
13.		Unknown hydrocarbon C7H14 Mol. Wt. 98	16.26	4740	19000	
14.	015890-40-1	Cyclopentane, 1,2,3-trimethyl-,(1.alpha.,2.alpha.,3.beta.)-	16.98	4510	20700	87
15.	000592-27-8	Heptane, 2-methyl-	17.30	10030	46700	95
16.		Unknown hydrocarbon	18.29	11700	61400	
17.	000111-84-2	Nonane	20.95	4710	24600	97

Volatile Organics Analysis Data Sheets
Tentatively Identified Compounds

SAMPLE#: RH6451

Field ID#: Residual Oil Summa Run 3 / 7813

Concentration Units

Number of TICs found: 18

	CAS #	Compound Name	RT	Est. Conc. ppbv	Est. Conc. ug/m3	Match %
1.	000075-28-5	Isobutane	5.53	7970	18900	86
2.	000115-11-7	1-Propene, 2-methyl	5.91	12500	28600	90
3.		Isomer of 2-Butene	6.27	3820	8740	
4.		Isomer of 2-Butene	6.56	2490	5700	
5.	000078-78-4	Butane, 2-methyl	7.78	16100	47400	94
6.	000109-67-1	1-Pentene	8.27	4920	14100	81
7.	000109-66-0	Pentane	8.54	28900	85000	91
8.		Unknown hydrocarbon C5H10 Mol. Wt. 70	8.83	4000	11400	
9.		Unknown hydrocarbon C5H10 Mol. Wt. 70	9.24	5950	17000	
10.		Unknown mix of hydrocarbons	10.50	3190	8870	
11.	000107-83-5	Pentane, 2-methyl	10.87	18100	63500	72
12.	000592-41-6	1-Hexene	11.67	5070	17400	95
13.		Unknown hydrocarbon C6H12 Mol. Wt. 84	12.22	4620	15900	
14.	000096-37-7	Cyclopentane, methyl	13.13	8920	30600	94
15.	000589-34-4	Hexane, 3-methyl	14.55	3540	14500	94
16.	000592-27-8	Heptane, 2-methyl	17.30	4150	19400	94
17.		Unknown hydrocarbon C8H16 Mol. Wt. 112	18.02	2100	9610	
18.		Unknown hydrocarbon	18.29	5020	26300	

Maxxam Analytical

Chain of Custody Form - Source

Maxxam Analytics Inc.
6655 N. Service Road
Burlington, Ontario L7L 5H7
www.maxxamanalytics.com
Toll Free: 1-800-668-0639
Phone: (905) 332-0798
Fax: (905) 332-9169

ANALYSIS REQUESTED

26-Apr-13 11:55
Ancy Sebastian
B362815
NNA AIR-001

CLIENT INFORMATION SECTION

Company Name: Eastmount Environmental Services, LLC
Project Manager: Anthony Stratton
e-mail: astratton@eastmount.com
Address: 2 New Pasture Road, Unit 5
Newburyport, MA 01950
Phone: 978-499-9300 Fax: 978-499-9303
Sampled by: Anthony Stratton

MAXXAM use only	Field Sample ID	Canister ID	Collection Date	Collection Time		Sample Contents	Analysis Requested
	Residual Oil Summa Run 1	2560	4/16/2013	21:00		VOC vapors from residual oil tank	TO-15 compounds plus first 20 TICs
	Residual Oil Summa Run 2 (Vessel)	T2602	4/16/2013	9:00		VOC vapors from residual oil tank	TO-15 compounds plus first 20 TICs
	Residual Oil Summa Run 3	7813	4/23/2013	16:05		VOC vapors from residual oil tank	TO-15 compounds plus first 20 TICs

TAT Requirement

- STD 10 Business day ☑
- Rush 5 Business day ☐
- Rush 2 Business day ☐
- Rush 1 Business day ☐
- Other (specify):

PROJECT INFORMATION

Project #: 12-009
Name: Global - Residual Oil Tank #3
PO #:
Maxxam Quote #:
Maxxam Contact: Jim Jacklin

REPORTING REQUIREMENTS

- Summary Report only ☑
- Summary Report & Full Data Package ☐
- EDD ☐

PROJECT SPECIFIC COMMENTS

1) See "Analysis Requested" above.
2) Please report results in ppbv and ug/M3.
3) Please provide results in both PDF and excel format.

* Initial Impinger charge volumes are required before the following analysis can be started: Method 26, CTM-027 & Method 8
Method 23 / TO9A
NATO TEF ☐ TEF x DL ☐ TEF x 0 DL ☐
WHO TEF ☐ TEF x 0.5 DL ☐

Client Signature:
Affiliation: EASTMOUNT Env
Date/Time: April 24, 2013 1630

Received by: [illegible] Lapuz
Affiliation:
Date/Time: 2013/04/26 1635

Maxxam

Success Through Science®

Your Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3
Your C.O.C. #: na

Attention: Anthony Stratton

Eastmount Environmental Services
2 New Pasture Road
Unit 5
Newburyport, MA
USA 1950

Report Date: 2013/07/24

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B3B0331
Received: 2013/07/10, 12:45

