The results set forth herein are provided by SGS North America Inc.

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Automated Report

Technical Report for

Montrose Environmental Solutions Inc.

Yaffa Drum Characterization

11595-01 PO#11595-01

SGS Job Number: JD56558

Sampling Date: 12/01/22

Report to:

Montrose Environmental Solutions Inc.
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Total number of pages in report: 219

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

David Chastain
General Manager

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Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

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SGS North America Inc.

Sample Summary

Montrose Environmental Solutions Inc.

Job No: JD56558

Yaffa Drum Characterization
Project No: 11595-01 PO#11595-01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD56558-1	12/01/22	10:40	AD	12/02/22	SO	Oil	DRUM-01
JD56558-2	12/01/22	10:45	AD	12/02/22	SO	Oil	DRUM-02
JD56558-3	12/01/22	10:50	AD	12/02/22	SO	Oil	DRUM-03
JD56558-4	12/01/22	09:55	AD	12/02/22	SO	Oil	DRUM-04
JD56558-5	12/01/22	10:55	AD	12/02/22	SO	Oil	DRUM-05
JD56558-6	12/01/22	12:45	AD	12/02/22	SO	Oil	DRUM-06
JD56558-7	12/01/22	13:00	AD	12/02/22	SO	Oil	DRUM-07
JD56558-8	12/01/22	13:15	AD	12/02/22	SO	Oil	DRUM-08
JD56558-9	12/01/22	13:30	AD	12/02/22	SO	Oil	DRUM-09
JD56558-10	12/01/22	13:45	AD	12/02/22	SO	Oil	DRUM-10
JD56558-11	12/01/22	14:00	AD	12/02/22	SO	Oil	DRUM-11
JD56558-11A	12/01/22	14:00	AD	12/02/22	AQ	Water	DRUM-11

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Montrose Environmental Solutions Inc.

Job No: JD56558

Yaffa Drum Characterization
Project No: 11595-01 PO#11595-01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JD56558-12	12/01/22	14:15	AD	12/02/22	SO	Oil	DRUM-12

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: JD56558
Account: Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization
Collected: 12/01/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD56558-1	**DRUM-01**					
Benzene		1.24	0.25	0.23	mg/kg	SW846 8260D
Cyclohexane		1.41	1.0	0.33	mg/kg	SW846 8260D
Ethylbenzene		8.81	0.50	0.23	mg/kg	SW846 8260D
Isopropylbenzene		3.80	1.0	0.71	mg/kg	SW846 8260D
Methylcyclohexane		8.15	1.0	0.44	mg/kg	SW846 8260D
4-Methyl-2-pentanone(MIBK)		4.77	2.5	1.1	mg/kg	SW846 8260D
Styrene		0.245 J	1.0	0.20	mg/kg	SW846 8260D
Toluene		13.2	0.50	0.26	mg/kg	SW846 8260D
m,p-Xylene		25.0	0.50	0.45	mg/kg	SW846 8260D
o-Xylene		12.0	0.50	0.23	mg/kg	SW846 8260D
Xylene (total)		37.0	0.50	0.23	mg/kg	SW846 8260D
Total TIC, Volatile		282.3 J			mg/kg	
Total TIC, Semi-Volatile		8890 J			mg/kg	
Corrosivity as pH		6.42 NC			su	SW846 9045D
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010B/ASTM D93
Solids, Total		937000	100		mg/kg	SM2540 G 18TH ED MOD
JD56558-2	**DRUM-02**					
Benzene [a]		0.401	0.23	0.21	mg/kg	SW846 8260D
Ethylbenzene [a]		0.389 J	0.45	0.21	mg/kg	SW846 8260D
Styrene [a]		0.426 J	0.91	0.18	mg/kg	SW846 8260D
Tetrachloroethene		173	9.1	2.6	mg/kg	SW846 8260D
Toluene [a]		0.711	0.45	0.24	mg/kg	SW846 8260D
m,p-Xylene [a]		0.813	0.45	0.41	mg/kg	SW846 8260D
o-Xylene [a]		0.459	0.45	0.21	mg/kg	SW846 8260D
Xylene (total) [a]		1.27	0.45	0.21	mg/kg	SW846 8260D
Total TIC, Volatile		183 J			mg/kg	
Corrosivity as pH		6.60 NC			su	SW846 9045D
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010B/ASTM D93
Solids, Total		905000	100		mg/kg	SM2540 G 18TH ED MOD
JD56558-3	**DRUM-03**					
Benzene		6.85	0.25	0.23	mg/kg	SW846 8260D
Cyclohexane		7.30	1.0	0.33	mg/kg	SW846 8260D
Ethylbenzene		70.3	0.50	0.23	mg/kg	SW846 8260D
Isopropylbenzene		17.5	1.0	0.71	mg/kg	SW846 8260D
Methylcyclohexane		28.1	1.0	0.44	mg/kg	SW846 8260D
Styrene		1.25	1.0	0.20	mg/kg	SW846 8260D
Toluene		86.5	25	13	mg/kg	SW846 8260D
m,p-Xylene		191	25	22	mg/kg	SW846 8260D
o-Xylene		86.6	25	11	mg/kg	SW846 8260D

Summary of Hits

Job Number: JD56558
Account: Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization
Collected: 12/01/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Xylene (total)		278	25	11	mg/kg	SW846 8260D
Total TIC, Volatile		556 J			mg/kg	
bis(2-Ethylhexyl)phthalate [b]		35.4 J	200	23	mg/kg	SW846 8270E
2-Methylnaphthalene [b]		60.1 J	100	23	mg/kg	SW846 8270E
Naphthalene [b]		40.2 J	100	28	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		570 J			mg/kg	
Aroclor 1262 [b]		22.1	5.0	3.3	mg/kg	SW846 8082A
Corrosivity as pH		6.22 NC			su	SW846 9045D
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010B/ASTM D93
Solids, Total		899000	100		mg/kg	SM2540 G 18TH ED MOD
JD56558-4	**DRUM-04**					
Benzene [c]		85.3	11	10	mg/kg	SW846 8260D
Cyclohexane [c]		68.1	45	15	mg/kg	SW846 8260D
Ethylbenzene [c]		2010	23	10	mg/kg	SW846 8260D
Isopropylbenzene [c]		245	45	32	mg/kg	SW846 8260D
Methylcyclohexane [c]		423	45	20	mg/kg	SW846 8260D
Toluene		5090	230	120	mg/kg	SW846 8260D
m,p-Xylene [c]		8380	23	20	mg/kg	SW846 8260D
o-Xylene [c]		3680	23	10	mg/kg	SW846 8260D
Xylene (total) [c]		12100	23	10	mg/kg	SW846 8260D
Total TIC, Volatile		30780 J			mg/kg	
1,1'-Biphenyl [b]		48.8 J	200	14	mg/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate [b]		53.2 J	200	23	mg/kg	SW846 8270E
2-Methylnaphthalene [b]		455	100	23	mg/kg	SW846 8270E
Naphthalene [b]		328	100	28	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		37470 J			mg/kg	
Lead		6.5	2.0		mg/kg	SW846 6010D
Corrosivity as pH		7.56 NC			su	SW846 9045D
Ignitability (Flashpoint) [d]		86.0			Deg. F	SW846 1010B/ASTM D93
Solids, Total		606000	100		mg/kg	SM2540 G 18TH ED MOD
JD56558-5	**DRUM-05**					
Benzene [a]		14.0	1.3	1.1	mg/kg	SW846 8260D
Cyclohexane [a]		32.3	5.0	1.6	mg/kg	SW846 8260D
Ethylbenzene [a]		176	2.5	1.1	mg/kg	SW846 8260D
Isopropylbenzene [a]		67.3	5.0	3.6	mg/kg	SW846 8260D
Methylcyclohexane [a]		170	5.0	2.2	mg/kg	SW846 8260D
Tetrachloroethene		666	50	15	mg/kg	SW846 8260D
Toluene [a]		170	2.5	1.3	mg/kg	SW846 8260D
m,p-Xylene [a]		633	2.5	2.2	mg/kg	SW846 8260D
o-Xylene [a]		328	2.5	1.1	mg/kg	SW846 8260D
Xylene (total) [a]		961	2.5	1.1	mg/kg	SW846 8260D

Summary of Hits

Job Number: JD56558
Account: Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization
Collected: 12/01/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Total TIC, Volatile		8170 J			mg/kg	
1,1'-Biphenyl [b]		24.4 J	200	14	mg/kg	SW846 8270E
2-Methylnaphthalene [b]		121	100	23	mg/kg	SW846 8270E
Naphthalene [b]		48.6 J	100	28	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		8080 J			mg/kg	
Lead		2.6	2.0		mg/kg	SW846 6010D
Corrosivity as pH		6.69 NC			su	SW846 9045D
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010B/ASTM D93
Solids, Total		694000	100		mg/kg	SM2540 G 18TH ED MOD
JD56558-6	**DRUM-06**					
Benzene [c]		14.7	0.45	0.41	mg/kg	SW846 8260D
Cyclohexane [c]		23.7	1.8	0.60	mg/kg	SW846 8260D
Ethylbenzene [c]		128	0.91	0.41	mg/kg	SW846 8260D
Isopropylbenzene [c]		56.0	1.8	1.3	mg/kg	SW846 8260D
Methylcyclohexane [c]		111	1.8	0.80	mg/kg	SW846 8260D
Toluene		253	9.1	4.8	mg/kg	SW846 8260D
m,p-Xylene		548	9.1	8.1	mg/kg	SW846 8260D
o-Xylene		254	9.1	4.2	mg/kg	SW846 8260D
Xylene (total)		802	9.1	4.2	mg/kg	SW846 8260D
Total TIC, Volatile		4350 J			mg/kg	
1,1'-Biphenyl		32.6 J	200	14	mg/kg	SW846 8270E
bis(2-Ethylhexyl)phthalate		61.0 J	200	23	mg/kg	SW846 8270E
2-Methylnaphthalene		203	100	23	mg/kg	SW846 8270E
Naphthalene		91.3 J	100	28	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		13280 J			mg/kg	
Corrosivity as pH		6.32 NC			su	SW846 9045D
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010B/ASTM D93
Solids, Total		742000	100		mg/kg	SM2540 G 18TH ED MOD
JD56558-7	**DRUM-07**					
Acetone [e]		34.0	5.0	2.1	mg/kg	SW846 8260D
Benzene		1.41	0.25	0.23	mg/kg	SW846 8260D
2-Butanone (MEK)		1.50 J	5.0	1.2	mg/kg	SW846 8260D
Cyclohexane		4.79	1.0	0.33	mg/kg	SW846 8260D
Ethylbenzene		14.8	0.50	0.23	mg/kg	SW846 8260D
Isopropylbenzene		6.96	1.0	0.71	mg/kg	SW846 8260D
Methylcyclohexane		19.4	1.0	0.44	mg/kg	SW846 8260D
Toluene		13.8	0.50	0.26	mg/kg	SW846 8260D
m,p-Xylene		53.2	0.50	0.45	mg/kg	SW846 8260D
o-Xylene		26.6	0.50	0.23	mg/kg	SW846 8260D
Xylene (total)		79.8	0.50	0.23	mg/kg	SW846 8260D
Total TIC, Volatile		1135 J			mg/kg	

Summary of Hits

Job Number: JD56558
Account: Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization
Collected: 12/01/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Total TIC, Semi-Volatile		6340 J			mg/kg	
Corrosivity as pH		7.17 NC			su	SW846 9045D
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010B/ASTM D93
Solids, Total		919000	100		mg/kg	SM2540 G 18TH ED MOD
JD56558-8	**DRUM-08**					
Benzene		0.865	0.23	0.21	mg/kg	SW846 8260D
Cyclohexane		3.71	0.91	0.30	mg/kg	SW846 8260D
Ethylbenzene		41.0	0.45	0.21	mg/kg	SW846 8260D
Isopropylbenzene		29.7	0.91	0.65	mg/kg	SW846 8260D
Methylcyclohexane		28.2	0.91	0.40	mg/kg	SW846 8260D
Tetrachloroethene		9.30	0.91	0.26	mg/kg	SW846 8260D
Toluene		24.2	0.45	0.24	mg/kg	SW846 8260D
m,p-Xylene		151	0.45	0.41	mg/kg	SW846 8260D
o-Xylene		82.6	0.45	0.21	mg/kg	SW846 8260D
Xylene (total)		234	0.45	0.21	mg/kg	SW846 8260D
Total TIC, Volatile		2930 J			mg/kg	
Corrosivity as pH		6.50 NC			su	SW846 9045D
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010B/ASTM D93
Solids, Total		300000	100		mg/kg	SM2540 G 18TH ED MOD
JD56558-9	**DRUM-09**					
Benzene [c]		37.7	2.5	2.3	mg/kg	SW846 8260D
Cyclohexane [c]		104	10	3.3	mg/kg	SW846 8260D
Ethylbenzene [c]		510	5.0	2.3	mg/kg	SW846 8260D
Isopropylbenzene [c]		201	10	7.1	mg/kg	SW846 8260D
Methylcyclohexane [c]		576	10	4.4	mg/kg	SW846 8260D
Toluene [c]		465	5.0	2.6	mg/kg	SW846 8260D
m,p-Xylene [c]		1870	5.0	4.5	mg/kg	SW846 8260D
o-Xylene [c]		983	5.0	2.3	mg/kg	SW846 8260D
Xylene (total) [c]		2850	5.0	2.3	mg/kg	SW846 8260D
Total TIC, Volatile		24700 J			mg/kg	
Acenaphthene [b]		35.4 J	100	35	mg/kg	SW846 8270E
1,1'-Biphenyl [b]		240	200	14	mg/kg	SW846 8270E
Fluorene [b]		89.2 J	100	46	mg/kg	SW846 8270E
2-Methylnaphthalene [b]		1110	100	23	mg/kg	SW846 8270E
Naphthalene [b]		414	100	28	mg/kg	SW846 8270E
Phenanthrene [b]		70.6 J	100	34	mg/kg	SW846 8270E
Pyrene [b]		63.8 J	100	32	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		72000 J			mg/kg	
Corrosivity as pH		6.22 NC			su	SW846 9045D
Ignitability (Flashpoint) [f]		141			Deg. F	SW846 1010B/ASTM D93
Solids, Total		42700	100		mg/kg	SM2540 G 18TH ED MOD

Summary of Hits

Job Number: JD56558
Account: Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization
Collected: 12/01/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD56558-10	**DRUM-10**					
Benzene [a]		8.97	0.45	0.41	mg/kg	SW846 8260D
Cyclohexane [a]		9.15	1.8	0.60	mg/kg	SW846 8260D
Ethylbenzene [a]		76.9	0.91	0.41	mg/kg	SW846 8260D
Isopropylbenzene [a]		12.7	1.8	1.3	mg/kg	SW846 8260D
Methylcyclohexane [a]		26.1	1.8	0.80	mg/kg	SW846 8260D
Toluene [a]		166	0.91	0.48	mg/kg	SW846 8260D
m,p-Xylene [a]		346	0.91	0.81	mg/kg	SW846 8260D
o-Xylene [a]		170	0.91	0.42	mg/kg	SW846 8260D
Xylene (total) [a]		516	0.91	0.42	mg/kg	SW846 8260D
Total TIC, Volatile		2339 J			mg/kg	
Corrosivity as pH		6.84 NC			su	SW846 9045D
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010B/ASTM D93
Solids, Total		772000	100		mg/kg	SM2540 G 18TH ED MOD
JD56558-11	**DRUM-11**					
Corrosivity as pH		6.73 NC			su	SW846 9045D
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010B/ASTM D93
Solids, Total		995	100		mg/kg	SM2540 G 18TH ED MOD
JD56558-11A	**DRUM-11**					
Total TIC, Volatile		12 J			ug/l	
JD56558-12	**DRUM-12**					
Cyclohexane [c]		3.69 J	5.0	1.6	mg/kg	SW846 8260D
Ethylbenzene [c]		115	2.5	1.1	mg/kg	SW846 8260D
Isopropylbenzene [c]		68.8	5.0	3.6	mg/kg	SW846 8260D
Methylcyclohexane [c]		56.7	5.0	2.2	mg/kg	SW846 8260D
Toluene [c]		49.7	2.5	1.3	mg/kg	SW846 8260D
m,p-Xylene [c]		538	2.5	2.2	mg/kg	SW846 8260D
o-Xylene [c]		298	2.5	1.1	mg/kg	SW846 8260D
Xylene (total) [c]		836	2.5	1.1	mg/kg	SW846 8260D
Total TIC, Volatile		9830 J			mg/kg	
1,1'-Biphenyl [b]		43.3 J	200	14	mg/kg	SW846 8270E
2-Methylnaphthalene [b]		180	100	23	mg/kg	SW846 8270E
Naphthalene [b]		60.6 J	100	28	mg/kg	SW846 8270E
Total TIC, Semi-Volatile		21290 J			mg/kg	
Corrosivity as pH		6.66 NC			su	SW846 9045D
Ignitability (Flashpoint)		> 200			Deg. F	SW846 1010B/ASTM D93
Solids, Total		381000	100		mg/kg	SM2540 G 18TH ED MOD

Summary of Hits

Job Number: JD56558
Account: Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization
Collected: 12/01/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method

(a) Dilution required due to high concentration of target compound.
(b) Dilution required due to viscosity of the extract matrix.
(c) Dilution required due to high concentrations of target and non-target compounds.
(d) Flashpoint testing started at 67 deg. F. Sample did sustain flame when tested with a flame in open air.
(e) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte.
(f) Flashpoint testing started at 59 deg. F. Sample did sustain flame when tested with a flame in open air.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	DRUM-01		
Lab Sample ID:	JD56558-1	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2F0795.D	1	12/09/22 19:09	ED	n/a	n/a	V2F28
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.0 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.1	mg/kg	
71-43-2	Benzene	1.24	0.25	0.23	mg/kg	
74-97-5	Bromochloromethane	ND	2.5	0.28	mg/kg	
75-27-4	Bromodichloromethane	ND	1.0	0.21	mg/kg	
75-25-2	Bromoform	ND	2.5	0.68	mg/kg	
74-83-9	Bromomethane [a]	ND	2.5	0.38	mg/kg	
78-93-3	2-Butanone (MEK) [a]	ND	5.0	1.2	mg/kg	
75-15-0	Carbon disulfide	ND	1.0	0.27	mg/kg	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	mg/kg	
108-90-7	Chlorobenzene	ND	1.0	0.23	mg/kg	
75-00-3	Chloroethane	ND	2.5	0.30	mg/kg	
67-66-3	Chloroform	ND	1.0	0.26	mg/kg	
74-87-3	Chloromethane	ND	2.5	0.98	mg/kg	
110-82-7	Cyclohexane	1.41	1.0	0.33	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.35	mg/kg	
124-48-1	Dibromochloromethane	ND	1.0	0.28	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.50	0.21	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.50	0.27	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.50	0.25	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.50	0.25	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	2.5	0.36	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.50	0.25	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.50	0.24	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.50	0.33	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.50	0.42	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	0.31	mg/kg	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.24	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.23	mg/kg	
100-41-4	Ethylbenzene	8.81	0.50	0.23	mg/kg	
76-13-1	Freon 113	ND	2.5	1.3	mg/kg	
591-78-6	2-Hexanone	ND	2.5	1.1	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-01		
Lab Sample ID:	JD56558-1	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	3.80	1.0	0.71	mg/kg	
79-20-9	Methyl Acetate	ND	2.5	0.70	mg/kg	
108-87-2	Methylcyclohexane	8.15	1.0	0.44	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.23	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	4.77	2.5	1.1	mg/kg	
75-09-2	Methylene chloride	ND	2.5	1.3	mg/kg	
100-42-5	Styrene	0.245	1.0	0.20	mg/kg	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	mg/kg	
127-18-4	Tetrachloroethene	ND	1.0	0.29	mg/kg	
108-88-3	Toluene	13.2	0.50	0.26	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	1.3	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	1.3	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	mg/kg	
79-01-6	Trichloroethene	ND	0.50	0.38	mg/kg	
75-69-4	Trichlorofluoromethane	ND	2.5	0.34	mg/kg	
75-01-4	Vinyl chloride	ND	1.0	0.24	mg/kg	
	m,p-Xylene	25.0	0.50	0.45	mg/kg	
95-47-6	o-Xylene	12.0	0.50	0.23	mg/kg	
1330-20-7	Xylene (total)	37.0	0.50	0.23	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%		80-124%
17060-07-0	1,2-Dichloroethane-D4	111%		75-133%
2037-26-5	Toluene-D8	98%		79-125%
460-00-4	4-Bromofluorobenzene	105%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	5.47	11	mg/kg	J
	alkane	7.61	33	mg/kg	J
	C3 alkyl benzene	7.67	18	mg/kg	J
95-63-6	Benzene, 1,2,4-trimethyl-	7.96	28	mg/kg	JN
	alkane	8.31	51	mg/kg	J
	alcohols	8.38	13	mg/kg	J
	C4 alkyl benzene	8.51	9.9	mg/kg	J
	Methylindene-dihydro-isomer+ C4 alkyl ben	8.61	12	mg/kg	J
	C4 alkyl benzene	8.81	9.4	mg/kg	J
	Methylindene-dihydro-isomer+ C4 alkyl ben	8.93	19	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-01		
Lab Sample ID:	JD56558-1	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Methylindene-dihydro-isomer+ C4 alkyl ben	9.03	23	mg/kg	J
	Naphthalene, tetrahydro-methyl-isom	9.23	10	mg/kg	J
	Dimethylindene-dihydro-isomer+ Naphthale	9.45	11	mg/kg	J
	Naphthalene, tetrahydro-methyl-isom	9.65	18	mg/kg	J
	Naphthalene, tetrahydro-methyl-isom	9.92	16	mg/kg	J
	Total TIC, Volatile		282.3	mg/kg	J