Sample Matrix: AIR
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Method Reference
Canister Pressure (TO-15)	1	N/A	2013/07/22	BRL SOP-00304	EPA TO-15
Volatile Organics in Air (TO-15) (1)	1	N/A	2013/07/22	BRL SOP-00304	EPA TO-15

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO14A. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO14A on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Maxxam for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Ancy Sebastian
24 Jul 2013 14:11:20 -04:00

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Ancy Sebastian, C.Tech., Senior Project Manager, Air Toxics
Email: ASebastian@maxxam.ca
Phone# (905) 817-5831

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Total cover pages: 1

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Success Through Science®

Maxxam Job #: B3B0331
Report Date: 2013/07/24

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3
Sampler Initials: AS

RESULTS OF ANALYSES OF AIR

Maxxam ID		SE8600	
Sampling Date		2013/07/02 15:55	
COC Number		na	
	Units	**RESIDUAL OIL SUMMA RUN 4 (TRUCKS) / 2758**	**QC Batch**
Pressure on Receipt	psig	(-0.5)	3289119

QC Batch = Quality Control Batch

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Success Through Science®

Maxxam Job #: B3B0331
Report Date: 2013/07/24

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3
Sampler Initials: AS

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		SE8600				
Sampling Date		2013/07/02 15:55				
COC Number		na				
	Units	**RESIDUAL OIL SUMMA RUN 4 (TRUCKS) / 2758**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Dichlorodifluoromethane (FREON 12)	ppbv	<600	600	<2970	2970	3289183
1,2-Dichlorotetrafluoroethane	ppbv	<510	510	<3570	3570	3289183
Chloromethane	ppbv	<900	900	<1860	1860	3289183
Vinyl Chloride	ppbv	<540	540	<1380	1380	3289183
Chloroethane	ppbv	<900	900	<2370	2370	3289183
1,3-Butadiene	ppbv	<1500	1500	<3320	3320	3289183
Trichlorofluoromethane (FREON 11)	ppbv	<600	600	<3370	3370	3289183
Ethanol (ethyl alcohol)	ppbv	<11000	11000	<21500	21500	3289183
Trichlorotrifluoroethane	ppbv	<450	450	<3450	3450	3289183
2-propanol	ppbv	<9000	9000	<22100	22100	3289183
2-Propanone	ppbv	<6000	6000	<14300	14300	3289183
Methyl Ethyl Ketone (2-Butanone)	ppbv	<46000	46000	<136000	136000	3289183
Methyl Isobutyl Ketone	ppbv	<9600	9600	<39300	39300	3289183
Methyl Butyl Ketone (2-Hexanone)	ppbv	<6000	6000	<24600	24600	3289183
Methyl t-butyl ether (MTBE)	ppbv	647	600	2330	2160	3289183
Ethyl Acetate	ppbv	<6600	6600	<23800	23800	3289183
1,1-Dichloroethylene	ppbv	<750	750	<2970	2970	3289183
cis-1,2-Dichloroethylene	ppbv	<570	570	<2260	2260	3289183
trans-1,2-Dichloroethylene	ppbv	<600	600	<2380	2380	3289183
Methylene Chloride(Dichloromethane)	ppbv	<27000	27000	<93800	93800	3289183
Chloroform	ppbv	<450	450	<2200	2200	3289183
Carbon Tetrachloride	ppbv	<900	900	<5660	5660	3289183
1,1-Dichloroethane	ppbv	<600	600	<2430	2430	3289183
1,2-Dichloroethane	ppbv	<600	600	<2430	2430	3289183
Ethylene Dibromide	ppbv	<510	510	<3920	3920	3289183
1,1,1-Trichloroethane	ppbv	<900	900	<4910	4910	3289183
1,1,2-Trichloroethane	ppbv	<450	450	<2460	2460	3289183
1,1,2,2-Tetrachloroethane	ppbv	<600	600	<4120	4120	3289183
cis-1,3-Dichloropropene	ppbv	<540	540	<2450	2450	3289183
trans-1,3-Dichloropropene	ppbv	<510	510	<2310	2310	3289183
1,2-Dichloropropane	ppbv	<1200	1200	<5550	5550	3289183

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam Analytics International Corporation o/a Maxxam Analytics 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.maxxam.ca

Maxxam Job #: B3B0331
Report Date: 2013/07/24

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3
Sampler Initials: AS

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		SE8600				
Sampling Date		2013/07/02 15:55				
COC Number		na				
	Units	**RESIDUAL OIL SUMMA RUN 4 (TRUCKS) / 2758**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Bromomethane	ppbv	<540	540	<2100	2100	3289183
Bromoform	ppbv	<600	600	<6200	6200	3289183
Bromodichloromethane	ppbv	<600	600	<4020	4020	3289183
Dibromochloromethane	ppbv	<600	600	<5110	5110	3289183
Trichloroethylene	ppbv	<900	900	<4840	4840	3289183
Tetrachloroethylene	ppbv	<600	600	<4070	4070	3289183
Benzene	ppbv	13000	540	41600	1730	3289183
Toluene	ppbv	38900	600	146000	2260	3289183
Ethylbenzene	ppbv	7810	600	33900	2610	3289183
p+m-Xylene	ppbv	23900	1100	104000	4820	3289183
o-Xylene	ppbv	9280	600	40300	2610	3289183
Styrene	ppbv	1270	600	5410	2560	3289183
4-ethyltoluene	ppbv	<6600	6600	<32400	32400	3289183
1,3,5-Trimethylbenzene	ppbv	2610	1500	12800	7370	3289183
1,2,4-Trimethylbenzene	ppbv	7820	1500	38400	7370	3289183
Chlorobenzene	ppbv	<600	600	<2760	2760	3289183
Benzyl chloride	ppbv	<3000	3000	<15500	15500	3289183
1,3-Dichlorobenzene	ppbv	<1200	1200	<7210	7210	3289183
1,4-Dichlorobenzene	ppbv	<1200	1200	<7210	7210	3289183
1,2-Dichlorobenzene	ppbv	<1200	1200	<7210	7210	3289183
1,2,4-Trichlorobenzene	ppbv	<6000	6000	<44500	44500	3289183
Hexachlorobutadiene	ppbv	<9000	9000	<96000	96000	3289183
Hexane	ppbv	80500	900	284000	3170	3289183
Heptane	ppbv	57300	900	235000	3690	3289183
Cyclohexane	ppbv	23000	600	79200	2070	3289183
Tetrahydrofuran	ppbv	<1200	1200	<3540	3540	3289183
1,4-Dioxane	ppbv	<6000	6000	<21600	21600	3289183
Xylene (Total)	ppbv	33200	1800	144000	7820	3289183
Vinyl Bromide	ppbv	<600	600	<2620	2620	3289183
Propene	ppbv	99900	900	172000	1550	3289183
2,2,4-Trimethylpentane	ppbv	4170	600	19500	2800	3289183
Carbon Disulfide	ppbv	<1500	1500	<4670	4670	3289183

QC Batch = Quality Control Batch

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Maxxam Job #: B3B0331
Report Date: 2013/07/24

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3
Sampler Initials: AS

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		SE8600				
Sampling Date		2013/07/02 15:55				
COC Number		na				
	Units	**RESIDUAL OIL SUMMA RUN 4 (TRUCKS) / 2758**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Vinyl Acetate	ppbv	<5100	5100	<18000	18000	3289183
Surrogate Recovery (%)						
Bromochloromethane	%	81	N/A	N/A	N/A	3289183
D5-Chlorobenzene	%	83	N/A	N/A	N/A	3289183
Difluorobenzene	%	84	N/A	N/A	N/A	3289183

N/A = Not Applicable
QC Batch = Quality Control Batch

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Maxxam Job #: B3B0331
Report Date: 2013/07/24

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3
Sampler Initials: AS

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		SE8600				
Sampling Date		2013/07/02 15:55				
COC Number		na				
	Units	RESIDUAL OIL SUMMA RUN 4 (TRUCKS) / 2758 Lab-Dup	RDL	ug/m3	DL (ug/m3)	QC Batch
Dichlorodifluoromethane (FREON 12)	ppbv	<600	600	<2970	2970	3289183
1,2-Dichlorotetrafluoroethane	ppbv	<510	510	<3570	3570	3289183
Chloromethane	ppbv	<900	900	<1860	1860	3289183
Vinyl Chloride	ppbv	<540	540	<1380	1380	3289183
Chloroethane	ppbv	<900	900	<2370	2370	3289183
1,3-Butadiene	ppbv	<1500	1500	<3320	3320	3289183
Trichlorofluoromethane (FREON 11)	ppbv	<600	600	<3370	3370	3289183
Ethanol (ethyl alcohol)	ppbv	<11000	11000	<21500	21500	3289183
Trichlorotrifluoroethane	ppbv	<450	450	<3450	3450	3289183
2-propanol	ppbv	<9000	9000	<22100	22100	3289183
2-Propanone	ppbv	<6000	6000	<14300	14300	3289183
Methyl Ethyl Ketone (2-Butanone)	ppbv	<46000	46000	<136000	136000	3289183
Methyl Isobutyl Ketone	ppbv	<9600	9600	<39300	39300	3289183
Methyl Butyl Ketone (2-Hexanone)	ppbv	<6000	6000	<24600	24600	3289183
Methyl t-butyl ether (MTBE)	ppbv	664	600	2400	2160	3289183
Ethyl Acetate	ppbv	<6600	6600	<23800	23800	3289183
1,1-Dichloroethylene	ppbv	<750	750	<2970	2970	3289183
cis-1,2-Dichloroethylene	ppbv	<570	570	<2260	2260	3289183
trans-1,2-Dichloroethylene	ppbv	<600	600	<2380	2380	3289183
Methylene Chloride(Dichloromethane)	ppbv	<27000	27000	<93800	93800	3289183
Chloroform	ppbv	<450	450	<2200	2200	3289183
Carbon Tetrachloride	ppbv	<900	900	<5660	5660	3289183
1,1-Dichloroethane	ppbv	<600	600	<2430	2430	3289183
1,2-Dichloroethane	ppbv	<600	600	<2430	2430	3289183
Ethylene Dibromide	ppbv	<510	510	<3920	3920	3289183
1,1,1-Trichloroethane	ppbv	<900	900	<4910	4910	3289183
1,1,2-Trichloroethane	ppbv	<450	450	<2460	2460	3289183
1,1,2,2-Tetrachloroethane	ppbv	<600	600	<4120	4120	3289183
cis-1,3-Dichloropropene	ppbv	<540	540	<2450	2450	3289183
trans-1,3-Dichloropropene	ppbv	<510	510	<2310	2310	3289183
1,2-Dichloropropane	ppbv	<1200	1200	<5550	5550	3289183