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-01		
Lab Sample ID:	JD56558-1	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M185640.D	10	12/16/22 13:19	CS	12/07/22 12:20	OP43515	EM8027
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol [b]	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol [b]	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol [c]	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol [b]	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	ND	100	35	mg/kg	
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	ND	200	14	mg/kg	
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-01		
Lab Sample ID:	JD56558-1	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [d]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	200	23	mg/kg	
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	ND	100	46	mg/kg	
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	ND	100	23	mg/kg	
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline [b]	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	ND	100	28	mg/kg	
98-95-3	Nitrobenzene [d]	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine [b]	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	ND	100	34	mg/kg	
129-00-0	Pyrene	ND	100	32	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	107% [e]		10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-01		
Lab Sample ID:	JD56558-1	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	85%		10-96%
118-79-6	2,4,6-Tribromophenol	105%		10-123%
4165-60-0	Nitrobenzene-d5	170% [f]		10-109%
321-60-8	2-Fluorobiphenyl	105%		11-109%
1718-51-0	Terphenyl-d14	117%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	12.73	440	mg/kg	J
	alkane	13.50	570	mg/kg	J
	unknown	13.76	470	mg/kg	J
	Cyclohexane alkyl	13.84	420	mg/kg	J
	alkane	14.23	440	mg/kg	J
	alkane	14.77	540	mg/kg	J
	alkane	14.93	600	mg/kg	J
	Cyclohexane alkyl	15.32	490	mg/kg	J
	alkane	15.62	900	mg/kg	J
	unknown	16.03	470	mg/kg	J
	alkane	16.28	880	mg/kg	J
	alkane	16.91	870	mg/kg	J
	alkane	17.52	1100	mg/kg	J
	unknown	18.12	700	mg/kg	J
	Total TIC, Semi-Volatile		8890	mg/kg	J

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in BS is outside in house QC limits bias high.
(d) Associated CCV,BS outside of control limits high, sample was ND.
(e) Outside control limits due to dilution.
(f) High percent recoveries and no positive found in the sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-01		
Lab Sample ID:	JD56558-1	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8082A SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5G126166.D	10	12/08/22 14:04	MLC	12/07/22 12:24	OP43508	G5G3190
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	5.0	2.3	mg/kg	
11104-28-2	Aroclor 1221	ND	5.0	3.1	mg/kg	
11141-16-5	Aroclor 1232	ND	5.0	3.2	mg/kg	
53469-21-9	Aroclor 1242	ND	5.0	2.1	mg/kg	
12672-29-6	Aroclor 1248	ND	5.0	4.5	mg/kg	
11097-69-1	Aroclor 1254	ND	5.0	2.7	mg/kg	
11096-82-5	Aroclor 1260	ND	5.0	2.1	mg/kg	
11100-14-4	Aroclor 1268	ND	5.0	2.1	mg/kg	
37324-23-5	Aroclor 1262	ND	5.0	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	180% [b]		10-163%
877-09-8	Tetrachloro-m-xylene	116%		10-163%
2051-24-3	Decachlorobiphenyl	229% [b]		10-215%
2051-24-3	Decachlorobiphenyl	134%		10-215%

(a) Dilution required due to viscosity of the extract matrix.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DRUM-01
Lab Sample ID: JD56558-1
Matrix: SO - Oil
Project: Yaffa Drum Characterization

Date Sampled: 12/01/22
Date Received: 12/02/22
Percent Solids: n/a

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 1.9	1.9	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 19	19	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.48	0.48	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 0.95	0.95	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	< 1.9	1.9	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 1.9	1.9	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.48	0.48	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-01		
Lab Sample ID:	JD56558-1	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.42 NC		su	1	12/05/22 19:44	MM	SW846 9045D
Cyanide Reactivity	< 9.7	9.7	mg/kg	1	12/07/22 15:50	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	937000	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 97	97	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-02		
Lab Sample ID:	JD56558-2	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D185208.D	1	12/12/22 21:17	ED	n/a	n/a	V3D7783
Run #2	3D185202.D	1	12/12/22 18:56	ED	n/a	n/a	V3D7783

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.1 g	10.0 ml	100 ul
Run #2	1.1 g	10.0 ml	10.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	4.5	1.9	mg/kg	
71-43-2	Benzene	0.401	0.23	0.21	mg/kg	
74-97-5	Bromochloromethane	ND	2.3	0.25	mg/kg	
75-27-4	Bromodichloromethane	ND	0.91	0.19	mg/kg	
75-25-2	Bromoform	ND	2.3	0.62	mg/kg	
74-83-9	Bromomethane	ND	2.3	0.35	mg/kg	
78-93-3	2-Butanone (MEK)	ND	4.5	1.1	mg/kg	
75-15-0	Carbon disulfide	ND	0.91	0.24	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.91	0.28	mg/kg	
108-90-7	Chlorobenzene	ND	0.91	0.21	mg/kg	
75-00-3	Chloroethane	ND	2.3	0.27	mg/kg	
67-66-3	Chloroform	ND	0.91	0.24	mg/kg	
74-87-3	Chloromethane	ND	2.3	0.89	mg/kg	
110-82-7	Cyclohexane	ND	0.91	0.30	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.91	0.32	mg/kg	
124-48-1	Dibromochloromethane	ND	0.91	0.25	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.45	0.19	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.45	0.25	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.45	0.23	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.45	0.22	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	2.3	0.33	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.45	0.22	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.45	0.21	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.45	0.30	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.45	0.38	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.45	0.28	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.91	0.21	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.91	0.22	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.91	0.21	mg/kg	
100-41-4	Ethylbenzene	0.389	0.45	0.21	mg/kg	J
76-13-1	Freon 113	ND	2.3	1.2	mg/kg	
591-78-6	2-Hexanone	ND	2.3	0.96	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-02		
Lab Sample ID:	JD56558-2	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	0.91	0.65	mg/kg	
79-20-9	Methyl Acetate	ND	2.3	0.63	mg/kg	
108-87-2	Methylcyclohexane	ND	0.91	0.40	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.45	0.21	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	2.3	1.0	mg/kg	
75-09-2	Methylene chloride	ND	2.3	1.2	mg/kg	
100-42-5	Styrene	0.426	0.91	0.18	mg/kg	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.91	0.27	mg/kg	
127-18-4	Tetrachloroethene	173 [c]	9.1	2.6	mg/kg	
108-88-3	Toluene	0.711	0.45	0.24	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	2.3	1.1	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2.3	1.1	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.91	0.22	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.91	0.25	mg/kg	
79-01-6	Trichloroethene	ND	0.45	0.35	mg/kg	
75-69-4	Trichlorofluoromethane	ND	2.3	0.31	mg/kg	
75-01-4	Vinyl chloride	ND	0.91	0.22	mg/kg	
	m,p-Xylene	0.813	0.45	0.41	mg/kg	
95-47-6	o-Xylene	0.459	0.45	0.21	mg/kg	
1330-20-7	Xylene (total)	1.27	0.45	0.21	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%	106%	80-124%
17060-07-0	1,2-Dichloroethane-D4	100%	94%	75-133%
2037-26-5	Toluene-D8	101%	96%	79-125%
460-00-4	4-Bromofluorobenzene	102%	99%	58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	9.66	12	mg/kg	J
	unknown	10.75	13	mg/kg	J
	Naphthalene, tetrahydro- isomer	10.93	10	mg/kg	J
	unknown	11.13	8.2	mg/kg	J
	1H-indene-dihydro-dimethyl- isomer	11.23	9.2	mg/kg	J
	Naphthalene, tetrahydro-methyl- isomer	11.49	8.9	mg/kg	J
	1H-indene-dihydro-dimethyl- isomer	11.58	16	mg/kg	J
	Naphthalene, tetrahydro-methyl- isomer	11.99	18	mg/kg	J
	Naphthalene, tetrahydro- isomer	12.30	13	mg/kg	J
	Naphthalene, tetrahydro- isomer	12.50	28	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-02		
Lab Sample ID:	JD56558-2	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Naphthalene, tetrahydro-methyl- isomer	12.57	8.3	mg/kg	J
	Naphthalene, methyl- isomer	12.71	13	mg/kg	J
	Naphthalene, tetrahydro-methyl- isomer	12.87	9.3	mg/kg	J
	Naphthalene, tetrahydro-methyl- isomer	13.24	8.5	mg/kg	J
	Naphthalene, dimethyl- isomer	13.67	7.6	mg/kg	J
	Total TIC, Volatile		183	mg/kg	J

(a) Dilution required due to high concentration of target compound.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(c) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-02		
Lab Sample ID:	JD56558-2	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M185634.D	10	12/16/22 10:18	CS	12/07/22 12:20	OP43515	EM8027
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol [b]	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol [b]	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol [c]	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol [b]	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	ND	100	35	mg/kg	
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	ND	200	14	mg/kg	
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-02		
Lab Sample ID:	JD56558-2	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [d]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	200	23	mg/kg	
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	ND	100	46	mg/kg	
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	ND	100	23	mg/kg	
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline [b]	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	ND	100	28	mg/kg	
98-95-3	Nitrobenzene [d]	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine [b]	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	ND	100	34	mg/kg	
129-00-0	Pyrene	ND	100	32	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	212% [e]		10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-02		
Lab Sample ID:	JD56558-2	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	194% e		10-96%
118-79-6	2,4,6-Tribromophenol	0% f		10-123%
4165-60-0	Nitrobenzene-d5	289% e		10-109%
321-60-8	2-Fluorobiphenyl	217% e		11-109%
1718-51-0	Terphenyl-d14	234% e		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in BS is outside in house QC limits bias high.
(d) Associated CCV,BS outside of control limits high, sample was ND.
(e) High percent recoveries and no positive found in the sample.
(f) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-02		
Lab Sample ID:	JD56558-2	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8082A SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5G126176.D	10	12/08/22 16:54	MLC	12/07/22 12:24	OP43508	G5G3190
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	5.0	2.3	mg/kg	
11104-28-2	Aroclor 1221	ND	5.0	3.1	mg/kg	
11141-16-5	Aroclor 1232	ND	5.0	3.2	mg/kg	
53469-21-9	Aroclor 1242	ND	5.0	2.1	mg/kg	
12672-29-6	Aroclor 1248	ND	5.0	4.5	mg/kg	
11097-69-1	Aroclor 1254	ND	5.0	2.7	mg/kg	
11096-82-5	Aroclor 1260	ND	5.0	2.1	mg/kg	
11100-14-4	Aroclor 1268	ND	5.0	2.1	mg/kg	
37324-23-5	Aroclor 1262	ND	5.0	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	96%		10-163%
877-09-8	Tetrachloro-m-xylene	121%		10-163%
2051-24-3	Decachlorobiphenyl	255% [b]		10-215%
2051-24-3	Decachlorobiphenyl	166%		10-215%

(a) Dilution required due to viscosity of the extract matrix.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-02		
Lab Sample ID:	JD56558-2	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 20	20	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 1.0	1.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-02		
Lab Sample ID:	JD56558-2	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.60 NC		su	1	12/05/22 20:00	MM	SW846 9045D
Cyanide Reactivity	< 9.6	9.6	mg/kg	1	12/07/22 15:52	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	905000	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 96	96	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-03		
Lab Sample ID:	JD56558-3	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2F0807.D	1	12/10/22 00:13	ED	n/a	n/a	V2F28
Run #2	3D185085.D	1	12/07/22 14:42	ED	n/a	n/a	V3D7776

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.0 g	10.0 ml	100 ul
Run #2	1.0 g	10.0 ml	2.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	2.1	mg/kg	
71-43-2	Benzene	6.85	0.25	0.23	mg/kg	
74-97-5	Bromochloromethane	ND	2.5	0.28	mg/kg	
75-27-4	Bromodichloromethane	ND	1.0	0.21	mg/kg	
75-25-2	Bromoform	ND	2.5	0.68	mg/kg	
74-83-9	Bromomethane [a]	ND	2.5	0.38	mg/kg	
78-93-3	2-Butanone (MEK) [a]	ND	5.0	1.2	mg/kg	
75-15-0	Carbon disulfide	ND	1.0	0.27	mg/kg	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	mg/kg	
108-90-7	Chlorobenzene	ND	1.0	0.23	mg/kg	
75-00-3	Chloroethane	ND	2.5	0.30	mg/kg	
67-66-3	Chloroform	ND	1.0	0.26	mg/kg	
74-87-3	Chloromethane	ND	2.5	0.98	mg/kg	
110-82-7	Cyclohexane	7.30	1.0	0.33	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.35	mg/kg	
124-48-1	Dibromochloromethane	ND	1.0	0.28	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.50	0.21	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.50	0.27	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.50	0.25	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.50	0.25	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	2.5	0.36	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.50	0.25	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.50	0.24	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.50	0.33	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.50	0.42	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	0.31	mg/kg	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.24	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.23	mg/kg	
100-41-4	Ethylbenzene	70.3	0.50	0.23	mg/kg	
76-13-1	Freon 113	ND	2.5	1.3	mg/kg	
591-78-6	2-Hexanone	ND	2.5	1.1	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-03		
Lab Sample ID:	JD56558-3	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	17.5	1.0	0.71	mg/kg	
79-20-9	Methyl Acetate	ND	2.5	0.70	mg/kg	
108-87-2	Methylcyclohexane	28.1	1.0	0.44	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.23	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	2.5	1.1	mg/kg	
75-09-2	Methylene chloride	ND	2.5	1.3	mg/kg	
100-42-5	Styrene	1.25	1.0	0.20	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	mg/kg	
127-18-4	Tetrachloroethene	ND	1.0	0.29	mg/kg	
108-88-3	Toluene	86.5 [b]	25	13	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	1.3	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	1.3	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	mg/kg	
79-01-6	Trichloroethene	ND	0.50	0.38	mg/kg	
75-69-4	Trichlorofluoromethane	ND	2.5	0.34	mg/kg	
75-01-4	Vinyl chloride	ND	1.0	0.24	mg/kg	
	m,p-Xylene	191 [b]	25	22	mg/kg	
95-47-6	o-Xylene	86.6 [b]	25	11	mg/kg	
1330-20-7	Xylene (total)	278 [b]	25	11	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	86%	101%	80-124%
17060-07-0	1,2-Dichloroethane-D4	101%	92%	75-133%
2037-26-5	Toluene-D8	100%	95%	79-125%
460-00-4	4-Bromofluorobenzene	114%	100%	58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
540-84-1	Pentane, 2,2,4-trimethyl-	3.71	31	mg/kg	JN
	alkane	4.73	30	mg/kg	J
	alkane	4.85	30	mg/kg	J
	alkane	4.90	22	mg/kg	J
	alkane	5.26	29	mg/kg	J
	alkane	5.47	29	mg/kg	J
	alkane	7.61	21	mg/kg	J
	C3 alkyl benzene	7.67	50	mg/kg	J
95-63-6	Benzene, 1,2,4-trimethyl-	7.96	77	mg/kg	JN
	C4 alkyl benzene	8.30	65	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-03		
Lab Sample ID:	JD56558-3	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C4 alkyl benzene	8.81	42	mg/kg	J
	1H-Indene-dihydro-methyl-isomer	8.93	30	mg/kg	J
	1H-Indene-dihydro-methyl-isomer	9.03	38	mg/kg	J
91-20-3	Naphthalene	9.46	37	mg/kg	JN
526-73-8	Benzene, 1,2,3-trimethyl-	8.21	25	mg/kg	JN
	Total TIC, Volatile		556	mg/kg	J

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-03		
Lab Sample ID:	JD56558-3	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M185717.D	10	12/19/22 16:16	KH	12/07/22 12:20	OP43515	EM8030
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	ND	100	35	mg/kg	
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene [b]	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene [b]	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	ND	200	14	mg/kg	
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DRUM-03
Lab Sample ID: JD56558-3
Matrix: SO - Oil
Method: SW846 8270E SW846 3580A
Project: Yaffa Drum Characterization

Date Sampled: 12/01/22
Date Received: 12/02/22
Percent Solids: n/a

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [b]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene [b]	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene [b]	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	35.4	200	23	mg/kg	J
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	ND	100	46	mg/kg	
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene [c]	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene [b]	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	60.1	100	23	mg/kg	J
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	40.2	100	28	mg/kg	J
98-95-3	Nitrobenzene	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	ND	100	34	mg/kg	
129-00-0	Pyrene	ND	100	32	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	101% [d]		10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-03		
Lab Sample ID:	JD56558-3	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	100% [d]		10-96%
118-79-6	2,4,6-Tribromophenol	125% [d]		10-123%
4165-60-0	Nitrobenzene-d5	134% [d]		10-109%
321-60-8	2-Fluorobiphenyl	115% [d]		11-109%
1718-51-0	Terphenyl-d14	120%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.48	1500	mg/kg	J
	unknown	5.23	570	mg/kg	J
	Total TIC, Semi-Volatile		570	mg/kg	J

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(d) Outside control limits due to dilution.

Report of Analysis

Client Sample ID:	DRUM-03		
Lab Sample ID:	JD56558-3	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8082A SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5G126182.D	10	12/08/22 18:36	MLC	12/07/22 12:24	OP43508	G5G3190
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	5.0	2.3	mg/kg	
11104-28-2	Aroclor 1221	ND	5.0	3.1	mg/kg	
11141-16-5	Aroclor 1232	ND	5.0	3.2	mg/kg	
53469-21-9	Aroclor 1242	ND	5.0	2.1	mg/kg	
12672-29-6	Aroclor 1248	ND	5.0	4.5	mg/kg	
11097-69-1	Aroclor 1254	ND	5.0	2.7	mg/kg	
11096-82-5	Aroclor 1260	ND	5.0	2.1	mg/kg	
11100-14-4	Aroclor 1268	ND	5.0	2.1	mg/kg	
37324-23-5	Aroclor 1262	22.1	5.0	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	350% [b]		10-163%
877-09-8	Tetrachloro-m-xylene	141%		10-163%
2051-24-3	Decachlorobiphenyl	396% [b]		10-215%
2051-24-3	Decachlorobiphenyl	355% [b]		10-215%

(a) Dilution required due to viscosity of the extract matrix.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-03		
Lab Sample ID:	JD56558-3	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 20	20	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 1.0	1.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-03		
Lab Sample ID:	JD56558-3	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.22 NC		su	1	12/05/22 20:02	MM	SW846 9045D
Cyanide Reactivity	< 9.7	9.7	mg/kg	1	12/07/22 15:53	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	899000	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 97	97	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-04		
Lab Sample ID:	JD56558-4	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D185086.D	1	12/07/22 15:06	ED	n/a	n/a	V3D7776
Run #2	3D185131.D	1	12/08/22 18:18	ED	n/a	n/a	V3D7780

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.1 g	10.0 ml	2.0 ul
Run #2	1.1 g	10.0 ml	0.20 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	230	94	mg/kg	
71-43-2	Benzene	85.3	11	10	mg/kg	
74-97-5	Bromochloromethane	ND	110	13	mg/kg	
75-27-4	Bromodichloromethane	ND	45	9.8	mg/kg	
75-25-2	Bromoform	ND	110	31	mg/kg	
74-83-9	Bromomethane	ND	110	17	mg/kg	
78-93-3	2-Butanone (MEK) [b]	ND	230	55	mg/kg	
75-15-0	Carbon disulfide	ND	45	12	mg/kg	
56-23-5	Carbon tetrachloride	ND	45	14	mg/kg	
108-90-7	Chlorobenzene	ND	45	10	mg/kg	
75-00-3	Chloroethane	ND	110	13	mg/kg	
67-66-3	Chloroform	ND	45	12	mg/kg	
74-87-3	Chloromethane [b]	ND	110	45	mg/kg	
110-82-7	Cyclohexane	68.1	45	15	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	45	16	mg/kg	
124-48-1	Dibromochloromethane	ND	45	13	mg/kg	
106-93-4	1,2-Dibromoethane	ND	23	9.6	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	23	12	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	23	11	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	23	11	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	110	17	mg/kg	
75-34-3	1,1-Dichloroethane	ND	23	11	mg/kg	
107-06-2	1,2-Dichloroethane	ND	23	11	mg/kg	
75-35-4	1,1-Dichloroethene	ND	23	15	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	23	19	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	23	14	mg/kg	
78-87-5	1,2-Dichloropropane [b]	ND	45	11	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	45	11	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	45	10	mg/kg	
100-41-4	Ethylbenzene	2010	23	10	mg/kg	
76-13-1	Freon 113	ND	110	61	mg/kg	
591-78-6	2-Hexanone	ND	110	48	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DRUM-04
Lab Sample ID: JD56558-4
Matrix: SO - Oil
Method: SW846 8260D
Project: Yaffa Drum Characterization

Date Sampled: 12/01/22
Date Received: 12/02/22
Percent Solids: n/a

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	245	45	32	mg/kg	
79-20-9	Methyl Acetate	ND	110	32	mg/kg	
108-87-2	Methylcyclohexane	423	45	20	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	23	11	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	110	52	mg/kg	
75-09-2	Methylene chloride	ND	110	59	mg/kg	
100-42-5	Styrene	ND	45	9.1	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	45	14	mg/kg	
127-18-4	Tetrachloroethene	ND	45	13	mg/kg	
108-88-3	Toluene	5090 [c]	230	120	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	110	57	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	110	57	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	45	11	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	45	13	mg/kg	
79-01-6	Trichloroethene	ND	23	17	mg/kg	
75-69-4	Trichlorofluoromethane	ND	110	16	mg/kg	
75-01-4	Vinyl chloride	ND	45	11	mg/kg	
	m,p-Xylene	8380	23	20	mg/kg	
95-47-6	o-Xylene	3680	23	10	mg/kg	
1330-20-7	Xylene (total)	12100	23	10	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	105%	80-124%
17060-07-0	1,2-Dichloroethane-D4	92%	101%	75-133%
2037-26-5	Toluene-D8	92%	98%	79-125%
460-00-4	4-Bromofluorobenzene	94%	110%	58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
540-84-1	Pentane, 2,2,4-trimethyl-	4.42	4100	mg/kg	JN
	alkane	5.30	2200	mg/kg	J
	alkane	5.41	3100	mg/kg	J
	alkane	5.68	1300	mg/kg	J
	C3 alkyl benzene	8.38	2900	mg/kg	J
	C3 alkyl benzene	8.42	1200	mg/kg	J
108-67-8	Benzene, 1,3,5-trimethyl-	8.48	2000	mg/kg	JN
	C3 alkyl benzene	8.65	1300	mg/kg	J
95-63-6	Benzene, 1,2,4-trimethyl-	8.84	4900	mg/kg	JN
	C4 alkyl benzene + Indane	9.45	1700	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-04		
Lab Sample ID:	JD56558-4	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C4 alkyl benzene	9.51	1400	mg/kg	J
	C4 alkyl benzene	9.89	930	mg/kg	J
	1H-Indene-dihydro-methyl - isomer	10.75	1400	mg/kg	J
	1H-indene-dihydro-dimethyl-isomer	11.58	950	mg/kg	J
526-73-8	Benzene, 1,2,3-trimethyl-	9.23	1400	mg/kg	JN
	Total TIC, Volatile		30780	mg/kg	J

(a) Dilution required due to high concentrations of target and non-target compounds.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(c) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-04		
Lab Sample ID:	JD56558-4	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M185633.D	10	12/16/22 09:48	CS	12/07/22 12:20	OP43515	EM8027
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol [b]	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol [b]	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol [c]	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol [b]	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	ND	100	35	mg/kg	
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	48.8	200	14	mg/kg	J
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DRUM-04
Lab Sample ID: JD56558-4
Matrix: SO - Oil
Method: SW846 8270E SW846 3580A
Project: Yaffa Drum Characterization

Date Sampled: 12/01/22
Date Received: 12/02/22
Percent Solids: n/a

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [d]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	53.2	200	23	mg/kg	J
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	ND	100	46	mg/kg	
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	455	100	23	mg/kg	
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline [b]	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	328	100	28	mg/kg	
98-95-3	Nitrobenzene [d]	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine [b]	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	ND	100	34	mg/kg	
129-00-0	Pyrene	ND	100	32	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	101% [e]		10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-04		
Lab Sample ID:	JD56558-4	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	179% e		10-96%
118-79-6	2,4,6-Tribromophenol	112%		10-123%
4165-60-0	Nitrobenzene-d5	221% e		10-109%
321-60-8	2-Fluorobiphenyl	108%		11-109%
1718-51-0	Terphenyl-d14	119%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	2.44	3500	mg/kg	J
	unknown	2.48	1300	mg/kg	J
	unknown	2.74	1500	mg/kg	J
	alkane	2.87	1700	mg/kg	J
	alkane	2.93	1900	mg/kg	J
	Hexane, -trimethyl-	3.10	1200	mg/kg	J
	alkane	3.95	920	mg/kg	J
	alkane	4.17	950	mg/kg	J
	alkane	4.34	1800	mg/kg	J
	C3 alkyl benzene	4.36	2500	mg/kg	J
	C3 alkyl benzene	4.39	1100	mg/kg	J
	C3 alkyl benzene	4.57	5000	mg/kg	J
	Cyclohexane alkyl	4.80	920	mg/kg	J
	C4 alkyl benzene	4.89	1800	mg/kg	J
	C4 alkyl benzene	4.93	1900	mg/kg	J
	C4 alkyl benzene	4.99	940	mg/kg	J
	unknown	5.20	640	mg/kg	J
	unknown	5.54	840	mg/kg	J
	alkane	6.29	610	mg/kg	J
	alkane	6.51	1800	mg/kg	J
	alkane	9.92	1800	mg/kg	J
	alkane	11.62	840	mg/kg	J
	alkane	12.43	680	mg/kg	J
	alkane	16.91	580	mg/kg	J
	alkane	17.52	750	mg/kg	J
	Total TIC, Semi-Volatile		37470	mg/kg	J

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in BS is outside in house QC limits bias high.
(d) Associated CCV,BS outside of control limits high, sample was ND.
(e) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-04		
Lab Sample ID:	JD56558-4	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8082A SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5G126172.D	2	12/08/22 15:47	MLC	12/07/22 12:24	OP43508	G5G3190
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	1.0	0.47	mg/kg	
11104-28-2	Aroclor 1221	ND	1.0	0.62	mg/kg	
11141-16-5	Aroclor 1232	ND	1.0	0.64	mg/kg	
53469-21-9	Aroclor 1242	ND	1.0	0.41	mg/kg	
12672-29-6	Aroclor 1248	ND	1.0	0.89	mg/kg	
11097-69-1	Aroclor 1254	ND	1.0	0.54	mg/kg	
11096-82-5	Aroclor 1260	ND	1.0	0.43	mg/kg	
11100-14-4	Aroclor 1268	ND	1.0	0.42	mg/kg	
37324-23-5	Aroclor 1262	ND	1.0	0.65	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		10-163%
877-09-8	Tetrachloro-m-xylene	82%		10-163%
2051-24-3	Decachlorobiphenyl	160%		10-215%
2051-24-3	Decachlorobiphenyl	137%		10-215%

(a) Dilution required due to viscosity of the extract matrix.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-04		
Lab Sample ID:	JD56558-4	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 20	20	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 1.0	1.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	6.5	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-04		
Lab Sample ID:	JD56558-4	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.56 NC		su	1	12/05/22 20:05	MM	SW846 9045D
Cyanide Reactivity	< 9.7	9.7	mg/kg	1	12/07/22 15:54	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint) [a]	86.0		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	606000	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 97	97	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

(a) Flashpoint testing started at 67 deg. F. Sample did sustain flame when tested with a flame in open air.

RL = Reporting Limit

Report of Analysis

Client Sample ID: DRUM-05
Lab Sample ID: JD56558-5
Matrix: SO - Oil
Method: SW846 8260D
Project: Yaffa Drum Characterization

Date Sampled: 12/01/22
Date Received: 12/02/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D185207.D	1	12/12/22 20:53	ED	n/a	n/a	V3D7783
Run #2	3D185087.D	1	12/07/22 15:29	ED	n/a	n/a	V3D7776

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.0 g	10.0 ml	20.0 ul
Run #2	1.0 g	10.0 ml	2.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	25	10	mg/kg	
71-43-2	Benzene	14.0	1.3	1.1	mg/kg	
74-97-5	Bromochloromethane	ND	13	1.4	mg/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.1	mg/kg	
75-25-2	Bromoform	ND	13	3.4	mg/kg	
74-83-9	Bromomethane	ND	13	1.9	mg/kg	
78-93-3	2-Butanone (MEK)	ND	25	6.1	mg/kg	
75-15-0	Carbon disulfide	ND	5.0	1.3	mg/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.5	mg/kg	
108-90-7	Chlorobenzene	ND	5.0	1.1	mg/kg	
75-00-3	Chloroethane	ND	13	1.5	mg/kg	
67-66-3	Chloroform	ND	5.0	1.3	mg/kg	
74-87-3	Chloromethane	ND	13	4.9	mg/kg	
110-82-7	Cyclohexane	32.3	5.0	1.6	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.7	mg/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.4	mg/kg	
106-93-4	1,2-Dibromoethane	ND	2.5	1.1	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.5	1.4	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.5	1.2	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.5	1.2	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	13	1.8	mg/kg	
75-34-3	1,1-Dichloroethane	ND	2.5	1.2	mg/kg	
107-06-2	1,2-Dichloroethane	ND	2.5	1.2	mg/kg	
75-35-4	1,1-Dichloroethene	ND	2.5	1.6	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.5	2.1	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	1.5	mg/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.2	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.2	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.1	mg/kg	
100-41-4	Ethylbenzene	176	2.5	1.1	mg/kg	
76-13-1	Freon 113	ND	13	6.7	mg/kg	
591-78-6	2-Hexanone	ND	13	5.3	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-05		
Lab Sample ID:	JD56558-5	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	67.3	5.0	3.6	mg/kg	
79-20-9	Methyl Acetate	ND	13	3.5	mg/kg	
108-87-2	Methylcyclohexane	170	5.0	2.2	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.5	1.2	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	13	5.7	mg/kg	
75-09-2	Methylene chloride	ND	13	6.5	mg/kg	
100-42-5	Styrene	ND	5.0	1.0	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	mg/kg	
127-18-4	Tetrachloroethene	666 [c]	50	15	mg/kg	
108-88-3	Toluene	170	2.5	1.3	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	13	6.3	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	13	6.3	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.4	mg/kg	
79-01-6	Trichloroethene	ND	2.5	1.9	mg/kg	
75-69-4	Trichlorofluoromethane	ND	13	1.7	mg/kg	
75-01-4	Vinyl chloride	ND	5.0	1.2	mg/kg	
	m,p-Xylene	633	2.5	2.2	mg/kg	
95-47-6	o-Xylene	328	2.5	1.1	mg/kg	
1330-20-7	Xylene (total)	961	2.5	1.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	99%	80-124%
17060-07-0	1,2-Dichloroethane-D4	95%	95%	75-133%
2037-26-5	Toluene-D8	99%	99%	79-125%
460-00-4	4-Bromofluorobenzene	107%	94%	58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	8.38	470	mg/kg	J
108-67-8	Benzene, 1,3,5-trimethyl-	8.48	510	mg/kg	JN
95-63-6	Benzene, 1,2,4-trimethyl-	8.84	780	mg/kg	JN
	C4 alkyl benzene	9.45	590	mg/kg	J
	C4 alkyl benzene	9.51	580	mg/kg	J
	C5 alkyl benzene	10.03	500	mg/kg	J
	1H-Indene-dihydro-methyl- isomer	10.60	440	mg/kg	J
	1H-Indene-dihydro-methyl- isomer	10.76	730	mg/kg	J
	Naphthalene, tetrahydro- isomer	10.93	500	mg/kg	J
	1H-indene-dihydro-dimethyl- isomer	11.13	430	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-05		
Lab Sample ID:	JD56558-5	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	1H-indene-dihydro-dimethyl- isomer	11.23	500	mg/kg	J
	Naphthalene, tetrahydro-methyl- is	11.49	380	mg/kg	J
	Naphthalene, tetrahydro-methyl- is	11.99	620	mg/kg	J
	Naphthalene, tetrahydro-methyl- is	12.30	420	mg/kg	J
	Naphthalene, tetrahydro-methyl- is	12.50	720	mg/kg	J
	Total TIC, Volatile		8170	mg/kg	J

(a) Dilution required due to high concentration of target compound.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(c) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DRUM-05
Lab Sample ID: JD56558-5
Matrix: SO - Oil
Method: SW846 8270E SW846 3580A
Project: Yaffa Drum Characterization

Date Sampled: 12/01/22
Date Received: 12/02/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M185718.D	10	12/19/22 16:46	KH	12/07/22 12:20	OP43515	EM8030
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	ND	100	35	mg/kg	
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene [b]	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene [b]	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	24.4	200	14	mg/kg	J
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-05		
Lab Sample ID:	JD56558-5	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [b]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene [b]	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene [b]	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	200	23	mg/kg	
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	ND	100	46	mg/kg	
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene [c]	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene [b]	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	121	100	23	mg/kg	
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	48.6	100	28	mg/kg	J
98-95-3	Nitrobenzene	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	ND	100	34	mg/kg	
129-00-0	Pyrene	ND	100	32	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	124% [d]		10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-05		
Lab Sample ID:	JD56558-5	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	121% [d]		10-96%
118-79-6	2,4,6-Tribromophenol	106%		10-123%
4165-60-0	Nitrobenzene-d5	230% [d]		10-109%
321-60-8	2-Fluorobiphenyl	124% [d]		11-109%
1718-51-0	Terphenyl-d14	126% [d]		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.46	650	mg/kg	J
	C3 alkyl benzene	4.38	430	mg/kg	J
	alkane	4.58	1300	mg/kg	J
	unknown	4.91	530	mg/kg	J
	C4 alkyl benzene	4.95	550	mg/kg	J
	C3 alkyl benzene	5.01	480	mg/kg	J
	C4 alkyl benzene	5.22	470	mg/kg	J
	alkane	5.57	400	mg/kg	J
	alkane	6.53	940	mg/kg	J
	alkane	7.83	430	mg/kg	J
	alkane	9.06	720	mg/kg	J
	alkane	9.94	920	mg/kg	J
	alkane	11.64	490	mg/kg	J
	alkane	12.45	420	mg/kg	J
	Total TIC, Semi-Volatile		8080	mg/kg	J

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(d) Outside control limits due to dilution.

Report of Analysis

Client Sample ID:	DRUM-05		
Lab Sample ID:	JD56558-5	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8082A SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5G126183.D	10	12/08/22 18:52	MLC	12/07/22 12:24	OP43508	G5G3190
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	5.0	2.3	mg/kg	
11104-28-2	Aroclor 1221	ND	5.0	3.1	mg/kg	
11141-16-5	Aroclor 1232	ND	5.0	3.2	mg/kg	
53469-21-9	Aroclor 1242	ND	5.0	2.1	mg/kg	
12672-29-6	Aroclor 1248	ND	5.0	4.5	mg/kg	
11097-69-1	Aroclor 1254	ND	5.0	2.7	mg/kg	
11096-82-5	Aroclor 1260	ND	5.0	2.1	mg/kg	
11100-14-4	Aroclor 1268	ND	5.0	2.1	mg/kg	
37324-23-5	Aroclor 1262	ND	5.0	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	194% [b]		10-163%
877-09-8	Tetrachloro-m-xylene	82%		10-163%
2051-24-3	Decachlorobiphenyl	236% [b]		10-215%
2051-24-3	Decachlorobiphenyl	152%		10-215%

(a) Dilution required due to viscosity of the extract matrix.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-05		
Lab Sample ID:	JD56558-5	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 20	20	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 1.0	1.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	2.6	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-05		
Lab Sample ID:	JD56558-5	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.69 NC		su	1	12/05/22 20:11	MM	SW846 9045D
Cyanide Reactivity	< 9.8	9.8	mg/kg	1	12/07/22 15:56	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	694000	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 98	98	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-06		
Lab Sample ID:	JD56558-6	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D185259.D	1	12/13/22 17:55	PS	n/a	n/a	V3D7785
Run #2	3D185255.D	1	12/13/22 16:20	PS	n/a	n/a	V3D7785

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.1 g	10.0 ml	50.0 ul
Run #2	1.1 g	10.0 ml	5.0 ul