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B3B0331
Report Date: 2013/07/24

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3
Sampler Initials: AS

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		SE8600				
Sampling Date		2013/07/02 15:55				
COC Number		na				
	Units	RESIDUAL OIL SUMMA RUN 4 (TRUCKS) / 2758 Lab-Dup	RDL	ug/m3	DL (ug/m3)	QC Batch
Bromomethane	ppbv	<540	540	<2100	2100	3289183
Bromoform	ppbv	<600	600	<6200	6200	3289183
Bromodichloromethane	ppbv	<600	600	<4020	4020	3289183
Dibromochloromethane	ppbv	<600	600	<5110	5110	3289183
Trichloroethylene	ppbv	<900	900	<4840	4840	3289183
Tetrachloroethylene	ppbv	<600	600	<4070	4070	3289183
Benzene	ppbv	13200	540	42100	1730	3289183
Toluene	ppbv	39500	600	148000	2260	3289183
Ethylbenzene	ppbv	7850	600	34100	2610	3289183
p+m-Xylene	ppbv	24000	1100	104000	4820	3289183
o-Xylene	ppbv	9380	600	40700	2610	3289183
Styrene	ppbv	1160	600	4930	2560	3289183
4-ethyltoluene	ppbv	<6600	6600	<32400	32400	3289183
1,3,5-Trimethylbenzene	ppbv	2600	1500	12800	7370	3289183
1,2,4-Trimethylbenzene	ppbv	7900	1500	38800	7370	3289183
Chlorobenzene	ppbv	<600	600	<2760	2760	3289183
Benzyl chloride	ppbv	<3000	3000	<15500	15500	3289183
1,3-Dichlorobenzene	ppbv	<1200	1200	<7210	7210	3289183
1,4-Dichlorobenzene	ppbv	<1200	1200	<7210	7210	3289183
1,2-Dichlorobenzene	ppbv	<1200	1200	<7210	7210	3289183
1,2,4-Trichlorobenzene	ppbv	<6000	6000	<44500	44500	3289183
Hexachlorobutadiene	ppbv	<9000	9000	<96000	96000	3289183
Hexane	ppbv	82700	900	291000	3170	3289183
Heptane	ppbv	58900	900	241000	3690	3289183
Cyclohexane	ppbv	23800	600	81900	2070	3289183
Tetrahydrofuran	ppbv	<1200	1200	<3540	3540	3289183
1,4-Dioxane	ppbv	<6000	6000	<21600	21600	3289183
Xylene (Total)	ppbv	33400	1800	145000	7820	3289183
Vinyl Bromide	ppbv	<600	600	<2620	2620	3289183
Propene	ppbv	101000	900	174000	1550	3289183
2,2,4-Trimethylpentane	ppbv	4240	600	19800	2800	3289183

QC Batch = Quality Control Batch

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Maxxam Job #: B3B0331
Report Date: 2013/07/24

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3
Sampler Initials: AS

VOLATILE ORGANICS BY GC/MS (AIR)

Maxxam ID		SE8600				
Sampling Date		2013/07/02 15:55				
COC Number		na				
	Units	**RESIDUAL OIL SUMMA RUN 4 (TRUCKS) / 2758 Lab-Dup**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Carbon Disulfide	ppbv	<1500	1500	<4670	4670	3289183
Vinyl Acetate	ppbv	<5100	5100	<18000	18000	3289183
Surrogate Recovery (%)						
Bromochloromethane	%	81	N/A	N/A	N/A	3289183
D5-Chlorobenzene	%	83	N/A	N/A	N/A	3289183
Difluorobenzene	%	84	N/A	N/A	N/A	3289183

N/A = Not Applicable
QC Batch = Quality Control Batch

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Maxxam Job #: B3B0331
Report Date: 2013/07/24

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3
Sampler Initials: AS

Test Summary

Maxxam ID SE8600 **Collected** 2013/07/02
Sample ID RESIDUAL OIL SUMMA RUN 4 (TRUCKS) / 2758 **Shipped**
Matrix AIR **Received** 2013/07/10

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Canister Pressure (TO-15)	PRES	3289119	N/A	2013/07/22	Diane Temniuk
Volatile Organics in Air (TO-15)	GC/MS	3289183	N/A	2013/07/22	Diane Temniuk

Maxxam ID SE8600 Dup **Collected** 2013/07/02
Sample ID RESIDUAL OIL SUMMA RUN 4 (TRUCKS) / 2758 **Shipped**
Matrix AIR **Received** 2013/07/10

Test Description	Instrumentation	Batch	Extracted	Analyzed	Analyst
Volatile Organics in Air (TO-15)	GC/MS	3289183	N/A	2013/07/22	Diane Temniuk

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Maxxam Job #: B3B0331
Report Date: 2013/07/24

Eastmount Environmental Services
Client Project #: 12-009
Site Location: GLOBAL - RESIDUAL OIL TANK #3
Sampler Initials: AS

GENERAL COMMENTS

WS# 3289183
Ethanol exceeds 40% RSD in continuing calibration.

Sample SE8600-01: Sample was run at a 3000x dilution. DLs adjusted accordingly. DLs were raised further for 2-Propanone and Methylene Chloride due to possible background, and for Vinyl Acetate and 2-Butanone due to matrix interference. Propene represents a mixture of both Propene and Propane.

Results relate only to the items tested.

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Success Through Sciences

Eastmount Environmental Services
Attention: Anthony Stratton
Client Project #: 12-009
P.O. #:
Site Location: GLOBAL - RESIDUAL OIL TANK #3

Quality Assurance Report

Maxxam Job Number: GB3B0331

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
3289183 DVO	Spiked Blank	Bromochloromethane	2013/07/22		97	%	60 - 140
		D5-Chlorobenzene	2013/07/22		98	%	60 - 140
		Difluorobenzene	2013/07/22		101	%	60 - 140
		Dichlorodifluoromethane (FREON 12)	2013/07/22		99	%	70 - 130
		1,2-Dichlorotetrafluoroethane	2013/07/22		110	%	70 - 130
		Chloromethane	2013/07/22		88	%	70 - 130
		Vinyl Chloride	2013/07/22		89	%	70 - 130
		Chloroethane	2013/07/22		86	%	70 - 130
		1,3-Butadiene	2013/07/22		84	%	70 - 130
		Trichlorofluoromethane (FREON 11)	2013/07/22		102	%	70 - 130
		Ethanol (ethyl alcohol)	2013/07/22		74	%	70 - 130
		Trichlorotrifluoroethane	2013/07/22		99	%	70 - 130
		2-propanol	2013/07/22		79	%	70 - 130
		2-Propanone	2013/07/22		83	%	70 - 130
		Methyl Ethyl Ketone (2-Butanone)	2013/07/22		90	%	70 - 130
		Methyl Isobutyl Ketone	2013/07/22		82	%	70 - 130
		Methyl Butyl Ketone (2-Hexanone)	2013/07/22		83	%	70 - 130
		Methyl t-butyl ether (MTBE)	2013/07/22		89	%	70 - 130
		Ethyl Acetate	2013/07/22		81	%	70 - 130
		1,1-Dichloroethylene	2013/07/22		87	%	70 - 130
		cis-1,2-Dichloroethylene	2013/07/22		89	%	70 - 130
		trans-1,2-Dichloroethylene	2013/07/22		88	%	70 - 130
		Methylene Chloride(Dichloromethane)	2013/07/22		82	%	70 - 130
		Chloroform	2013/07/22		97	%	70 - 130
		Carbon Tetrachloride	2013/07/22		101	%	70 - 130
		1,1-Dichloroethane	2013/07/22		91	%	70 - 130
		1,2-Dichloroethane	2013/07/22		91	%	70 - 130
		Ethylene Dibromide	2013/07/22		105	%	70 - 130
		1,1,1-Trichloroethane	2013/07/22		101	%	70 - 130
		1,1,2-Trichloroethane	2013/07/22		105	%	70 - 130
		1,1,2,2-Tetrachloroethane	2013/07/22		100	%	70 - 130
		cis-1,3-Dichloropropene	2013/07/22		96	%	70 - 130
		trans-1,3-Dichloropropene	2013/07/22		95	%	70 - 130
		1,2-Dichloropropane	2013/07/22		94	%	70 - 130
		Bromomethane	2013/07/22		98	%	70 - 130
		Bromoform	2013/07/22		110	%	70 - 130
		Bromodichloromethane	2013/07/22		98	%	70 - 130
		Dibromochloromethane	2013/07/22		107	%	70 - 130
		Trichloroethylene	2013/07/22		108	%	70 - 130
		Tetrachloroethylene	2013/07/22		117	%	70 - 130
		Benzene	2013/07/22		96	%	70 - 130
		Toluene	2013/07/22		101	%	70 - 130
		Ethylbenzene	2013/07/22		102	%	70 - 130
		p+m-Xylene	2013/07/22		100	%	70 - 130
		o-Xylene	2013/07/22		102	%	70 - 130
		Styrene	2013/07/22		97	%	70 - 130
		4-ethyltoluene	2013/07/22		105	%	70 - 130
		1,3,5-Trimethylbenzene	2013/07/22		108	%	70 - 130
		1,2,4-Trimethylbenzene	2013/07/22		109	%	70 - 130
		Chlorobenzene	2013/07/22		109	%	70 - 130
		Benzyl chloride	2013/07/22		84	%	70 - 130
		1,3-Dichlorobenzene	2013/07/22		118	%	70 - 130
		1,4-Dichlorobenzene	2013/07/22		113	%	70 - 130
		1,2-Dichlorobenzene	2013/07/22		113	%	70 - 130
		1,2,4-Trichlorobenzene	2013/07/22		96	%	70 - 130