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	9.1	3.8	mg/kg	
71-43-2	Benzene	14.7	0.45	0.41	mg/kg	
74-97-5	Bromochloromethane	ND	4.5	0.51	mg/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.39	mg/kg	
75-25-2	Bromoform	ND	4.5	1.2	mg/kg	
74-83-9	Bromomethane	ND	4.5	0.69	mg/kg	
78-93-3	2-Butanone (MEK)	ND	9.1	2.2	mg/kg	
75-15-0	Carbon disulfide	ND	1.8	0.49	mg/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.56	mg/kg	
108-90-7	Chlorobenzene	ND	1.8	0.42	mg/kg	
75-00-3	Chloroethane [b]	ND	4.5	0.54	mg/kg	
67-66-3	Chloroform	ND	1.8	0.47	mg/kg	
74-87-3	Chloromethane	ND	4.5	1.8	mg/kg	
110-82-7	Cyclohexane	23.7	1.8	0.60	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.63	mg/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.51	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.91	0.38	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.91	0.50	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.91	0.45	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.91	0.45	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	4.5	0.66	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.91	0.45	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.91	0.43	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.91	0.60	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.91	0.76	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.91	0.56	mg/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.43	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.43	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.42	mg/kg	
100-41-4	Ethylbenzene	128	0.91	0.41	mg/kg	
76-13-1	Freon 113	ND	4.5	2.4	mg/kg	
591-78-6	2-Hexanone	ND	4.5	1.9	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-06		
Lab Sample ID:	JD56558-6	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	56.0	1.8	1.3	mg/kg	
79-20-9	Methyl Acetate	ND	4.5	1.3	mg/kg	
108-87-2	Methylcyclohexane	111	1.8	0.80	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.91	0.43	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.5	2.1	mg/kg	
75-09-2	Methylene chloride	ND	4.5	2.4	mg/kg	
100-42-5	Styrene	ND	1.8	0.37	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.54	mg/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.53	mg/kg	
108-88-3	Toluene	253 [c]	9.1	4.8	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.5	2.3	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.5	2.3	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.44	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.50	mg/kg	
79-01-6	Trichloroethene	ND	0.91	0.69	mg/kg	
75-69-4	Trichlorofluoromethane [b]	ND	4.5	0.62	mg/kg	
75-01-4	Vinyl chloride [b]	ND	1.8	0.44	mg/kg	
	m,p-Xylene	548 [c]	9.1	8.1	mg/kg	
95-47-6	o-Xylene	254 [c]	9.1	4.2	mg/kg	
1330-20-7	Xylene (total)	802 [c]	9.1	4.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	98%	80-124%
17060-07-0	1,2-Dichloroethane-D4	89%	95%	75-133%
2037-26-5	Toluene-D8	97%	98%	79-125%
460-00-4	4-Bromofluorobenzene	104%	93%	58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	8.38	310	mg/kg	J
108-67-8	Benzene, 1,3,5-trimethyl-	8.48	220	mg/kg	JN
95-63-6	Benzene, 1,2,4-trimethyl-	8.84	470	mg/kg	JN
	C4 alkyl benzene	9.45	320	mg/kg	J
	C4 alkyl benzene	9.51	290	mg/kg	J
	C4 alkyl benzene	10.03	260	mg/kg	J
	1H-Indene-dihydro-methyl-isomer	10.60	230	mg/kg	J
	1H-Indene-dihydro-methyl-isomer+ C4	10.76	380	mg/kg	J
	Naphthalene, tetrahydro-isomer	10.93	220	mg/kg	J
	1H-Indene-dihydro-dimethyl-isomer+	11.14	210	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-06		
Lab Sample ID:	JD56558-6	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	1H-Indene-dihydro-dimethyl-isomer+	11.24	250	mg/kg	J
	1H-indene-dihydro-dimethyl-isomer	11.58	370	mg/kg	J
	Naphthalene,tetrahydro-dimethyl-isom	11.99	300	mg/kg	J
	Naphthalene,tetrahydro-methyl-isom	12.31	180	mg/kg	J
	Naphthalene,tetrahydro-dimethyl-isom	12.51	340	mg/kg	J
	Total TIC, Volatile		4350	mg/kg	J

(a) Dilution required due to high concentrations of target and non-target compounds.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-06		
Lab Sample ID:	JD56558-6	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M185635.D	10	12/16/22 10:48	CS	12/07/22 12:20	OP43515	EM8027
Run #2 [a]	2P111327.D	5	12/29/22 20:28	RS	12/22/22 11:00	OP43822	E2P5036

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2	1.0 g	10.0 ml

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol [b]	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol [b]	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol [c]	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol [b]	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	ND	100	35	mg/kg	
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	32.6	200	14	mg/kg	J
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-06		
Lab Sample ID:	JD56558-6	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [d]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	61.0	200	23	mg/kg	J
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	ND	100	46	mg/kg	
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	203	100	23	mg/kg	
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline [b]	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	91.3	100	28	mg/kg	J
98-95-3	Nitrobenzene [d]	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine [b]	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	ND	100	34	mg/kg	
129-00-0	Pyrene	ND	100	32	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	226% [e]	94%	10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-06		
Lab Sample ID:	JD56558-6	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	222% [e]	105% [f]	10-96%
118-79-6	2,4,6-Tribromophenol	241% [e]	86%	10-123%
4165-60-0	Nitrobenzene-d5	358% [e]	109%	10-109%
321-60-8	2-Fluorobiphenyl	246% [e]	75%	11-109%
1718-51-0	Terphenyl-d14	274% [e]	100%	10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	4.37	500	mg/kg	J
	C3 alkyl benzene	4.57	1000	mg/kg	J
	C4 alkyl benzene	4.89	520	mg/kg	J
	C4 alkyl benzene	4.93	500	mg/kg	J
	unknown	5.54	590	mg/kg	J
	alkane	6.51	660	mg/kg	J
	alkane	9.04	800	mg/kg	J
	alkane	9.92	910	mg/kg	J
	alkane	11.62	570	mg/kg	J
	alkane	12.43	460	mg/kg	J
	alkane	13.21	490	mg/kg	J
	alkane	14.69	430	mg/kg	J
	alkane	15.39	410	mg/kg	J
	alkane	15.63	700	mg/kg	J
	alkane	16.09	500	mg/kg	J
	alkane	16.75	610	mg/kg	J
	alkane	16.91	930	mg/kg	J
	unknown	17.32	500	mg/kg	J
	unknown	17.53	1200	mg/kg	J
	alkane	17.68	530	mg/kg	J
	unknown	17.77	470	mg/kg	J
	Total TIC, Semi-Volatile		13280	mg/kg	J

(a) Confirmation run.
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in BS is outside in house QC limits bias high.
(d) Associated CCV,BS outside of control limits high, sample was ND.
(e) Outside control limits due to analytical spiking error. Sample re-extracted for confirmation.
(f) Outside of in house control limits, but within reasonable method recovery limits.

Report of Analysis

Client Sample ID:	DRUM-06		
Lab Sample ID:	JD56558-6	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8082A SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5G126173.D	10	12/08/22 16:04	MLC	12/07/22 12:24	OP43508	G5G3190
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	5.0	2.3	mg/kg	
11104-28-2	Aroclor 1221	ND	5.0	3.1	mg/kg	
11141-16-5	Aroclor 1232	ND	5.0	3.2	mg/kg	
53469-21-9	Aroclor 1242	ND	5.0	2.1	mg/kg	
12672-29-6	Aroclor 1248	ND	5.0	4.5	mg/kg	
11097-69-1	Aroclor 1254	ND	5.0	2.7	mg/kg	
11096-82-5	Aroclor 1260	ND	5.0	2.1	mg/kg	
11100-14-4	Aroclor 1268	ND	5.0	2.1	mg/kg	
37324-23-5	Aroclor 1262	ND	5.0	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	242% [b]		10-163%
877-09-8	Tetrachloro-m-xylene	92%		10-163%
2051-24-3	Decachlorobiphenyl	248% [b]		10-215%
2051-24-3	Decachlorobiphenyl	263% [b]		10-215%

(a) Dilution required due to viscosity of the extract matrix.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DRUM-06
Lab Sample ID: JD56558-6
Matrix: SO - Oil
Project: Yaffa Drum Characterization

Date Sampled: 12/01/22
Date Received: 12/02/22
Percent Solids: n/a

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 20	20	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 1.0	1.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-06		
Lab Sample ID:	JD56558-6	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.32 NC		su	1	12/05/22 20:13	MM	SW846 9045D
Cyanide Reactivity	< 9.8	9.8	mg/kg	1	12/07/22 15:57	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	742000	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 98	98	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-07		
Lab Sample ID:	JD56558-7	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D185206.D	1	12/12/22 20:30	ED	n/a	n/a	V3D7783
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.0 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	34.0	5.0	2.1	mg/kg	
71-43-2	Benzene	1.41	0.25	0.23	mg/kg	
74-97-5	Bromochloromethane	ND	2.5	0.28	mg/kg	
75-27-4	Bromodichloromethane	ND	1.0	0.21	mg/kg	
75-25-2	Bromoform	ND	2.5	0.68	mg/kg	
74-83-9	Bromomethane	ND	2.5	0.38	mg/kg	
78-93-3	2-Butanone (MEK)	1.50	5.0	1.2	mg/kg	J
75-15-0	Carbon disulfide	ND	1.0	0.27	mg/kg	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	mg/kg	
108-90-7	Chlorobenzene	ND	1.0	0.23	mg/kg	
75-00-3	Chloroethane	ND	2.5	0.30	mg/kg	
67-66-3	Chloroform	ND	1.0	0.26	mg/kg	
74-87-3	Chloromethane	ND	2.5	0.98	mg/kg	
110-82-7	Cyclohexane	4.79	1.0	0.33	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.0	0.35	mg/kg	
124-48-1	Dibromochloromethane	ND	1.0	0.28	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.50	0.21	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.50	0.27	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.50	0.25	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.50	0.25	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	2.5	0.36	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.50	0.25	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.50	0.24	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.50	0.33	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.50	0.42	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.50	0.31	mg/kg	
78-87-5	1,2-Dichloropropane	ND	1.0	0.24	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.24	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.23	mg/kg	
100-41-4	Ethylbenzene	14.8	0.50	0.23	mg/kg	
76-13-1	Freon 113	ND	2.5	1.3	mg/kg	
591-78-6	2-Hexanone	ND	2.5	1.1	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DRUM-07
Lab Sample ID: JD56558-7
Matrix: SO - Oil
Method: SW846 8260D
Project: Yaffa Drum Characterization

Date Sampled: 12/01/22
Date Received: 12/02/22
Percent Solids: n/a

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	6.96	1.0	0.71	mg/kg	
79-20-9	Methyl Acetate	ND	2.5	0.70	mg/kg	
108-87-2	Methylcyclohexane	19.4	1.0	0.44	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.50	0.23	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	2.5	1.1	mg/kg	
75-09-2	Methylene chloride	ND	2.5	1.3	mg/kg	
100-42-5	Styrene	ND	1.0	0.20	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	mg/kg	
127-18-4	Tetrachloroethene	ND	1.0	0.29	mg/kg	
108-88-3	Toluene	13.8	0.50	0.26	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	1.3	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	1.3	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.24	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.28	mg/kg	
79-01-6	Trichloroethene	ND	0.50	0.38	mg/kg	
75-69-4	Trichlorofluoromethane	ND	2.5	0.34	mg/kg	
75-01-4	Vinyl chloride	ND	1.0	0.24	mg/kg	
	m,p-Xylene	53.2	0.50	0.45	mg/kg	
95-47-6	o-Xylene	26.6	0.50	0.23	mg/kg	
1330-20-7	Xylene (total)	79.8	0.50	0.23	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		80-124%
17060-07-0	1,2-Dichloroethane-D4	95%		75-133%
2037-26-5	Toluene-D8	96%		79-125%
460-00-4	4-Bromofluorobenzene	88%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	8.49	73	mg/kg	J
95-63-6	Benzene, 1,2,4-trimethyl-	8.84	73	mg/kg	JN
	C3 alkyl benzene	9.45	66	mg/kg	J
	C4 alkyl benzene	9.51	66	mg/kg	J
	C4 alkyl benzene	10.02	65	mg/kg	J
	unknown	10.75	96	mg/kg	J
	Naphthalene, tetrahydro-methyl- is	10.93	77	mg/kg	J
	1H-indene-dihydro-dimethyl- isomer	11.14	54	mg/kg	J
	1H-indene-dihydro-dimethyl- isomer	11.23	65	mg/kg	J
	Naphthalene, tetrahydro-methyl- isomer	11.49	71	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-07		
Lab Sample ID:	JD56558-7	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	1H-indene-dihydro-dimethyl- isomer	11.58	93	mg/kg	J
	Naphthalene, tetrahydro-methyl- isomer	11.99	96	mg/kg	J
	Naphthalene, tetrahydro-methyl- isomer	12.31	67	mg/kg	J
	Naphthalene, tetrahydro-methyl- isomer	12.50	120	mg/kg	J
	Naphthalene, methyl-isomer	12.71	53	mg/kg	J
	Total TIC, Volatile		1135	mg/kg	J

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-07		
Lab Sample ID:	JD56558-7	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M185636.D	10	12/16/22 11:18	CS	12/07/22 12:20	OP43515	EM8027
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol [b]	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol [b]	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol [c]	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol [b]	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	ND	100	35	mg/kg	
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	ND	200	14	mg/kg	
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-07		
Lab Sample ID:	JD56558-7	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [d]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	200	23	mg/kg	
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	ND	100	46	mg/kg	
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	ND	100	23	mg/kg	
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline [b]	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	ND	100	28	mg/kg	
98-95-3	Nitrobenzene [d]	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine [b]	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	ND	100	34	mg/kg	
129-00-0	Pyrene	ND	100	32	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	97%		10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-07		
Lab Sample ID:	JD56558-7	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	112% [e]		10-96%
118-79-6	2,4,6-Tribromophenol	78%		10-123%
4165-60-0	Nitrobenzene-d5	163% [f]		10-109%
321-60-8	2-Fluorobiphenyl	122% [f]		11-109%
1718-51-0	Terphenyl-d14	119%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	2.50	4700	mg/kg	J
65-85-0	Benzoic acid	5.56	1100	mg/kg	JN
98-73-7	Benzoic acid, p-tert-butyl-	8.09	540	mg/kg	JN
	Total TIC, Semi-Volatile		6340	mg/kg	J

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in BS is outside in house QC limits bias high.
(d) Associated CCV,BS outside of control limits high, sample was ND.
(e) Outside control limits due to dilution.
(f) High percent recoveries and no positive found in the sample.

Report of Analysis

Client Sample ID:	DRUM-07		
Lab Sample ID:	JD56558-7	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8082A SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5G126184.D	10	12/08/22 19:09	MLC	12/07/22 12:24	OP43508	G5G3190
Run #2							

	Initial Weight	Final Volume
Run #1	1.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	4.5	2.1	mg/kg	
11104-28-2	Aroclor 1221	ND	4.5	2.8	mg/kg	
11141-16-5	Aroclor 1232	ND	4.5	2.9	mg/kg	
53469-21-9	Aroclor 1242	ND	4.5	1.9	mg/kg	
12672-29-6	Aroclor 1248	ND	4.5	4.1	mg/kg	
11097-69-1	Aroclor 1254	ND	4.5	2.4	mg/kg	
11096-82-5	Aroclor 1260	ND	4.5	1.9	mg/kg	
11100-14-4	Aroclor 1268	ND	4.5	1.9	mg/kg	
37324-23-5	Aroclor 1262	ND	4.5	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	35%		10-163%
877-09-8	Tetrachloro-m-xylene	90%		10-163%
2051-24-3	Decachlorobiphenyl	488% [b]		10-215%
2051-24-3	Decachlorobiphenyl	156%		10-215%

(a) Dilution required due to viscosity of the extract matrix.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-07		
Lab Sample ID:	JD56558-7	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 20	20	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 1.0	1.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-07		
Lab Sample ID:	JD56558-7	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	7.17 NC		su	1	12/05/22 20:15	MM	SW846 9045D
Cyanide Reactivity	< 9.6	9.6	mg/kg	1	12/07/22 15:58	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	919000	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 96	96	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-08		
Lab Sample ID:	JD56558-8	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3D185211.D	1	12/12/22 22:27	ED	n/a	n/a	V3D7783
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.1 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	4.5	1.9	mg/kg	
71-43-2	Benzene	0.865	0.23	0.21	mg/kg	
74-97-5	Bromochloromethane	ND	2.3	0.25	mg/kg	
75-27-4	Bromodichloromethane	ND	0.91	0.19	mg/kg	
75-25-2	Bromoform	ND	2.3	0.62	mg/kg	
74-83-9	Bromomethane	ND	2.3	0.35	mg/kg	
78-93-3	2-Butanone (MEK)	ND	4.5	1.1	mg/kg	
75-15-0	Carbon disulfide	ND	0.91	0.24	mg/kg	
56-23-5	Carbon tetrachloride	ND	0.91	0.28	mg/kg	
108-90-7	Chlorobenzene	ND	0.91	0.21	mg/kg	
75-00-3	Chloroethane	ND	2.3	0.27	mg/kg	
67-66-3	Chloroform	ND	0.91	0.24	mg/kg	
74-87-3	Chloromethane	ND	2.3	0.89	mg/kg	
110-82-7	Cyclohexane	3.71	0.91	0.30	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	0.91	0.32	mg/kg	
124-48-1	Dibromochloromethane	ND	0.91	0.25	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.45	0.19	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.45	0.25	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.45	0.23	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.45	0.22	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	2.3	0.33	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.45	0.22	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.45	0.21	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.45	0.30	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.45	0.38	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.45	0.28	mg/kg	
78-87-5	1,2-Dichloropropane	ND	0.91	0.21	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	0.91	0.22	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	0.91	0.21	mg/kg	
100-41-4	Ethylbenzene	41.0	0.45	0.21	mg/kg	
76-13-1	Freon 113	ND	2.3	1.2	mg/kg	
591-78-6	2-Hexanone	ND	2.3	0.96	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-08		
Lab Sample ID:	JD56558-8	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	29.7	0.91	0.65	mg/kg	
79-20-9	Methyl Acetate	ND	2.3	0.63	mg/kg	
108-87-2	Methylcyclohexane	28.2	0.91	0.40	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.45	0.21	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	2.3	1.0	mg/kg	
75-09-2	Methylene chloride	ND	2.3	1.2	mg/kg	
100-42-5	Styrene	ND	0.91	0.18	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.91	0.27	mg/kg	
127-18-4	Tetrachloroethene	9.30	0.91	0.26	mg/kg	
108-88-3	Toluene	24.2	0.45	0.24	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	2.3	1.1	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2.3	1.1	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	0.91	0.22	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	0.91	0.25	mg/kg	
79-01-6	Trichloroethene	ND	0.45	0.35	mg/kg	
75-69-4	Trichlorofluoromethane	ND	2.3	0.31	mg/kg	
75-01-4	Vinyl chloride	ND	0.91	0.22	mg/kg	
	m,p-Xylene	151	0.45	0.41	mg/kg	
95-47-6	o-Xylene	82.6	0.45	0.21	mg/kg	
1330-20-7	Xylene (total)	234	0.45	0.21	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		80-124%
17060-07-0	1,2-Dichloroethane-D4	100%		75-133%
2037-26-5	Toluene-D8	97%		79-125%
460-00-4	4-Bromofluorobenzene	105%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	8.38	150	mg/kg	J
108-67-8	Benzene, 1,3,5-trimethyl-	8.48	170	mg/kg	JN
526-73-8	Benzene, 1,2,4-trimethyl-	8.84	250	mg/kg	JN
	C4 alkyl benzene	9.45	200	mg/kg	J
	C4 alkyl benzene	9.51	210	mg/kg	J
	C4 alkyl benzene	9.89	130	mg/kg	J
	C5 alkyl benzene	10.03	200	mg/kg	J
	1H-Indene-dihydro-methyl- isomer	10.60	150	mg/kg	J
	unknown	10.76	290	mg/kg	J
	Naphthalene, tetrahydro- isomer	10.93	200	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-08		
Lab Sample ID:	JD56558-8	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	unknown	11.13	240	mg/kg	J
	1H-indene-dihydro-dimethyl- isomer	11.23	180	mg/kg	J
	1H-indene-dihydro-dimethyl- isomer	11.49	170	mg/kg	J
	1H-indene-dihydro-dimethyl- isomer	11.58	220	mg/kg	J
	Naphthalene, tetrahydro-methyl- isomer	11.99	170	mg/kg	J
	Total TIC, Volatile		2930	mg/kg	J

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DRUM-08
Lab Sample ID: JD56558-8
Matrix: SO - Oil
Method: SW846 8270E SW846 3580A
Project: Yaffa Drum Characterization