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Eastmount Environmental Services
Attention: Anthony Stratton
Client Project #: 12-009
P.O. #:
Site Location: GLOBAL - RESIDUAL OIL TANK #3

Quality Assurance Report (Continued)

Maxxam Job Number: GB3B0331

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
3289183 DVO	Spiked Blank	Hexachlorobutadiene	2013/07/22		117	%	70 - 130
		Hexane	2013/07/22		83	%	70 - 130
		Heptane	2013/07/22		81	%	70 - 130
		Cyclohexane	2013/07/22		87	%	70 - 130
		Tetrahydrofuran	2013/07/22		81	%	70 - 130
		1,4-Dioxane	2013/07/22		97	%	70 - 130
		Xylene (Total)	2013/07/22		101	%	70 - 130
		Vinyl Bromide	2013/07/22		94	%	70 - 130
		Propene	2013/07/22		80	%	70 - 130
		2,2,4-Trimethylpentane	2013/07/22		86	%	70 - 130
		Carbon Disulfide	2013/07/22		95	%	70 - 130
		Vinyl Acetate	2013/07/22		76	%	70 - 130
	Method Blank	Bromochloromethane	2013/07/22		83	%	60 - 140
		D5-Chlorobenzene	2013/07/22		80	%	60 - 140
		Difluorobenzene	2013/07/22		84	%	60 - 140
		Dichlorodifluoromethane (FREON 12)	2013/07/22	<0.20		ppbv	
		1,2-Dichlorotetrafluoroethane	2013/07/22	<0.17		ppbv	
		Chloromethane	2013/07/22	<0.30		ppbv	
		Vinyl Chloride	2013/07/22	<0.18		ppbv	
		Chloroethane	2013/07/22	<0.30		ppbv	
		1,3-Butadiene	2013/07/22	<0.50		ppbv	
		Trichlorofluoromethane (FREON 11)	2013/07/22	<0.20		ppbv	
		Ethanol (ethyl alcohol)	2013/07/22	<2.3		ppbv	
		Trichlorotrifluoroethane	2013/07/22	<0.15		ppbv	
		2-propanol	2013/07/22	<3.0		ppbv	
		2-Propanone	2013/07/22	<0.80		ppbv	
		Methyl Ethyl Ketone (2-Butanone)	2013/07/22	<3.0		ppbv	
		Methyl Isobutyl Ketone	2013/07/22	<3.2		ppbv	
		Methyl Butyl Ketone (2-Hexanone)	2013/07/22	<2.0		ppbv	
		Methyl t-butyl ether (MTBE)	2013/07/22	<0.20		ppbv	
		Ethyl Acetate	2013/07/22	<2.2		ppbv	
		1,1-Dichloroethylene	2013/07/22	<0.25		ppbv	
		cis-1,2-Dichloroethylene	2013/07/22	<0.19		ppbv	
		trans-1,2-Dichloroethylene	2013/07/22	<0.20		ppbv	
		Methylene Chloride(Dichloromethane)	2013/07/22	<0.80		ppbv	
		Chloroform	2013/07/22	<0.15		ppbv	
		Carbon Tetrachloride	2013/07/22	<0.30		ppbv	
		1,1-Dichloroethane	2013/07/22	<0.20		ppbv	
		1,2-Dichloroethane	2013/07/22	<0.20		ppbv	
		Ethylene Dibromide	2013/07/22	<0.17		ppbv	
		1,1,1-Trichloroethane	2013/07/22	<0.30		ppbv	
		1,1,2-Trichloroethane	2013/07/22	<0.15		ppbv	
		1,1,2,2-Tetrachloroethane	2013/07/22	<0.20		ppbv	
		cis-1,3-Dichloropropene	2013/07/22	<0.18		ppbv	
		trans-1,3-Dichloropropene	2013/07/22	<0.17		ppbv	
		1,2-Dichloropropane	2013/07/22	<0.40		ppbv	
		Bromomethane	2013/07/22	<0.18		ppbv	
		Bromoform	2013/07/22	<0.20		ppbv	
		Bromodichloromethane	2013/07/22	<0.20		ppbv	
		Dibromochloromethane	2013/07/22	<0.20		ppbv	
		Trichloroethylene	2013/07/22	<0.30		ppbv	
		Tetrachloroethylene	2013/07/22	<0.20		ppbv	
		Benzene	2013/07/22	<0.18		ppbv	
		Toluene	2013/07/22	<0.20		ppbv	
		Ethylbenzene	2013/07/22	<0.20		ppbv	

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Eastmount Environmental Services
Attention: Anthony Stratton
Client Project #: 12-009
P.O. #:
Site Location: GLOBAL - RESIDUAL OIL TANK #3

Quality Assurance Report (Continued)