Date Sampled: 12/01/22
Date Received: 12/02/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M185637.D	10	12/16/22 11:48	CS	12/07/22 12:20	OP43515	EM8027
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol [b]	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol [b]	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol [c]	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol [b]	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	ND	100	35	mg/kg	
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	ND	200	14	mg/kg	
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-08		
Lab Sample ID:	JD56558-8	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [d]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	200	23	mg/kg	
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	ND	100	46	mg/kg	
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	ND	100	23	mg/kg	
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline [b]	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	ND	100	28	mg/kg	
98-95-3	Nitrobenzene [d]	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine [b]	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	ND	100	34	mg/kg	
129-00-0	Pyrene	ND	100	32	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	183% [e]		10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-08		
Lab Sample ID:	JD56558-8	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	180% e		10-96%
118-79-6	2,4,6-Tribromophenol	179% e		10-123%
4165-60-0	Nitrobenzene-d5	265% e		10-109%
321-60-8	2-Fluorobiphenyl	209% e		11-109%
1718-51-0	Terphenyl-d14	210% e		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in BS is outside in house QC limits bias high.
(d) Associated CCV,BS outside of control limits high, sample was ND.
(e) High percent recoveries and no positive found in the sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-08		
Lab Sample ID:	JD56558-8	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8082A SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5G126185.D	10	12/08/22 19:26	MLC	12/07/22 12:24	OP43508	G5G3190
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	5.0	2.3	mg/kg	
11104-28-2	Aroclor 1221	ND	5.0	3.1	mg/kg	
11141-16-5	Aroclor 1232	ND	5.0	3.2	mg/kg	
53469-21-9	Aroclor 1242	ND	5.0	2.1	mg/kg	
12672-29-6	Aroclor 1248	ND	5.0	4.5	mg/kg	
11097-69-1	Aroclor 1254	ND	5.0	2.7	mg/kg	
11096-82-5	Aroclor 1260	ND	5.0	2.1	mg/kg	
11100-14-4	Aroclor 1268	ND	5.0	2.1	mg/kg	
37324-23-5	Aroclor 1262	ND	5.0	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	165% [b]		10-163%
877-09-8	Tetrachloro-m-xylene	89%		10-163%
2051-24-3	Decachlorobiphenyl	542% [b]		10-215%
2051-24-3	Decachlorobiphenyl	120%		10-215%

(a) Dilution required due to viscosity of the extract matrix.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-08		
Lab Sample ID:	JD56558-8	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 20	20	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 1.0	1.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-08		
Lab Sample ID:	JD56558-8	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.50 NC		su	1	12/05/22 20:16	MM	SW846 9045D
Cyanide Reactivity	< 9.5	9.5	mg/kg	1	12/07/22 16:02	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	300000	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 95	95	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-09		
Lab Sample ID:	JD56558-9	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D185256.D	1	12/13/22 16:44	PS	n/a	n/a	V3D7785
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.0 g	10.0 ml	10.0 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	50	21	mg/kg	
71-43-2	Benzene	37.7	2.5	2.3	mg/kg	
74-97-5	Bromochloromethane	ND	25	2.8	mg/kg	
75-27-4	Bromodichloromethane	ND	10	2.1	mg/kg	
75-25-2	Bromoform	ND	25	6.8	mg/kg	
74-83-9	Bromomethane	ND	25	3.8	mg/kg	
78-93-3	2-Butanone (MEK)	ND	50	12	mg/kg	
75-15-0	Carbon disulfide	ND	10	2.7	mg/kg	
56-23-5	Carbon tetrachloride	ND	10	3.1	mg/kg	
108-90-7	Chlorobenzene	ND	10	2.3	mg/kg	
75-00-3	Chloroethane [b]	ND	25	3.0	mg/kg	
67-66-3	Chloroform	ND	10	2.6	mg/kg	
74-87-3	Chloromethane	ND	25	9.8	mg/kg	
110-82-7	Cyclohexane	104	10	3.3	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	10	3.5	mg/kg	
124-48-1	Dibromochloromethane	ND	10	2.8	mg/kg	
106-93-4	1,2-Dibromoethane	ND	5.0	2.1	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	5.0	2.7	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	5.0	2.5	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	5.0	2.5	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	25	3.6	mg/kg	
75-34-3	1,1-Dichloroethane	ND	5.0	2.5	mg/kg	
107-06-2	1,2-Dichloroethane	ND	5.0	2.4	mg/kg	
75-35-4	1,1-Dichloroethene	ND	5.0	3.3	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	5.0	4.2	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	5.0	3.1	mg/kg	
78-87-5	1,2-Dichloropropane	ND	10	2.4	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.4	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.3	mg/kg	
100-41-4	Ethylbenzene	510	5.0	2.3	mg/kg	
76-13-1	Freon 113	ND	25	13	mg/kg	
591-78-6	2-Hexanone	ND	25	11	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-09		
Lab Sample ID:	JD56558-9	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	201	10	7.1	mg/kg	
79-20-9	Methyl Acetate	ND	25	7.0	mg/kg	
108-87-2	Methylcyclohexane	576	10	4.4	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	5.0	2.3	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	25	11	mg/kg	
75-09-2	Methylene chloride	ND	25	13	mg/kg	
100-42-5	Styrene	ND	10	2.0	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	mg/kg	
127-18-4	Tetrachloroethene	ND	10	2.9	mg/kg	
108-88-3	Toluene	465	5.0	2.6	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	25	13	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	25	13	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	10	2.4	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	10	2.8	mg/kg	
79-01-6	Trichloroethene	ND	5.0	3.8	mg/kg	
75-69-4	Trichlorofluoromethane [b]	ND	25	3.4	mg/kg	
75-01-4	Vinyl chloride [b]	ND	10	2.4	mg/kg	
	m,p-Xylene	1870	5.0	4.5	mg/kg	
95-47-6	o-Xylene	983	5.0	2.3	mg/kg	
1330-20-7	Xylene (total)	2850	5.0	2.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-124%
17060-07-0	1,2-Dichloroethane-D4	91%		75-133%
2037-26-5	Toluene-D8	99%		79-125%
460-00-4	4-Bromofluorobenzene	98%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	8.38	1600	mg/kg	J
108-67-8	Benzene, 1,3,5-trimethyl-	8.48	1100	mg/kg	JN
95-63-6	Benzene, 1,2,4-trimethyl-	8.84	2700	mg/kg	JN
	C4 alkyl benzene	9.45	1900	mg/kg	J
	C4 alkyl benzene	9.51	1900	mg/kg	J
	1H-Indene-dihydro-methyl-isomer	10.00	1400	mg/kg	J
	1H-Indene-dihydro-methyl-isomer	10.60	1200	mg/kg	J
	1H-Indene-dihydro-methyl-isomer+ C4	10.76	2300	mg/kg	J
	Naphthalene, tetrahydro-isomer	10.93	1400	mg/kg	J
	1H-Indene-dihydro-dimethyl-isomer+	11.13	1700	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-09		
Lab Sample ID:	JD56558-9	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	1H-indene-dihydro-dimethyl-isomer	11.23	1300	mg/kg	J
	Naphthalene,tetrahydro-methyl-isom	11.49	1200	mg/kg	J
	1H-indene-dihydro-dimethyl-isomer	11.58	1100	mg/kg	J
	Naphthalene,tetrahydro-methyl-isom	11.99	2400	mg/kg	J
	Naphthalene,tetrahydro-methyl-isom	12.50	1500	mg/kg	J
	Total TIC, Volatile		24700	mg/kg	J

(a) Dilution required due to high concentrations of target and non-target compounds.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DRUM-09
Lab Sample ID: JD56558-9
Matrix: SO - Oil
Method: SW846 8270E SW846 3580A
Project: Yaffa Drum Characterization

Date Sampled: 12/01/22
Date Received: 12/02/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M185630.D	10	12/16/22 08:17	CS	12/07/22 12:20	OP43515	EM8027
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol [b]	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol [b]	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol [c]	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol [b]	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	35.4	100	35	mg/kg	J
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	240	200	14	mg/kg	
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-09		
Lab Sample ID:	JD56558-9	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [d]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	200	23	mg/kg	
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	89.2	100	46	mg/kg	J
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	1110	100	23	mg/kg	
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline [b]	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	414	100	28	mg/kg	
98-95-3	Nitrobenzene [d]	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine [b]	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	70.6	100	34	mg/kg	J
129-00-0	Pyrene	63.8	100	32	mg/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	158% [e]		10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-09		
Lab Sample ID:	JD56558-9	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	138% e		10-96%
118-79-6	2,4,6-Tribromophenol	99%		10-123%
4165-60-0	Nitrobenzene-d5	998% e		10-109%
321-60-8	2-Fluorobiphenyl	116% e		11-109%
1718-51-0	Terphenyl-d14	110%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alkane	3.24	1200	mg/kg	J
	alkane	3.96	4300	mg/kg	J
	Cyclohexane alkyl	4.04	1300	mg/kg	J
	C3 alkyl benzene	4.13	1100	mg/kg	J
	alkane	4.17	1700	mg/kg	J
	alkane	4.30	1100	mg/kg	J
	alkane	4.34	2600	mg/kg	J
	C3 alkyl benzene	4.36	4900	mg/kg	J
	Cyclohexane alkyl	4.51	1800	mg/kg	J
	alkane	4.57	12000	mg/kg	J
	Cyclohexane alkyl	4.80	2100	mg/kg	J
	C4 alkyl benzene	4.90	5400	mg/kg	J
	C4 alkyl benzene	4.93	5300	mg/kg	J
	C4 alkyl benzene	4.99	4900	mg/kg	J
	C4 alkyl benzene	5.05	1200	mg/kg	J
	unknown	5.20	2700	mg/kg	J
	C4 alkyl benzene	5.24	1400	mg/kg	J
	alkane	5.55	1300	mg/kg	J
	alkane	6.29	1300	mg/kg	J
	alkane	6.51	3200	mg/kg	J
	alkane	9.93	4700	mg/kg	J
	alkane	11.62	2200	mg/kg	J
	alkane	12.44	1700	mg/kg	J
	alkane	13.22	1300	mg/kg	J
	alkane	14.69	1300	mg/kg	J
	Total TIC, Semi-Volatile		72000	mg/kg	J

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in BS is outside in house QC limits bias high.
(d) Associated CCV,BS outside of control limits high, sample was ND.
(e) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: DRUM-09
Lab Sample ID: JD56558-9
Matrix: SO - Oil
Method: SW846 8082A SW846 3580A
Project: Yaffa Drum Characterization

Date Sampled: 12/01/22
Date Received: 12/02/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G126171.D	1	12/08/22 15:30	MLC	12/07/22 12:24	OP43508	G5G3190
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.23	mg/kg	
11104-28-2	Aroclor 1221	ND	0.50	0.31	mg/kg	
11141-16-5	Aroclor 1232	ND	0.50	0.32	mg/kg	
53469-21-9	Aroclor 1242	ND	0.50	0.21	mg/kg	
12672-29-6	Aroclor 1248	ND	0.50	0.45	mg/kg	
11097-69-1	Aroclor 1254	ND	0.50	0.27	mg/kg	
11096-82-5	Aroclor 1260	ND	0.50	0.21	mg/kg	
11100-14-4	Aroclor 1268	ND	0.50	0.21	mg/kg	
37324-23-5	Aroclor 1262	ND	0.50	0.33	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	132%		10-163%
877-09-8	Tetrachloro-m-xylene	73%		10-163%
2051-24-3	Decachlorobiphenyl	172%		10-215%
2051-24-3	Decachlorobiphenyl	102%		10-215%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-09		
Lab Sample ID:	JD56558-9	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 20	20	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 1.0	1.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-09		
Lab Sample ID:	JD56558-9	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.22 NC		su	1	12/05/22 20:17	MM	SW846 9045D
Cyanide Reactivity	< 9.6	9.6	mg/kg	1	12/07/22 16:04	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint) [a]	141		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	42700	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 96	96	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

(a) Flashpoint testing started at 59 deg. F. Sample did sustain flame when tested with a flame in open air.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-10		
Lab Sample ID:	JD56558-10	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D185210.D	1	12/12/22 22:03	ED	n/a	n/a	V3D7783
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.1 g	10.0 ml	50.0 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [b]	ND	9.1	3.8	mg/kg	
71-43-2	Benzene	8.97	0.45	0.41	mg/kg	
74-97-5	Bromochloromethane	ND	4.5	0.51	mg/kg	
75-27-4	Bromodichloromethane	ND	1.8	0.39	mg/kg	
75-25-2	Bromoform	ND	4.5	1.2	mg/kg	
74-83-9	Bromomethane	ND	4.5	0.69	mg/kg	
78-93-3	2-Butanone (MEK)	ND	9.1	2.2	mg/kg	
75-15-0	Carbon disulfide	ND	1.8	0.49	mg/kg	
56-23-5	Carbon tetrachloride	ND	1.8	0.56	mg/kg	
108-90-7	Chlorobenzene	ND	1.8	0.42	mg/kg	
75-00-3	Chloroethane	ND	4.5	0.54	mg/kg	
67-66-3	Chloroform	ND	1.8	0.47	mg/kg	
74-87-3	Chloromethane	ND	4.5	1.8	mg/kg	
110-82-7	Cyclohexane	9.15	1.8	0.60	mg/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1.8	0.63	mg/kg	
124-48-1	Dibromochloromethane	ND	1.8	0.51	mg/kg	
106-93-4	1,2-Dibromoethane	ND	0.91	0.38	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	0.91	0.50	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	0.91	0.45	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	0.91	0.45	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	4.5	0.66	mg/kg	
75-34-3	1,1-Dichloroethane	ND	0.91	0.45	mg/kg	
107-06-2	1,2-Dichloroethane	ND	0.91	0.43	mg/kg	
75-35-4	1,1-Dichloroethene	ND	0.91	0.60	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	0.91	0.76	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	0.91	0.56	mg/kg	
78-87-5	1,2-Dichloropropane	ND	1.8	0.43	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.8	0.43	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.8	0.42	mg/kg	
100-41-4	Ethylbenzene	76.9	0.91	0.41	mg/kg	
76-13-1	Freon 113	ND	4.5	2.4	mg/kg	
591-78-6	2-Hexanone	ND	4.5	1.9	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-10		
Lab Sample ID:	JD56558-10	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	12.7	1.8	1.3	mg/kg	
79-20-9	Methyl Acetate	ND	4.5	1.3	mg/kg	
108-87-2	Methylcyclohexane	26.1	1.8	0.80	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	0.91	0.43	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	4.5	2.1	mg/kg	
75-09-2	Methylene chloride	ND	4.5	2.4	mg/kg	
100-42-5	Styrene	ND	1.8	0.37	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.8	0.54	mg/kg	
127-18-4	Tetrachloroethene	ND	1.8	0.53	mg/kg	
108-88-3	Toluene	166	0.91	0.48	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	4.5	2.3	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	4.5	2.3	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.8	0.44	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.8	0.50	mg/kg	
79-01-6	Trichloroethene	ND	0.91	0.69	mg/kg	
75-69-4	Trichlorofluoromethane	ND	4.5	0.62	mg/kg	
75-01-4	Vinyl chloride	ND	1.8	0.44	mg/kg	
	m,p-Xylene	346	0.91	0.81	mg/kg	
95-47-6	o-Xylene	170	0.91	0.42	mg/kg	
1330-20-7	Xylene (total)	516	0.91	0.42	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		80-124%
17060-07-0	1,2-Dichloroethane-D4	95%		75-133%
2037-26-5	Toluene-D8	95%		79-125%
460-00-4	4-Bromofluorobenzene	98%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	8.38	210	mg/kg	J
108-67-8	Benzene, 1,3,5-trimethyl-	8.48	130	mg/kg	JN
	C3 alkyl benzene	8.65	90	mg/kg	J
95-63-6	Benzene, 1,2,4-trimethyl-	8.84	430	mg/kg	JN
	C4 alkyl benzene	9.45	180	mg/kg	J
	C4 alkyl benzene	9.51	150	mg/kg	J
	C4 alkyl benzene	9.89	120	mg/kg	J
	C4 alkyl benzene	10.29	89	mg/kg	J
	C4 alkyl benzene	10.34	120	mg/kg	J
	1H-Indene-dihydro-methyl- isomer	10.60	110	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-10		
Lab Sample ID:	JD56558-10	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	1H-Indene-dihydro-methyl- isomer	10.75	190	mg/kg	J
	1H-indene-dihydro-dimethyl- isomer	11.13	150	mg/kg	J
	1H-indene-dihydro-dimethyl- isomer	11.23	90	mg/kg	J
91-20-3	Naphthalene	11.40	120	mg/kg	JN
	Naphthalene, methyl- isomer	12.53	160	mg/kg	J
	Total TIC, Volatile		2339	mg/kg	J

(a) Dilution required due to high concentration of target compound.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-10		
Lab Sample ID:	JD56558-10	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M185631.D	10	12/16/22 08:47	CS	12/07/22 12:20	OP43515	EM8027
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol [b]	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol [b]	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol [c]	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol [b]	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	ND	100	35	mg/kg	
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	ND	200	14	mg/kg	
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-10		
Lab Sample ID:	JD56558-10	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [d]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	200	23	mg/kg	
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	ND	100	46	mg/kg	
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	ND	100	23	mg/kg	
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline [b]	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	ND	100	28	mg/kg	
98-95-3	Nitrobenzene [d]	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine [b]	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	ND	100	34	mg/kg	
129-00-0	Pyrene	ND	100	32	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	106% [e]		10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-10		
Lab Sample ID:	JD56558-10	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	105% e		10-96%
118-79-6	2,4,6-Tribromophenol	0% e		10-123%
4165-60-0	Nitrobenzene-d5	151% e		10-109%
321-60-8	2-Fluorobiphenyl	112% e		11-109%
1718-51-0	Terphenyl-d14	129% e		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in BS is outside in house QC limits bias high.
(d) Associated CCV,BS outside of control limits high, sample was ND.
(e) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-10		
Lab Sample ID:	JD56558-10	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8082A SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5G126174.D	10	12/08/22 16:21	MLC	12/07/22 12:24	OP43508	G5G3190
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	5.0	2.3	mg/kg	
11104-28-2	Aroclor 1221	ND	5.0	3.1	mg/kg	
11141-16-5	Aroclor 1232	ND	5.0	3.2	mg/kg	
53469-21-9	Aroclor 1242	ND	5.0	2.1	mg/kg	
12672-29-6	Aroclor 1248	ND	5.0	4.5	mg/kg	
11097-69-1	Aroclor 1254	ND	5.0	2.7	mg/kg	
11096-82-5	Aroclor 1260	ND	5.0	2.1	mg/kg	
11100-14-4	Aroclor 1268	ND	5.0	2.1	mg/kg	
37324-23-5	Aroclor 1262	ND	5.0	3.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	400% [b]		10-163%
877-09-8	Tetrachloro-m-xylene	64%		10-163%
2051-24-3	Decachlorobiphenyl	675% [b]		10-215%
2051-24-3	Decachlorobiphenyl	246% [b]		10-215%

(a) Dilution required due to viscosity of the extract matrix.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-10		
Lab Sample ID:	JD56558-10	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 20	20	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 1.0	1.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	DRUM-10		
Lab Sample ID:	JD56558-10	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.84 NC		su	1	12/05/22 19:46	MM	SW846 9045D
Cyanide Reactivity	< 9.3	9.3	mg/kg	1	12/07/22 16:05	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	772000	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 93	93	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-11		
Lab Sample ID:	JD56558-11	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M185632.D	10	12/16/22 09:17	CS	12/07/22 12:20	OP43515	EM8027
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol [b]	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol [b]	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol [c]	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol [b]	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	ND	100	35	mg/kg	
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	ND	200	14	mg/kg	
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-11		
Lab Sample ID:	JD56558-11	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [d]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	200	23	mg/kg	
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	ND	100	46	mg/kg	
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	ND	100	23	mg/kg	
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline [b]	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	ND	100	28	mg/kg	
98-95-3	Nitrobenzene [d]	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine [b]	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	ND	100	34	mg/kg	
129-00-0	Pyrene	ND	100	32	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	82%		10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
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J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-11		
Lab Sample ID:	JD56558-11	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	99% [e]		10-96%
118-79-6	2,4,6-Tribromophenol	0% [e]		10-123%
4165-60-0	Nitrobenzene-d5	125% [f]		10-109%
321-60-8	2-Fluorobiphenyl	102%		11-109%
1718-51-0	Terphenyl-d14	103%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	mg/kg	

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in BS is outside in house QC limits bias high.
(d) Associated CCV,BS outside of control limits high, sample was ND.
(e) Outside control limits due to dilution.
(f) High percent recoveries and no positive found in the sample.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-11		
Lab Sample ID:	JD56558-11	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8082A SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5G126895.D	1	12/27/22 13:40	TP	12/07/22 12:24	OP43508	G5G3206
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.23	mg/kg	
11104-28-2	Aroclor 1221	ND	0.50	0.31	mg/kg	
11141-16-5	Aroclor 1232	ND	0.50	0.32	mg/kg	
53469-21-9	Aroclor 1242	ND	0.50	0.21	mg/kg	
12672-29-6	Aroclor 1248	ND	0.50	0.45	mg/kg	
11097-69-1	Aroclor 1254	ND	0.50	0.27	mg/kg	
11096-82-5	Aroclor 1260	ND	0.50	0.21	mg/kg	
11100-14-4	Aroclor 1268	ND	0.50	0.21	mg/kg	
37324-23-5	Aroclor 1262	ND	0.50	0.33	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	140%		10-163%
877-09-8	Tetrachloro-m-xylene	130%		10-163%
2051-24-3	Decachlorobiphenyl	112%		10-215%
2051-24-3	Decachlorobiphenyl	99%		10-215%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DRUM-11		
Lab Sample ID:	JD56558-11	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 20	20	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 1.0	1.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	DRUM-11		
Lab Sample ID:	JD56558-11	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.73 NC		su	1	12/05/22 19:49	MM	SW846 9045D
Cyanide Reactivity	< 9.9	9.9	mg/kg	1	12/07/22 16:06	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	995	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 99	99	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DRUM-11		
Lab Sample ID:	JD56558-11A	**Date Sampled:**	12/01/22
Matrix:	AQ - Water	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L350840.D	1	12/14/22 10:58	TS	n/a	n/a	VL10625
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone [a]	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.7	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane [b]	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-11		
Lab Sample ID:	JD56558-11A	**Date Sampled:**	12/01/22
Matrix:	AQ - Water	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.52	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	106%		80-120%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	96%		82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
128-39-2	Phenol, 2,6-bis(1,1-dimethylethyl)	14.01	12	ug/l	JN
	Total TIC, Volatile		12	ug/l	J

(a) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-12		
Lab Sample ID:	JD56558-12	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D185257.D	1	12/13/22 17:08	PS	n/a	n/a	V3D7785
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	1.0 g	10.0 ml	20.0 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	mg/kg	
71-43-2	Benzene	ND	1.3	1.1	mg/kg	
74-97-5	Bromochloromethane	ND	13	1.4	mg/kg	
75-27-4	Bromodichloromethane	ND	5.0	1.1	mg/kg	
75-25-2	Bromoform	ND	13	3.4	mg/kg	
74-83-9	Bromomethane	ND	13	1.9	mg/kg	
78-93-3	2-Butanone (MEK)	ND	25	6.1	mg/kg	
75-15-0	Carbon disulfide	ND	5.0	1.3	mg/kg	
56-23-5	Carbon tetrachloride	ND	5.0	1.5	mg/kg	
108-90-7	Chlorobenzene	ND	5.0	1.1	mg/kg	
75-00-3	Chloroethane [b]	ND	13	1.5	mg/kg	
67-66-3	Chloroform	ND	5.0	1.3	mg/kg	
74-87-3	Chloromethane	ND	13	4.9	mg/kg	
110-82-7	Cyclohexane	3.69	5.0	1.6	mg/kg	J
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.7	mg/kg	
124-48-1	Dibromochloromethane	ND	5.0	1.4	mg/kg	
106-93-4	1,2-Dibromoethane	ND	2.5	1.1	mg/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.5	1.4	mg/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.5	1.2	mg/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.5	1.2	mg/kg	
75-71-8	Dichlorodifluoromethane	ND	13	1.8	mg/kg	
75-34-3	1,1-Dichloroethane	ND	2.5	1.2	mg/kg	
107-06-2	1,2-Dichloroethane	ND	2.5	1.2	mg/kg	
75-35-4	1,1-Dichloroethene	ND	2.5	1.6	mg/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.5	2.1	mg/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	1.5	mg/kg	
78-87-5	1,2-Dichloropropane	ND	5.0	1.2	mg/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	5.0	1.2	mg/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	5.0	1.1	mg/kg	
100-41-4	Ethylbenzene	115	2.5	1.1	mg/kg	
76-13-1	Freon 113	ND	13	6.7	mg/kg	
591-78-6	2-Hexanone	ND	13	5.3	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-12		
Lab Sample ID:	JD56558-12	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
98-82-8	Isopropylbenzene	68.8	5.0	3.6	mg/kg	
79-20-9	Methyl Acetate	ND	13	3.5	mg/kg	
108-87-2	Methylcyclohexane	56.7	5.0	2.2	mg/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.5	1.2	mg/kg	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	13	5.7	mg/kg	
75-09-2	Methylene chloride	ND	13	6.5	mg/kg	
100-42-5	Styrene	ND	5.0	1.0	mg/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	5.0	1.5	mg/kg	
127-18-4	Tetrachloroethene	ND	5.0	1.5	mg/kg	
108-88-3	Toluene	49.7	2.5	1.3	mg/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	13	6.3	mg/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	13	6.3	mg/kg	
71-55-6	1,1,1-Trichloroethane	ND	5.0	1.2	mg/kg	
79-00-5	1,1,2-Trichloroethane	ND	5.0	1.4	mg/kg	
79-01-6	Trichloroethene	ND	2.5	1.9	mg/kg	
75-69-4	Trichlorofluoromethane [b]	ND	13	1.7	mg/kg	
75-01-4	Vinyl chloride [b]	ND	5.0	1.2	mg/kg	
	m,p-Xylene	538	2.5	2.2	mg/kg	
95-47-6	o-Xylene	298	2.5	1.1	mg/kg	
1330-20-7	Xylene (total)	836	2.5	1.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-124%
17060-07-0	1,2-Dichloroethane-D4	95%		75-133%
2037-26-5	Toluene-D8	94%		79-125%
460-00-4	4-Bromofluorobenzene	104%		58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	C3 alkyl benzene	8.38	560	mg/kg	J
108-67-8	Benzene, 1,3,5-trimethyl-	8.48	590	mg/kg	JN
95-63-6	Benzene, 1,2,4-trimethyl-	8.84	920	mg/kg	JN
	C4 alkyl benzene	9.45	720	mg/kg	J
	C4 alkyl benzene	9.51	710	mg/kg	J
	1H-Indene-dihydro-methyl-isomer+ C4	10.01	600	mg/kg	J
	1H-Indene-dihydro-methyl-isomer+ C5	10.59	510	mg/kg	J
	1H-Indene-dihydro-methyl-isomer+ C4	10.76	880	mg/kg	J
	Naphthalene, tetrahydro-isomer	10.93	600	mg/kg	J
	1H-Indene-dihydro-dimethyl-isomer+	11.13	500	mg/kg	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-12		
Lab Sample ID:	JD56558-12	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

VOA TCL List

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	1H-Indene-dihydro-dimethyl-isomer+	11.23	590	mg/kg	J
	1H-Indene-dihydro-dimethyl-isomer+	11.58	780	mg/kg	J
	Naphthalene,tetrahydro-methyl-isom	11.99	690	mg/kg	J
	Naphthalene,tetrahydro-methyl-isom	12.31	480	mg/kg	J
	Naphthalene,tetrahydro-methyl-isom	12.51	700	mg/kg	J
	Total TIC, Volatile		9830	mg/kg	J

(a) Dilution required due to high concentrations of target and non-target compounds.
(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-12		
Lab Sample ID:	JD56558-12	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	M185719.D	10	12/19/22 17:15	KH	12/07/22 12:20	OP43515	EM8030
Run #2							

	Initial Weight	Final Volume
Run #1	1.0 g	10.0 ml
Run #2		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	200	49	mg/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	500	61	mg/kg	
120-83-2	2,4-Dichlorophenol	ND	500	85	mg/kg	
105-67-9	2,4-Dimethylphenol	ND	500	180	mg/kg	
51-28-5	2,4-Dinitrophenol	ND	500	380	mg/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	500	110	mg/kg	
95-48-7	2-Methylphenol	ND	200	64	mg/kg	
	3&4-Methylphenol	ND	200	82	mg/kg	
88-75-5	2-Nitrophenol [b]	ND	500	66	mg/kg	
100-02-7	4-Nitrophenol [b]	ND	1000	270	mg/kg	
87-86-5	Pentachlorophenol	ND	400	94	mg/kg	
108-95-2	Phenol	ND	200	52	mg/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	500	66	mg/kg	
95-95-4	2,4,5-Trichlorophenol	ND	500	75	mg/kg	
88-06-2	2,4,6-Trichlorophenol	ND	500	60	mg/kg	
83-32-9	Acenaphthene	ND	100	35	mg/kg	
208-96-8	Acenaphthylene	ND	100	51	mg/kg	
98-86-2	Acetophenone	ND	500	22	mg/kg	
120-12-7	Anthracene	ND	100	61	mg/kg	
1912-24-9	Atrazine [b]	ND	200	43	mg/kg	
56-55-3	Benzo(a)anthracene	ND	100	28	mg/kg	
50-32-8	Benzo(a)pyrene [b]	ND	100	46	mg/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	44	mg/kg	
191-24-2	Benzo(g,h,i)perylene [b]	ND	100	50	mg/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	47	mg/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	200	39	mg/kg	
85-68-7	Butyl benzyl phthalate	ND	200	24	mg/kg	
92-52-4	1,1'-Biphenyl	43.3	200	14	mg/kg	J
100-52-7	Benzaldehyde	ND	500	25	mg/kg	
91-58-7	2-Chloronaphthalene	ND	200	24	mg/kg	
106-47-8	4-Chloroaniline	ND	500	36	mg/kg	
86-74-8	Carbazole	ND	200	15	mg/kg	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-12		
Lab Sample ID:	JD56558-12	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam [b]	ND	200	40	mg/kg	
218-01-9	Chrysene	ND	100	32	mg/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	200	21	mg/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	200	43	mg/kg	
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	200	36	mg/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	200	32	mg/kg	
121-14-2	2,4-Dinitrotoluene [b]	ND	100	31	mg/kg	
606-20-2	2,6-Dinitrotoluene [b]	ND	100	50	mg/kg	
91-94-1	3,3'-Dichlorobenzidine [b]	ND	200	83	mg/kg	
123-91-1	1,4-Dioxane	ND	100	66	mg/kg	
53-70-3	Dibenzo(a,h)anthracene [b]	ND	100	44	mg/kg	
132-64-9	Dibenzofuran	ND	200	41	mg/kg	
84-74-2	Di-n-butyl phthalate	ND	200	16	mg/kg	
117-84-0	Di-n-octyl phthalate	ND	200	25	mg/kg	
84-66-2	Diethyl phthalate	ND	200	21	mg/kg	
131-11-3	Dimethyl phthalate	ND	200	18	mg/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	200	23	mg/kg	
206-44-0	Fluoranthene	ND	100	45	mg/kg	
86-73-7	Fluorene	ND	100	46	mg/kg	
118-74-1	Hexachlorobenzene	ND	200	25	mg/kg	
87-68-3	Hexachlorobutadiene	ND	100	40	mg/kg	
77-47-4	Hexachlorocyclopentadiene [c]	ND	1000	40	mg/kg	
67-72-1	Hexachloroethane	ND	500	50	mg/kg	
193-39-5	Indeno(1,2,3-cd)pyrene [b]	ND	100	47	mg/kg	
78-59-1	Isophorone	ND	200	21	mg/kg	
91-57-6	2-Methylnaphthalene	180	100	23	mg/kg	
88-74-4	2-Nitroaniline [b]	ND	500	24	mg/kg	
99-09-2	3-Nitroaniline	ND	500	25	mg/kg	
100-01-6	4-Nitroaniline [b]	ND	500	26	mg/kg	
91-20-3	Naphthalene	60.6	100	28	mg/kg	J
98-95-3	Nitrobenzene	ND	200	39	mg/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	200	29	mg/kg	
86-30-6	N-Nitrosodiphenylamine	ND	500	37	mg/kg	
85-01-8	Phenanthrene	ND	100	34	mg/kg	
129-00-0	Pyrene	ND	100	32	mg/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	500	25	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	132% [d]		10-99%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-12		
Lab Sample ID:	JD56558-12	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8270E SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

ABN TCL List (SOM0 2.0)

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-62-2	Phenol-d5	126% [d]		10-96%
118-79-6	2,4,6-Tribromophenol	121%		10-123%
4165-60-0	Nitrobenzene-d5	279% [d]		10-109%
321-60-8	2-Fluorobiphenyl	122% [d]		11-109%
1718-51-0	Terphenyl-d14	115%		10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	alakne	3.96	850	mg/kg	J
	alkane	4.18	720	mg/kg	J
	alkane	4.35	480	mg/kg	J
	C3 alkyl benzene	4.38	1100	mg/kg	J
	alkane	4.58	2800	mg/kg	J
	Cyclohexane alkyl	4.81	430	mg/kg	J
	C4 alkyl benzene	4.92	890	mg/kg	J
	C4 alkyl benzene	4.95	1300	mg/kg	J
	C4 alkyl benzene	5.01	1100	mg/kg	J
	C4 alkyl benzene	5.22	600	mg/kg	J
	alkane	5.57	630	mg/kg	J
	alkane	6.31	710	mg/kg	J
	Naphthalene, tetrahydro-methyl-	6.39	410	mg/kg	J
	alkane	6.53	1700	mg/kg	J
	Naphthalene, tetrahydro- dimethyl-	6.80	520	mg/kg	J
	alkane	7.83	430	mg/kg	J
	alkane	9.07	1300	mg/kg	J
	alkane	9.47	510	mg/kg	J
	alkane	9.95	1900	mg/kg	J
	alkane	11.65	930	mg/kg	J
	alkane	12.45	730	mg/kg	J
	alkane	13.24	570	mg/kg	J
	unknown	16.30	680	mg/kg	J
	Total TIC, Semi-Volatile		21290	mg/kg	J

(a) Dilution required due to viscosity of the extract matrix.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low. Low-level verification was analyzed to demonstrate system suitability to detect affected analytes. Sample was ND.
(d) Outside control limits due to dilution.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DRUM-12		
Lab Sample ID:	JD56558-12	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
Method:	SW846 8082A SW846 3580A	**Percent Solids:**	n/a
Project:	Yaffa Drum Characterization		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	5G126175.D	10	12/08/22 16:38	MLC	12/07/22 12:24	OP43508	G5G3190
Run #2							

	Initial Weight	Final Volume
Run #1	1.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	4.5	2.1	mg/kg	
11104-28-2	Aroclor 1221	ND	4.5	2.8	mg/kg	
11141-16-5	Aroclor 1232	ND	4.5	2.9	mg/kg	
53469-21-9	Aroclor 1242	ND	4.5	1.9	mg/kg	
12672-29-6	Aroclor 1248	ND	4.5	4.1	mg/kg	
11097-69-1	Aroclor 1254	ND	4.5	2.4	mg/kg	
11096-82-5	Aroclor 1260	ND	4.5	1.9	mg/kg	
11100-14-4	Aroclor 1268	ND	4.5	1.9	mg/kg	
37324-23-5	Aroclor 1262	ND	4.5	3.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	339% [b]		10-163%
877-09-8	Tetrachloro-m-xylene	157%		10-163%
2051-24-3	Decachlorobiphenyl	462% [b]		10-215%
2051-24-3	Decachlorobiphenyl	143%		10-215%

(a) Dilution required due to viscosity of the extract matrix.
(b) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

SGS North America Inc.

Report of Analysis

Client Sample ID:	DRUM-12		
Lab Sample ID:	JD56558-12	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Arsenic	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Barium	< 20	20	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Cadmium	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Chromium	< 1.0	1.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Lead	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	12/06/22	12/07/22	LM	SW846 7471B [1]	SW846 7471B [4]
Selenium	< 2.0	2.0	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	12/06/22	12/07/22	ND	SW846 6010D [2]	SW846 3050B [3]

(1) Instrument QC Batch: MA53421
(2) Instrument QC Batch: MA53430
(3) Prep QC Batch: MP36771
(4) Prep QC Batch: MP36796

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	DRUM-12		
Lab Sample ID:	JD56558-12	**Date Sampled:**	12/01/22
Matrix:	SO - Oil	**Date Received:**	12/02/22
		Percent Solids:	n/a
Project:	Yaffa Drum Characterization		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.66 NC		su	1	12/05/22 19:52	MM	SW846 9045D
Cyanide Reactivity	< 9.8	9.8	mg/kg	1	12/07/22 16:08	MM	SW846 CHAP7/9012 B
Ignitability (Flashpoint)	> 200		Deg. F	1	12/05/22 23:59	MM	SW846 1010B/ASTM D93
Solids, Total	381000	100	mg/kg	1	12/06/22 12:13	AS	SM2540 G 18TH ED MOD
Sulfide Reactivity	< 98	98	mg/kg	1	12/06/22 17:10	MP	SW846 CHAP7/9034

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Cyanide Reactivity		**SW846 CHAP7/9012 B**	SO	SGS is not certified for this parameter.[a]
Sulfide Reactivity		**SW846 CHAP7/9034**	SO	SGS is not certified for this parameter.[a]

(a) Reactivity analyzed following SW846 Chapter 7 is no longer recognized by regulatory agencies. Use of results should be verified through the program to which the data is being submitted.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

Page 1 of 1 PN

SGS

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CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200
www.sgs.com/ehsusa

FED-EX Tracking #	Bottle Order Control # PREM-KR-112122-19
SGS Quote #	SGS Job # JD56558

Client / Reporting Information	Project Information	
Company Name: Montrose Environmental	Project Name: Yaffa Drum Characterization	
Street Address: 1140 Valley Forge Rd	Street	Billing Information (If different from Report to)
City: Valley Forge State: PA Zip	City: Camden State: NJ	Company Name
Project Contact: Amy Graham E-mail: agraham@montrose-env...	Project #: 11595-01	Street Address
Phone #: 4848025590	Client Purchase Order #: 11595-01	City / State / Zip
Sampler(s) Name(s): A Doubleday Phone #: 610-639-2749	Project Manager: Chris Valligny	Attention:

Analyses: PCB's | TCL VOA | RCRA Metals | Reactive Cyanide/Sulfide, Corrosivity, Ignitability | SVOCs | Total Solids

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Date	Time	Sampled by	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	PCB's	TCL VOA	RCRA Metals	Reactive Cyanide/Sulfide, Corrosivity, Ignitability	SVOCs	Total Solids	LAB USE ONLY
1	DRUM-01		12/1/22	1040	AWD	G		OI	5					5				X	X	X	X	X	X	15C
2	DRUM-02		↓	1045	↓			↓	↓					↓				X	X	X	X	X	X	15A1
3	DRUM-03			1050														X	X	X	X	X	X	
4	DRUM-04			0955*														X	X	X	X	X	X	
5	DRUM-05			1055														X	X	X	X	X	X	
6	DRUM-06			1245														X	X	X	X	X	X	
7	DRUM-07			1300														X	X	X	X	X	X	
8	DRUM-08			1315														X	X	X	X	X	X	
9	DRUM-09			1330														X	X	X	X	X	X	
10	DRUM-10			1345														X	X	X	X	X	X	
11	DRUM-11			1400														X	X	X	X	X	X	
12	DRUM-12		↓	1415	↓			↓	↓					↓				X	X	X	X	X	X	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; SED - Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB - Field Blank; EB - Equipment Blank; RB - Rinse Blank; TB - Trip Blank

pH Check (Lab Use Only)

Turn Around Time (Business Days)

- [x] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

All data available via SGS Engage

Approved By (SGS PM) / Date: [redacted] NA (1B) [redacted]

* Approval needed for 1-3 BD TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [x] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [ ] EDD Format

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

* sample DRUM-04 is highly volatile (VOC gas reading >5K ppm)

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 [signature]	12/2/22 13:15	1 Gotham Nino 12/2/22 13:15	2 Gotham Nino	12/2/22 17:50	2 James Hunon
3		3	4		4
5		5	Custody Seal #	☐ Intact ☐ Not intact ☐ Absent	Therm ID: On Ice ☐ Cooler Temp. °C 4.4 See Sample Receipt Summary

SGS Courier

EHSA-QAC-0023-05 Rev.Date:8/5/22

JD56558: Chain of Custody
Page 1 of 4

4.2 4

SGS Sample Receipt Summary

Job Number: JD56558 **Client:** MONTROSE ENVIRONMENTAL SOLUTION **Project:** BARCLAY FARMS, NJ

Date / Time Received: 12/2/2022 5:50:00 PM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (4.4);

Cooler Temps (Corrected) °C: Cooler 1: (4.4);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control _Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments
-1 to -10 and -12 Sample appears to be bi-phasic. Oil on top of liquid. Please advise.