Maxxam Job Number: GB3B0331

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
3289183 DVO	Method Blank	p+m-Xylene	2013/07/22	<0.37		ppbv	
		o-Xylene	2013/07/22	<0.20		ppbv	
		Styrene	2013/07/22	<0.20		ppbv	
		4-ethyltoluene	2013/07/22	<2.2		ppbv	
		1,3,5-Trimethylbenzene	2013/07/22	<0.50		ppbv	
		1,2,4-Trimethylbenzene	2013/07/22	<0.50		ppbv	
		Chlorobenzene	2013/07/22	<0.20		ppbv	
		Benzyl chloride	2013/07/22	<1.0		ppbv	
		1,3-Dichlorobenzene	2013/07/22	<0.40		ppbv	
		1,4-Dichlorobenzene	2013/07/22	<0.40		ppbv	
		1,2-Dichlorobenzene	2013/07/22	<0.40		ppbv	
		1,2,4-Trichlorobenzene	2013/07/22	<2.0		ppbv	
		Hexachlorobutadiene	2013/07/22	<3.0		ppbv	
		Hexane	2013/07/22	<0.30		ppbv	
		Heptane	2013/07/22	<0.30		ppbv	
		Cyclohexane	2013/07/22	<0.20		ppbv	
		Tetrahydrofuran	2013/07/22	<0.40		ppbv	
		1,4-Dioxane	2013/07/22	<2.0		ppbv	
		Xylene (Total)	2013/07/22	<0.60		ppbv	
		Vinyl Bromide	2013/07/22	<0.20		ppbv	
		Propene	2013/07/22	<0.30		ppbv	
		2,2,4-Trimethylpentane	2013/07/22	<0.20		ppbv	
		Carbon Disulfide	2013/07/22	<0.50		ppbv	
		Vinyl Acetate	2013/07/22	<0.20		ppbv	
	RPD - Sample/Sample Dup	Dichlorodifluoromethane (FREON 12)	2013/07/22	NC		%	25
		1,2-Dichlorotetrafluoroethane	2013/07/22	NC		%	25
		Chloromethane	2013/07/22	NC		%	25
		Vinyl Chloride	2013/07/22	NC		%	25
		Chloroethane	2013/07/22	NC		%	25
		1,3-Butadiene	2013/07/22	NC		%	25
		Trichlorofluoromethane (FREON 11)	2013/07/22	NC		%	25
		Ethanol (ethyl alcohol)	2013/07/22	NC		%	25
		Trichlorotrifluoroethane	2013/07/22	NC		%	25
		2-propanol	2013/07/22	NC		%	25
		2-Propanone	2013/07/22	NC		%	25
		Methyl Ethyl Ketone (2-Butanone)	2013/07/22	NC		%	25
		Methyl Isobutyl Ketone	2013/07/22	NC		%	25
		Methyl Butyl Ketone (2-Hexanone)	2013/07/22	NC		%	25
		Methyl t-butyl ether (MTBE)	2013/07/22	NC		%	25
		Ethyl Acetate	2013/07/22	NC		%	25
		1,1-Dichloroethylene	2013/07/22	NC		%	25
		cis-1,2-Dichloroethylene	2013/07/22	NC		%	25
		trans-1,2-Dichloroethylene	2013/07/22	NC		%	25
		Methylene Chloride(Dichloromethane)	2013/07/22	NC		%	25
		Chloroform	2013/07/22	NC		%	25
		Carbon Tetrachloride	2013/07/22	NC		%	25
		1,1-Dichloroethane	2013/07/22	NC		%	25
		1,2-Dichloroethane	2013/07/22	NC		%	25
		Ethylene Dibromide	2013/07/22	NC		%	25
		1,1,1-Trichloroethane	2013/07/22	NC		%	25
		1,1,2-Trichloroethane	2013/07/22	NC		%	25
		1,1,2,2-Tetrachloroethane	2013/07/22	NC		%	25
		cis-1,3-Dichloropropene	2013/07/22	NC		%	25

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Success Through Science®

Eastmount Environmental Services
Attention: Anthony Stratton
Client Project #: 12-009
P.O. #:
Site Location: GLOBAL - RESIDUAL OIL TANK #3

Quality Assurance Report (Continued)

Maxxam Job Number: GB3B0331

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	%Recovery	Units	QC Limits
3289183 DVO	RPD - Sample/Sample Dup	trans-1,3-Dichloropropene	2013/07/22	NC		%	25
		1,2-Dichloropropane	2013/07/22	NC		%	25
		Bromomethane	2013/07/22	NC		%	25
		Bromoform	2013/07/22	NC		%	25
		Bromodichloromethane	2013/07/22	NC		%	25
		Dibromochloromethane	2013/07/22	NC		%	25
		Trichloroethylene	2013/07/22	NC		%	25
		Tetrachloroethylene	2013/07/22	NC		%	25
		Benzene	2013/07/22	1.1		%	25
		Toluene	2013/07/22	1.4		%	25
		Ethylbenzene	2013/07/22	0.5		%	25
		p+m-Xylene	2013/07/22	0.2		%	25
		o-Xylene	2013/07/22	1.0		%	25
		Styrene	2013/07/22	NC		%	25
		4-ethyltoluene	2013/07/22	NC		%	25
		1,3,5-Trimethylbenzene	2013/07/22	NC		%	25
		1,2,4-Trimethylbenzene	2013/07/22	1.0		%	25
		Chlorobenzene	2013/07/22	NC		%	25
		Benzyl chloride	2013/07/22	NC		%	25
		1,3-Dichlorobenzene	2013/07/22	NC		%	25
		1,4-Dichlorobenzene	2013/07/22	NC		%	25
		1,2-Dichlorobenzene	2013/07/22	NC		%	25
		1,2,4-Trichlorobenzene	2013/07/22	NC		%	25
		Hexachlorobutadiene	2013/07/22	NC		%	25
		Hexane	2013/07/22	2.7		%	25
		Heptane	2013/07/22	2.7		%	25
		Cyclohexane	2013/07/22	3.4		%	25
		Tetrahydrofuran	2013/07/22	NC		%	25
		1,4-Dioxane	2013/07/22	NC		%	25
		Xylene (Total)	2013/07/22	0.5		%	25
		Vinyl Bromide	2013/07/22	NC		%	25
		Propene	2013/07/22	1.4		%	25
		2,2,4-Trimethylpentane	2013/07/22	1.7		%	25
		Carbon Disulfide	2013/07/22	NC		%	25
		Vinyl Acetate	2013/07/22	NC		%	25