-4 Sample is highly volatile according to COC comment.

Responded to by: Kelly Ramos

Response Date: 12/6/2022

Please proceed as noted, no phase separation

Job Change Order: JD56558

Requested Date:	12/5/2022	**Received Date:**	12/2/2022
Account Name:	Montrose Environmental Solution	**Due Date:**	12/5/2022
Project Description:	Yaffa Drum Characterization	**Deliverable:**	COMMB
C/O Initiated By:	KELLY.RAM **PM:** KR	**TAT (Days):**	6

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Sample #: JD56558-11 **Change:**

Dept: Please move V8260TCL20+ to A samples and revise matrix to WW

TAT: 6

DRUM-11

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Above Changes Per: Mei Chen **Date/Time:** 12/6/2022

To Client: This Change Order is confirmation of the revisions, previously discussed with the Client Service Representative.

JD56558: Chain of Custody
Page 4 of 4

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7776-MB	3D185072.D	1	12/07/22	ED	n/a	n/a	V3D7776

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-3, JD56558-4, JD56558-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	210	ug/kg	
71-43-2	Benzene	ND	25	23	ug/kg	
74-97-5	Bromochloromethane	ND	250	28	ug/kg	
75-27-4	Bromodichloromethane	ND	100	21	ug/kg	
75-25-2	Bromoform	ND	250	68	ug/kg	
74-83-9	Bromomethane	ND	250	38	ug/kg	
78-93-3	2-Butanone (MEK)	ND	500	120	ug/kg	
75-15-0	Carbon disulfide	ND	100	27	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	31	ug/kg	
108-90-7	Chlorobenzene	ND	100	23	ug/kg	
75-00-3	Chloroethane	ND	250	30	ug/kg	
67-66-3	Chloroform	ND	100	26	ug/kg	
74-87-3	Chloromethane	ND	250	98	ug/kg	
110-82-7	Cyclohexane	ND	100	33	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	35	ug/kg	
124-48-1	Dibromochloromethane	ND	100	28	ug/kg	
106-93-4	1,2-Dibromoethane	ND	50	21	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	50	27	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	50	25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	50	25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	250	36	ug/kg	
75-34-3	1,1-Dichloroethane	ND	50	25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	50	24	ug/kg	
75-35-4	1,1-Dichloroethene	ND	50	33	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	50	42	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	50	31	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	24	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	24	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	23	ug/kg	
100-41-4	Ethylbenzene	ND	50	23	ug/kg	
76-13-1	Freon 113	ND	250	130	ug/kg	
591-78-6	2-Hexanone	ND	250	110	ug/kg	
98-82-8	Isopropylbenzene	ND	100	71	ug/kg	
79-20-9	Methyl Acetate	ND	250	70	ug/kg	
108-87-2	Methylcyclohexane	ND	100	44	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	50	23	ug/kg	

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7776-MB	3D185072.D	1	12/07/22	ED	n/a	n/a	V3D7776

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-3, JD56558-4, JD56558-5

CAS No.	Compound	Result	RL	MDL	Units	Q
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	110	ug/kg	
75-09-2	Methylene chloride	ND	250	130	ug/kg	
100-42-5	Styrene	ND	100	20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	30	ug/kg	
127-18-4	Tetrachloroethene	ND	100	29	ug/kg	
108-88-3	Toluene	ND	50	26	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	130	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	130	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	24	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	28	ug/kg	
79-01-6	Trichloroethene	ND	50	38	ug/kg	
75-69-4	Trichlorofluoromethane	ND	250	34	ug/kg	
75-01-4	Vinyl chloride	ND	100	24	ug/kg	
	m,p-Xylene	ND	50	45	ug/kg	
95-47-6	o-Xylene	ND	50	23	ug/kg	
1330-20-7	Xylene (total)	ND	50	23	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	80-124%
17060-07-0	1,2-Dichloroethane-D4	97%	75-133%
2037-26-5	Toluene-D8	96%	79-125%
460-00-4	4-Bromofluorobenzene	95%	58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.96	1600	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7780-MB	3D185120.D	1	12/08/22	ED	n/a	n/a	V3D7780

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-4

CAS No.	Compound	Result	RL	MDL	Units	Q
108-88-3	Toluene	ND	50	26	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	104%	80-124%
17060-07-0	1,2-Dichloroethane-D4	95%	75-133%
2037-26-5	Toluene-D8	95%	79-125%
460-00-4	4-Bromofluorobenzene	96%	58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.90	1500	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2F28-MB	2F0784.D	1	12/09/22	ED	n/a	n/a	V2F28

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-1, JD56558-3

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	210	ug/kg	
71-43-2	Benzene	ND	25	23	ug/kg	
74-97-5	Bromochloromethane	ND	250	28	ug/kg	
75-27-4	Bromodichloromethane	ND	100	21	ug/kg	
75-25-2	Bromoform	ND	250	68	ug/kg	
74-83-9	Bromomethane	38.6	250	38	ug/kg	J
78-93-3	2-Butanone (MEK)	ND	500	120	ug/kg	
75-15-0	Carbon disulfide	ND	100	27	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	31	ug/kg	
108-90-7	Chlorobenzene	ND	100	23	ug/kg	
75-00-3	Chloroethane	ND	250	30	ug/kg	
67-66-3	Chloroform	ND	100	26	ug/kg	
74-87-3	Chloromethane	ND	250	98	ug/kg	
110-82-7	Cyclohexane	ND	100	33	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	35	ug/kg	
124-48-1	Dibromochloromethane	ND	100	28	ug/kg	
106-93-4	1,2-Dibromoethane	ND	50	21	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	50	27	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	50	25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	50	25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	250	36	ug/kg	
75-34-3	1,1-Dichloroethane	ND	50	25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	50	24	ug/kg	
75-35-4	1,1-Dichloroethene	ND	50	33	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	50	42	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	50	31	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	24	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	24	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	23	ug/kg	
100-41-4	Ethylbenzene	ND	50	23	ug/kg	
76-13-1	Freon 113	ND	250	130	ug/kg	
591-78-6	2-Hexanone	ND	250	110	ug/kg	
98-82-8	Isopropylbenzene	ND	100	71	ug/kg	
79-20-9	Methyl Acetate	ND	250	70	ug/kg	
108-87-2	Methylcyclohexane	ND	100	44	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	50	23	ug/kg	

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2F28-MB	2F0784.D	1	12/09/22	ED	n/a	n/a	V2F28

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-1, JD56558-3

CAS No.	Compound	Result	RL	MDL	Units	Q
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	110	ug/kg	
75-09-2	Methylene chloride	ND	250	130	ug/kg	
100-42-5	Styrene	ND	100	20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	30	ug/kg	
127-18-4	Tetrachloroethene	ND	100	29	ug/kg	
108-88-3	Toluene	ND	50	26	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	130	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	130	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	24	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	28	ug/kg	
79-01-6	Trichloroethene	ND	50	38	ug/kg	
75-69-4	Trichlorofluoromethane	ND	250	34	ug/kg	
75-01-4	Vinyl chloride	ND	100	24	ug/kg	
	m,p-Xylene	ND	50	45	ug/kg	
95-47-6	o-Xylene	ND	50	23	ug/kg	
1330-20-7	Xylene (total)	ND	50	23	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	92%	80-124%
17060-07-0	1,2-Dichloroethane-D4	102%	75-133%
2037-26-5	Toluene-D8	99%	79-125%
460-00-4	4-Bromofluorobenzene	96%	58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	.92	800	ug/kg	J
	esters	1.83	1900	ug/kg	J
	Total TIC, Volatile		1900	ug/kg	J

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7783-MB	3D185187.D	1	12/12/22	ED	n/a	n/a	V3D7783

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-2, JD56558-5, JD56558-7, JD56558-8, JD56558-10

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	210	ug/kg	
71-43-2	Benzene	ND	25	23	ug/kg	
74-97-5	Bromochloromethane	ND	250	28	ug/kg	
75-27-4	Bromodichloromethane	ND	100	21	ug/kg	
75-25-2	Bromoform	ND	250	68	ug/kg	
74-83-9	Bromomethane	ND	250	38	ug/kg	
78-93-3	2-Butanone (MEK)	ND	500	120	ug/kg	
75-15-0	Carbon disulfide	ND	100	27	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	31	ug/kg	
108-90-7	Chlorobenzene	ND	100	23	ug/kg	
75-00-3	Chloroethane	ND	250	30	ug/kg	
67-66-3	Chloroform	ND	100	26	ug/kg	
74-87-3	Chloromethane	ND	250	98	ug/kg	
110-82-7	Cyclohexane	ND	100	33	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	35	ug/kg	
124-48-1	Dibromochloromethane	ND	100	28	ug/kg	
106-93-4	1,2-Dibromoethane	ND	50	21	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	50	27	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	50	25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	50	25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	250	36	ug/kg	
75-34-3	1,1-Dichloroethane	ND	50	25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	50	24	ug/kg	
75-35-4	1,1-Dichloroethene	ND	50	33	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	50	42	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	50	31	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	24	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	24	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	23	ug/kg	
100-41-4	Ethylbenzene	ND	50	23	ug/kg	
76-13-1	Freon 113	ND	250	130	ug/kg	
591-78-6	2-Hexanone	ND	250	110	ug/kg	
98-82-8	Isopropylbenzene	ND	100	71	ug/kg	
79-20-9	Methyl Acetate	ND	250	70	ug/kg	
108-87-2	Methylcyclohexane	ND	100	44	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	50	23	ug/kg	

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7783-MB	3D185187.D	1	12/12/22	ED	n/a	n/a	V3D7783

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-2, JD56558-5, JD56558-7, JD56558-8, JD56558-10

CAS No.	Compound	Result	RL	MDL	Units	Q
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	110	ug/kg	
75-09-2	Methylene chloride	ND	250	130	ug/kg	
100-42-5	Styrene	ND	100	20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	30	ug/kg	
127-18-4	Tetrachloroethene	ND	100	29	ug/kg	
108-88-3	Toluene	ND	50	26	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	130	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	130	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	24	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	28	ug/kg	
79-01-6	Trichloroethene	ND	50	38	ug/kg	
75-69-4	Trichlorofluoromethane	ND	250	34	ug/kg	
75-01-4	Vinyl chloride	ND	100	24	ug/kg	
	m,p-Xylene	ND	50	45	ug/kg	
95-47-6	o-Xylene	ND	50	23	ug/kg	
1330-20-7	Xylene (total)	ND	50	23	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	107%	80-124%
17060-07-0	1,2-Dichloroethane-D4	94%	75-133%
2037-26-5	Toluene-D8	96%	79-125%
460-00-4	4-Bromofluorobenzene	94%	58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.93	680	ug/kg	J
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7785-MB	3D185245.D	1	12/13/22	PS	n/a	n/a	V3D7785

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-6, JD56558-9, JD56558-12

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	210	ug/kg	
71-43-2	Benzene	ND	25	23	ug/kg	
74-97-5	Bromochloromethane	ND	250	28	ug/kg	
75-27-4	Bromodichloromethane	ND	100	21	ug/kg	
75-25-2	Bromoform	ND	250	68	ug/kg	
74-83-9	Bromomethane	ND	250	38	ug/kg	
78-93-3	2-Butanone (MEK)	ND	500	120	ug/kg	
75-15-0	Carbon disulfide	ND	100	27	ug/kg	
56-23-5	Carbon tetrachloride	ND	100	31	ug/kg	
108-90-7	Chlorobenzene	ND	100	23	ug/kg	
75-00-3	Chloroethane	ND	250	30	ug/kg	
67-66-3	Chloroform	ND	100	26	ug/kg	
74-87-3	Chloromethane	ND	250	98	ug/kg	
110-82-7	Cyclohexane	ND	100	33	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	35	ug/kg	
124-48-1	Dibromochloromethane	ND	100	28	ug/kg	
106-93-4	1,2-Dibromoethane	ND	50	21	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	50	27	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	50	25	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	50	25	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	250	36	ug/kg	
75-34-3	1,1-Dichloroethane	ND	50	25	ug/kg	
107-06-2	1,2-Dichloroethane	ND	50	24	ug/kg	
75-35-4	1,1-Dichloroethene	ND	50	33	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	50	42	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	50	31	ug/kg	
78-87-5	1,2-Dichloropropane	ND	100	24	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	100	24	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	100	23	ug/kg	
100-41-4	Ethylbenzene	ND	50	23	ug/kg	
76-13-1	Freon 113	ND	250	130	ug/kg	
591-78-6	2-Hexanone	ND	250	110	ug/kg	
98-82-8	Isopropylbenzene	ND	100	71	ug/kg	
79-20-9	Methyl Acetate	ND	250	70	ug/kg	
108-87-2	Methylcyclohexane	ND	100	44	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	50	23	ug/kg	

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7785-MB	3D185245.D	1	12/13/22	PS	n/a	n/a	V3D7785

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-6, JD56558-9, JD56558-12

CAS No.	Compound	Result	RL	MDL	Units	Q
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	250	110	ug/kg	
75-09-2	Methylene chloride	ND	250	130	ug/kg	
100-42-5	Styrene	ND	100	20	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	100	30	ug/kg	
127-18-4	Tetrachloroethene	ND	100	29	ug/kg	
108-88-3	Toluene	ND	50	26	ug/kg	
87-61-6	1,2,3-Trichlorobenzene	ND	250	130	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	250	130	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	100	24	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	100	28	ug/kg	
79-01-6	Trichloroethene	ND	50	38	ug/kg	
75-69-4	Trichlorofluoromethane	ND	250	34	ug/kg	
75-01-4	Vinyl chloride	ND	100	24	ug/kg	
	m,p-Xylene	ND	50	45	ug/kg	
95-47-6	o-Xylene	ND	50	23	ug/kg	
1330-20-7	Xylene (total)	ND	50	23	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	80-124%
17060-07-0	1,2-Dichloroethane-D4	90%	75-133%
2037-26-5	Toluene-D8	94%	79-125%
460-00-4	4-Bromofluorobenzene	93%	58-148%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/kg	

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10625-MB	L350839.D	1	12/14/22	TS	n/a	n/a	VL10625

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-11A

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	10	3.1	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.48	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	2.7	ug/l	
75-15-0	Carbon disulfide	ND	2.0	0.46	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
110-82-7	Cyclohexane	ND	5.0	0.78	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.0	0.53	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
106-93-4	1,2-Dibromoethane	ND	1.0	0.48	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
76-13-1	Freon 113	ND	5.0	0.58	ug/l	
591-78-6	2-Hexanone	ND	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.65	ug/l	
79-20-9	Methyl Acetate	ND	5.0	0.80	ug/l	
108-87-2	Methylcyclohexane	ND	5.0	0.60	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.51	ug/l	

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10625-MB	L350839.D	1	12/14/22	TS	n/a	n/a	VL10625

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-11A

CAS No.	Compound	Result	RL	MDL	Units	Q
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.9	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
100-42-5	Styrene	ND	1.0	0.49	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	1.0	0.50	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.52	ug/l	
	m,p-Xylene	ND	1.0	0.78	ug/l	
95-47-6	o-Xylene	ND	1.0	0.59	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	103%	80-120%
17060-07-0	1,2-Dichloroethane-D4	109%	80-120%
2037-26-5	Toluene-D8	103%	80-120%
460-00-4	4-Bromofluorobenzene	97%	82-114%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7776-BS	3D185070.D	1	12/07/22	ED	n/a	n/a	V3D7776

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-3, JD56558-4, JD56558-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	10000	5830	58	52-156
71-43-2	Benzene	2500	2260	90	82-119
74-97-5	Bromochloromethane	2500	2440	98	82-123
75-27-4	Bromodichloromethane	2500	2250	90	83-121
75-25-2	Bromoform	2500	2440	98	74-138
74-83-9	Bromomethane	2500	2540	102	56-150
78-93-3	2-Butanone (MEK)	10000	7770	78	72-138
75-15-0	Carbon disulfide	2500	2380	95	67-131
56-23-5	Carbon tetrachloride	2500	2400	96	72-130
108-90-7	Chlorobenzene	2500	2330	93	83-114
75-00-3	Chloroethane	2500	3060	122	67-141
67-66-3	Chloroform	2500	2180	87	76-115
74-87-3	Chloromethane	2500	1910	76	57-141
110-82-7	Cyclohexane	2500	2220	89	69-130
96-12-8	1,2-Dibromo-3-chloropropane	2500	2400	96	72-131
124-48-1	Dibromochloromethane	2500	2350	94	80-128
106-93-4	1,2-Dibromoethane	2500	2210	88	58-145
95-50-1	1,2-Dichlorobenzene	2500	2320	93	83-117
541-73-1	1,3-Dichlorobenzene	2500	2210	88	82-114
106-46-7	1,4-Dichlorobenzene	2500	2240	90	79-114
75-71-8	Dichlorodifluoromethane	2500	2000	80	49-146
75-34-3	1,1-Dichloroethane	2500	2150	86	76-126
107-06-2	1,2-Dichloroethane	2500	2090	84	76-118
75-35-4	1,1-Dichloroethene	2500	2410	96	72-125
156-59-2	cis-1,2-Dichloroethene	2500	2260	90	80-118
156-60-5	trans-1,2-Dichloroethene	2500	2340	94	76-122
78-87-5	1,2-Dichloropropane	2500	2110	84	82-123
10061-01-5	cis-1,3-Dichloropropene	2500	2290	92	83-123
10061-02-6	trans-1,3-Dichloropropene	2500	2270	91	83-123
100-41-4	Ethylbenzene	2500	2260	90	83-115
76-13-1	Freon 113	2500	2520	101	65-132
591-78-6	2-Hexanone	10000	7730	77	73-138
98-82-8	Isopropylbenzene	2500	2290	92	81-122
79-20-9	Methyl Acetate	2500	2340	94	63-142
108-87-2	Methylcyclohexane	2500	2120	85	73-126
1634-04-4	Methyl Tert Butyl Ether	2500	2420	97	75-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7776-BS	3D185070.D	1	12/07/22	ED	n/a	n/a	V3D7776

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-3, JD56558-4, JD56558-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	10000	8740	87	71-138
75-09-2	Methylene chloride	2500	2280	91	73-122
100-42-5	Styrene	2500	2520	101	84-122
79-34-5	1,1,2,2-Tetrachloroethane	2500	2280	91	75-127
127-18-4	Tetrachloroethene	2500	2090	84	73-125
108-88-3	Toluene	2500	2190	88	82-118
87-61-6	1,2,3-Trichlorobenzene	2500	2120	85	68-132
120-82-1	1,2,4-Trichlorobenzene	2500	2150	86	72-133
71-55-6	1,1,1-Trichloroethane	2500	2280	91	77-124
79-00-5	1,1,2-Trichloroethane	2500	2200	88	83-122
79-01-6	Trichloroethene	2500	2300	92	80-122
75-69-4	Trichlorofluoromethane	2500	2380	95	69-132
75-01-4	Vinyl chloride	2500	2420	97	60-144
	m,p-Xylene	5000	4520	90	82-119
95-47-6	o-Xylene	2500	2350	94	84-120
1330-20-7	Xylene (total)	7500	6880	92	83-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	80-124%
17060-07-0	1,2-Dichloroethane-D4	90%	75-133%
2037-26-5	Toluene-D8	94%	79-125%
460-00-4	4-Bromofluorobenzene	98%	58-148%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7780-BS	3D185118.D	1	12/08/22	ED	n/a	n/a	V3D7780

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-88-3	Toluene	2500	2120	85	82-118

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	109%	80-124%
17060-07-0	1,2-Dichloroethane-D4	91%	75-133%
2037-26-5	Toluene-D8	93%	79-125%
460-00-4	4-Bromofluorobenzene	84%	58-148%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2F28-BS	2F0782.D	1	12/09/22	ED	n/a	n/a	V2F28