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

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Volatile Organics Analysis Data Sheets
Tentatively Identified Compounds

SAMPLE#: Method Blank

Field ID#: Method Blank

Number of TICs found: 0

Concentration Units
ppbv

	CAS #	Compound Name	RT	Est. Conc.	Match %
1.		No compounds found			

Maxxam Analytical

Volatile Organics Analysis Data Sheets
Tentatively Identified Compounds

SAMPLE#: SE8600

Field ID#: Residual Oil Summa Run 4

Concentration Units

Number of TICs found 18

	CAS #	Compound Name	RT	Est. Conc. ppbv	Est. Conc. ug/m3	Match %
1.	000075-28-5	Isobutane	5.50	30500	72400	72
2.		Unknown, likely methanol	5.80	23700	31000	
3.	000115-11-7	2-methyl -1-propene	5.91	45300	104000	90
4.	000078-78-4	2-methyl butane	7.78	70700	208000	94
5.	000109-67-1	1-Pentene	8.27	13700	39100	74
6.		Unknown hydrocarbon C5H10 Mol. Wt.70	8.47	18500	52800	
7.	000109-66-0	Pentane	8.54	115000	338000	91
8.		2-methyl-2-butene	8.82	17200	49200	91
9.		Unknown hydrocarbon C5H10 Mol. Wt.70	9.24	27300	78300	
10.		Unknown hydrocarbon C6H14 Mol. Wt.86	10.90	95500	336000	
11.	000592-41-6	1-hexene	11.70	21000	72400	95
12.		Unknown hydrocarbon C6H12 Mol. Wt. 84	12.20	16800	57600	
13.	000096-37-7	methyl cyclopentane	13.10	51700	178000	94
14.	000589-34-4	3-methyl hexane	14.50	25800	106000	87
15.	000592-27-8	2-methyl- heptane	17.30	31000	145000	95
16.		Unknown hydrocarbon C9H20 Mol. Wt. 128	18.30	49200	257000	
17.	000111-84-2	Nonane	20.90	19000	99700	93
18.		Unknown hydrocarbon C13H28 Mol. Wt. 184	25.30	17000	128000	
19.						
20.						

Maxxam Analytical

AIR Chain of Cus

10-Jul-13 12:45
Ancy Sebastian
B3B0331

Maxxam Analytics Inc

ASR AIR-001

Toll Free: 1-800-668-0639
Phone: (905) 332-9768
Fax: (905) 332-9169

ANALYSIS REQUESTED

CLIENT INFORMATION SECTION

Company Name: Eastmount Environmental Services, LLC
Project Manager: Anthony Stratton
e-mail: astratton@eastmount.com
Address: 2 New Pasture Road Unit 5
Newburyport, MA 01950
Phone: 978-499-9300 Fax: 978-499-9303
Sampled by: Anthony Stratton

MAXXAM use only	Field Sample ID	Canister ID	Collection Date	Collection Time		Sample Contents	Analysis Requested
	Residual Oil Summa Run 4 (Trucks)	2758	7/2/2013	15:55		VOC vapors from residual oil tank	TO-15 compounds plus first 20 TICs

TAT Requirement

- STD 10 Business day ☑
- Rush 5 Business day ☐
- Rush 2 Business day ☐
- Rush 1 Business day ☐
- Other (specify)

PROJECT INFORMATION

Project #: 12-009
Name: Global - Residual Oil Tank #3
PO #:
Maxxam Quote #:
Maxxam Contact: Jim Jacklin

REPORTING REQUIREMENTS

- Summary Report only ☑
- Summary Report & Full Data Package ☐
- EDD ☐

PROJECT SPECIFIC COMMENTS

1) See "Analysis Requested" above.
2) Please report results in ppbv and ug/M3.
3) Please provide results in both PDF and excel format.

* Initial Impinger charge volumes are required before the following analysis can be started: Method 26, CTM-027 & Method 8.

Method 23 / TO9A
NATO TEF ☐ TEF x DL ☐ TEF x 0 DL ☐
WHO TEF ☐ TEF x 0.5 DL ☐

Client Signature: [signature]
Affiliation: Eastmount
Date/Time: 7-8-2013 10:00

Received by: Ashitha Sukumaran
Affiliation: ASHITHA SUKUMARAN
Date/Time: 2013/07/10 12:45

ED_002592A_00000538-00054