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-1, JD56558-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	10000	12400	124	52-156
71-43-2	Benzene	2500	2330	93	82-119
74-97-5	Bromochloromethane	2500	2060	82	82-123
75-27-4	Bromodichloromethane	2500	2220	89	83-121
75-25-2	Bromoform	2500	2240	90	74-138
74-83-9	Bromomethane	2500	2070	83	56-150
78-93-3	2-Butanone (MEK)	10000	8980	90	72-138
75-15-0	Carbon disulfide	2500	2180	87	67-131
56-23-5	Carbon tetrachloride	2500	2150	86	72-130
108-90-7	Chlorobenzene	2500	2260	90	83-114
75-00-3	Chloroethane	2500	2290	92	67-141
67-66-3	Chloroform	2500	2110	84	76-115
74-87-3	Chloromethane	2500	2060	82	57-141
110-82-7	Cyclohexane	2500	1970	79	69-130
96-12-8	1,2-Dibromo-3-chloropropane	2500	2320	93	72-131
124-48-1	Dibromochloromethane	2500	2240	90	80-128
106-93-4	1,2-Dibromoethane	2500	2330	93	58-145
95-50-1	1,2-Dichlorobenzene	2500	2320	93	83-117
541-73-1	1,3-Dichlorobenzene	2500	2250	90	82-114
106-46-7	1,4-Dichlorobenzene	2500	2200	88	79-114
75-71-8	Dichlorodifluoromethane	2500	1980	79	49-146
75-34-3	1,1-Dichloroethane	2500	2180	87	76-126
107-06-2	1,2-Dichloroethane	2500	2150	86	76-118
75-35-4	1,1-Dichloroethene	2500	2240	90	72-125
156-59-2	cis-1,2-Dichloroethene	2500	2070	83	80-118
156-60-5	trans-1,2-Dichloroethene	2500	2180	87	76-122
78-87-5	1,2-Dichloropropane	2500	2300	92	82-123
10061-01-5	cis-1,3-Dichloropropene	2500	2330	93	83-123
10061-02-6	trans-1,3-Dichloropropene	2500	2370	95	83-123
100-41-4	Ethylbenzene	2500	2300	92	83-115
76-13-1	Freon 113	2500	2150	86	65-132
591-78-6	2-Hexanone	10000	9960	100	73-138
98-82-8	Isopropylbenzene	2500	2310	92	81-122
79-20-9	Methyl Acetate	2500	2380	95	63-142
108-87-2	Methylcyclohexane	2500	2450	98	73-126
1634-04-4	Methyl Tert Butyl Ether	2500	2110	84	75-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V2F28-BS	2F0782.D	1	12/09/22	ED	n/a	n/a	V2F28

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-1, JD56558-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	10000	10100	101	71-138
75-09-2	Methylene chloride	2500	2190	88	73-122
100-42-5	Styrene	2500	2270	91	84-122
79-34-5	1,1,2,2-Tetrachloroethane	2500	2410	96	75-127
127-18-4	Tetrachloroethene	2500	2410	96	73-125
108-88-3	Toluene	2500	2280	91	82-118
87-61-6	1,2,3-Trichlorobenzene	2500	2490	100	68-132
120-82-1	1,2,4-Trichlorobenzene	2500	2540	102	72-133
71-55-6	1,1,1-Trichloroethane	2500	2180	87	77-124
79-00-5	1,1,2-Trichloroethane	2500	2300	92	83-122
79-01-6	Trichloroethene	2500	2280	91	80-122
75-69-4	Trichlorofluoromethane	2500	2120	85	69-132
75-01-4	Vinyl chloride	2500	2100	84	60-144
	m,p-Xylene	5000	4570	91	82-119
95-47-6	o-Xylene	2500	2270	91	84-120
1330-20-7	Xylene (total)	7500	6840	91	83-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	89%	80-124%
17060-07-0	1,2-Dichloroethane-D4	98%	75-133%
2037-26-5	Toluene-D8	99%	79-125%
460-00-4	4-Bromofluorobenzene	95%	58-148%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7783-BS	3D185185.D	1	12/12/22	ED	n/a	n/a	V3D7783

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-2, JD56558-5, JD56558-7, JD56558-8, JD56558-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	10000	7350	74	52-156
71-43-2	Benzene	2500	2160	86	82-119
74-97-5	Bromochloromethane	2500	2410	96	82-123
75-27-4	Bromodichloromethane	2500	2240	90	83-121
75-25-2	Bromoform	2500	2230	89	74-138
74-83-9	Bromomethane	2500	2030	81	56-150
78-93-3	2-Butanone (MEK)	10000	8610	86	72-138
75-15-0	Carbon disulfide	2500	2370	95	67-131
56-23-5	Carbon tetrachloride	2500	2490	100	72-130
108-90-7	Chlorobenzene	2500	2170	87	83-114
75-00-3	Chloroethane	2500	2020	81	67-141
67-66-3	Chloroform	2500	2220	89	76-115
74-87-3	Chloromethane	2500	1560	62	57-141
110-82-7	Cyclohexane	2500	1720	69	69-130
96-12-8	1,2-Dibromo-3-chloropropane	2500	2310	92	72-131
124-48-1	Dibromochloromethane	2500	2370	95	80-128
106-93-4	1,2-Dibromoethane	2500	2130	85	58-145
95-50-1	1,2-Dichlorobenzene	2500	2200	88	83-117
541-73-1	1,3-Dichlorobenzene	2500	2080	83	82-114
106-46-7	1,4-Dichlorobenzene	2500	2090	84	79-114
75-71-8	Dichlorodifluoromethane	2500	1750	70	49-146
75-34-3	1,1-Dichloroethane	2500	2100	84	76-126
107-06-2	1,2-Dichloroethane	2500	1980	79	76-118
75-35-4	1,1-Dichloroethene	2500	2350	94	72-125
156-59-2	cis-1,2-Dichloroethene	2500	2240	90	80-118
156-60-5	trans-1,2-Dichloroethene	2500	2340	94	76-122
78-87-5	1,2-Dichloropropane	2500	1940	78* [a]	82-123
10061-01-5	cis-1,3-Dichloropropene	2500	2280	91	83-123
10061-02-6	trans-1,3-Dichloropropene	2500	2210	88	83-123
100-41-4	Ethylbenzene	2500	2090	84	83-115
76-13-1	Freon 113	2500	2490	100	65-132
591-78-6	2-Hexanone	10000	7660	77	73-138
98-82-8	Isopropylbenzene	2500	2050	82	81-122
79-20-9	Methyl Acetate	2500	2240	90	63-142
108-87-2	Methylcyclohexane	2500	2150	86	73-126
1634-04-4	Methyl Tert Butyl Ether	2500	2340	94	75-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7783-BS	3D185185.D	1	12/12/22	ED	n/a	n/a	V3D7783

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-2, JD56558-5, JD56558-7, JD56558-8, JD56558-10

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	10000	8220	82	71-138
75-09-2	Methylene chloride	2500	2150	86	73-122
100-42-5	Styrene	2500	2180	87	84-122
79-34-5	1,1,2,2-Tetrachloroethane	2500	2250	90	75-127
127-18-4	Tetrachloroethene	2500	2070	83	73-125
108-88-3	Toluene	2500	2010	80* [b]	82-118
87-61-6	1,2,3-Trichlorobenzene	2500	2110	84	68-132
120-82-1	1,2,4-Trichlorobenzene	2500	2140	86	72-133
71-55-6	1,1,1-Trichloroethane	2500	2400	96	77-124
79-00-5	1,1,2-Trichloroethane	2500	2040	82* [b]	83-122
79-01-6	Trichloroethene	2500	2270	91	80-122
75-69-4	Trichlorofluoromethane	2500	1890	76	69-132
75-01-4	Vinyl chloride	2500	1870	75	60-144
	m,p-Xylene	5000	4130	83	82-119
95-47-6	o-Xylene	2500	2140	86	84-120
1330-20-7	Xylene (total)	7500	6260	83	83-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	111%	80-124%
17060-07-0	1,2-Dichloroethane-D4	90%	75-133%
2037-26-5	Toluene-D8	92%	79-125%
460-00-4	4-Bromofluorobenzene	96%	58-148%

(a) Outside of in house control limits, but within the marginal exceedance limits.
(b) Outside of in house control limits, but within reasonable method recovery limits.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7785-BS	3D185243.D	1	12/13/22	PS	n/a	n/a	V3D7785

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-6, JD56558-9, JD56558-12

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
67-64-1	Acetone	10000	8810	88	52-156
71-43-2	Benzene	2500	2470	99	82-119
74-97-5	Bromochloromethane	2500	2680	107	82-123
75-27-4	Bromodichloromethane	2500	2570	103	83-121
75-25-2	Bromoform	2500	2270	91	74-138
74-83-9	Bromomethane	2500	3090	124	56-150
78-93-3	2-Butanone (MEK)	10000	9490	95	72-138
75-15-0	Carbon disulfide	2500	2580	103	67-131
56-23-5	Carbon tetrachloride	2500	2770	111	72-130
108-90-7	Chlorobenzene	2500	2400	96	83-114
75-00-3	Chloroethane	2500	2800	112	67-141
67-66-3	Chloroform	2500	2440	98	76-115
74-87-3	Chloromethane	2500	2280	91	57-141
110-82-7	Cyclohexane	2500	2580	103	69-130
96-12-8	1,2-Dibromo-3-chloropropane	2500	2350	94	72-131
124-48-1	Dibromochloromethane	2500	2620	105	80-128
106-93-4	1,2-Dibromoethane	2500	2440	98	58-145
95-50-1	1,2-Dichlorobenzene	2500	2460	98	83-117
541-73-1	1,3-Dichlorobenzene	2500	2300	92	82-114
106-46-7	1,4-Dichlorobenzene	2500	2380	95	79-114
75-71-8	Dichlorodifluoromethane	2500	2620	105	49-146
75-34-3	1,1-Dichloroethane	2500	2300	92	76-126
107-06-2	1,2-Dichloroethane	2500	2330	93	76-118
75-35-4	1,1-Dichloroethene	2500	2550	102	72-125
156-59-2	cis-1,2-Dichloroethene	2500	2420	97	80-118
156-60-5	trans-1,2-Dichloroethene	2500	2550	102	76-122
78-87-5	1,2-Dichloropropane	2500	2270	91	82-123
10061-01-5	cis-1,3-Dichloropropene	2500	2460	98	83-123
10061-02-6	trans-1,3-Dichloropropene	2500	2370	95	83-123
100-41-4	Ethylbenzene	2500	2290	92	83-115
76-13-1	Freon 113	2500	2830	113	65-132
591-78-6	2-Hexanone	10000	8260	83	73-138
98-82-8	Isopropylbenzene	2500	2340	94	81-122
79-20-9	Methyl Acetate	2500	2490	100	63-142
108-87-2	Methylcyclohexane	2500	2370	95	73-126
1634-04-4	Methyl Tert Butyl Ether	2500	2580	103	75-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3D7785-BS	3D185243.D	1	12/13/22	PS	n/a	n/a	V3D7785

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-6, JD56558-9, JD56558-12

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	10000	8740	87	71-138
75-09-2	Methylene chloride	2500	2460	98	73-122
100-42-5	Styrene	2500	2540	102	84-122
79-34-5	1,1,2,2-Tetrachloroethane	2500	2200	88	75-127
127-18-4	Tetrachloroethene	2500	2370	95	73-125
108-88-3	Toluene	2500	2180	87	82-118
87-61-6	1,2,3-Trichlorobenzene	2500	2300	92	68-132
120-82-1	1,2,4-Trichlorobenzene	2500	2350	94	72-133
71-55-6	1,1,1-Trichloroethane	2500	2580	103	77-124
79-00-5	1,1,2-Trichloroethane	2500	2260	90	83-122
79-01-6	Trichloroethene	2500	2720	109	80-122
75-69-4	Trichlorofluoromethane	2500	2760	110	69-132
75-01-4	Vinyl chloride	2500	2630	105	60-144
	m,p-Xylene	5000	4620	92	82-119
95-47-6	o-Xylene	2500	2390	96	84-120
1330-20-7	Xylene (total)	7500	7010	93	83-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	80-124%
17060-07-0	1,2-Dichloroethane-D4	91%	75-133%
2037-26-5	Toluene-D8	90%	79-125%
460-00-4	4-Bromofluorobenzene	90%	58-148%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10625-BS	L350837.D	1	12/14/22	TS	n/a	n/a	VL10625

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-11A

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	200	196	98	27-175
71-43-2	Benzene	50	40.1	80	80-115
74-97-5	Bromochloromethane	50	48.7	97	83-122
75-27-4	Bromodichloromethane	50	44.2	88	82-119
75-25-2	Bromoform	50	45.7	91	77-135
74-83-9	Bromomethane	50	40.9	82	40-162
78-93-3	2-Butanone (MEK)	200	201	101	61-150
75-15-0	Carbon disulfide	50	40.0	80	64-130
56-23-5	Carbon tetrachloride	50	44.2	88	75-127
108-90-7	Chlorobenzene	50	44.6	89	80-115
75-00-3	Chloroethane	50	36.0	72	56-144
67-66-3	Chloroform	50	39.9	80	75-116
74-87-3	Chloromethane	50	36.0	72	41-153
110-82-7	Cyclohexane	50	34.3	69	66-129
96-12-8	1,2-Dibromo-3-chloropropane	50	47.7	95	69-134
124-48-1	Dibromochloromethane	50	43.7	87	81-123
106-93-4	1,2-Dibromoethane	50	45.4	91	67-138
95-50-1	1,2-Dichlorobenzene	50	45.5	91	81-117
541-73-1	1,3-Dichlorobenzene	50	44.8	90	81-115
106-46-7	1,4-Dichlorobenzene	50	44.4	89	80-114
75-71-8	Dichlorodifluoromethane	50	44.9	90	43-152
75-34-3	1,1-Dichloroethane	50	40.9	82	75-125
107-06-2	1,2-Dichloroethane	50	43.1	86	73-117
75-35-4	1,1-Dichloroethene	50	45.1	90	70-124
156-59-2	cis-1,2-Dichloroethene	50	41.8	84	80-120
156-60-5	trans-1,2-Dichloroethene	50	43.3	87	77-121
78-87-5	1,2-Dichloropropane	50	42.5	85	79-121
10061-01-5	cis-1,3-Dichloropropene	50	42.6	85	83-123
10061-02-6	trans-1,3-Dichloropropene	50	42.8	86	83-122
100-41-4	Ethylbenzene	50	39.8	80	78-116
76-13-1	Freon 113	50	46.3	93	68-134
591-78-6	2-Hexanone	200	185	93	66-136
98-82-8	Isopropylbenzene	50	42.1	84	78-121
79-20-9	Methyl Acetate	50	41.9	84	60-143
108-87-2	Methylcyclohexane	50	39.6	79	71-123
1634-04-4	Methyl Tert Butyl Ether	50	43.2	86	76-123

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VL10625-BS	L350837.D	1	12/14/22	TS	n/a	n/a	VL10625

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-11A

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-10-1	4-Methyl-2-pentanone(MIBK)	200	177	89	73-134
75-09-2	Methylene chloride	50	42.7	85	73-123
100-42-5	Styrene	50	41.5	83	81-125
79-34-5	1,1,2,2-Tetrachloroethane	50	45.8	92	73-126
127-18-4	Tetrachloroethene	50	43.6	87	73-119
108-88-3	Toluene	50	41.9	84	79-116
87-61-6	1,2,3-Trichlorobenzene	50	47.4	95	63-137
120-82-1	1,2,4-Trichlorobenzene	50	47.0	94	68-135
71-55-6	1,1,1-Trichloroethane	50	44.1	88	76-124
79-00-5	1,1,2-Trichloroethane	50	43.4	87	83-117
79-01-6	Trichloroethene	50	43.6	87	80-118
75-69-4	Trichlorofluoromethane	50	39.7	79	67-134
75-01-4	Vinyl chloride	50	37.9	76	52-146
	m,p-Xylene	100	80.7	81	79-119
95-47-6	o-Xylene	50	43.2	86	81-119
1330-20-7	Xylene (total)	150	124	83	80-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	105%	80-120%
17060-07-0	1,2-Dichloroethane-D4	102%	80-120%
2037-26-5	Toluene-D8	94%	80-120%
460-00-4	4-Bromofluorobenzene	97%	82-114%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD56475-1MS	3D185078.D	1	12/07/22	ED	n/a	n/a	V3D7776
JD56475-1MSD	3D185079.D	1	12/07/22	ED	n/a	n/a	V3D7776
JD56475-1	3D185077.D	1	12/07/22	ED	n/a	n/a	V3D7776

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-3, JD56558-4, JD56558-5

CAS No.	Compound	JD56475-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		63400	41900	66	63400	41900	66	0	10-170/24
71-43-2	Benzene	ND		15800	14100	89	15800	14100	89	0	61-132/13
74-97-5	Bromochloromethane	ND		15800	16100	102	15800	15900	100	1	68-126/13
75-27-4	Bromodichloromethane	ND		15800	14200	90	15800	14200	90	0	65-129/12
75-25-2	Bromoform	ND		15800	15600	98	15800	16400	104	5	52-136/16
74-83-9	Bromomethane	ND		15800	16000	101	15800	16200	102	1	23-158/29
78-93-3	2-Butanone (MEK)	ND		63400	53000	84	63400	52300	83	1	45-142/14
75-15-0	Carbon disulfide	ND		15800	16300	103	15800	16500	104	1	50-140/18
56-23-5	Carbon tetrachloride	ND		15800	15200	96	15800	16000	101	5	54-139/21
108-90-7	Chlorobenzene	ND		15800	14400	91	15800	14300	90	1	57-127/15
75-00-3	Chloroethane	ND		15800	17300	109	15800	16600	105	4	30-157/29
67-66-3	Chloroform	ND		15800	14400	91	15800	14700	93	2	59-127/16
74-87-3	Chloromethane	ND		15800	11000	69	15800	11200	71	2	49-145/21
110-82-7	Cyclohexane	ND		15800	13400	85	15800	12900	81	4	39-147/21
96-12-8	1,2-Dibromo-3-chloropropane	ND		15800	19100	121	15800	19100	121	0	35-140/17
124-48-1	Dibromochloromethane	ND		15800	15200	96	15800	16000	101	5	63-129/12
106-93-4	1,2-Dibromoethane	ND		15800	14300	90	15800	14600	92	2	45-141/12
95-50-1	1,2-Dichlorobenzene	ND		15800	16400	104	15800	16600	105	1	38-136/19
541-73-1	1,3-Dichlorobenzene	ND		15800	14000	88	15800	14000	88	0	37-135/19
106-46-7	1,4-Dichlorobenzene	ND		15800	14300	90	15800	14000	88	2	36-134/19
75-71-8	Dichlorodifluoromethane	ND		15800	15200	96	15800	15100	95	1	33-152/17
75-34-3	1,1-Dichloroethane	ND		15800	14100	89	15800	14000	88	1	68-131/13
107-06-2	1,2-Dichloroethane	ND		15800	13300	84	15800	13800	87	4	64-119/12
75-35-4	1,1-Dichloroethene	ND		15800	16100	102	15800	16400	104	2	60-133/15
156-59-2	cis-1,2-Dichloroethene	ND		15800	14900	94	15800	14600	92	2	58-133/15
156-60-5	trans-1,2-Dichloroethene	ND		15800	15900	100	15800	15700	99	1	62-130/16
78-87-5	1,2-Dichloropropane	ND		15800	12900	81	15800	12900	81	0	70-127/12
10061-01-5	cis-1,3-Dichloropropene	ND		15800	14200	90	15800	14800	93	4	64-126/16
10061-02-6	trans-1,3-Dichloropropene	ND		15800	14900	94	15800	15400	97	3	61-127/13
100-41-4	Ethylbenzene	10700		15800	23500	81	15800	23300	80	1	51-133/19
76-13-1	Freon 113	ND		15800	17600	111	15800	17700	112	1	46-138/17
591-78-6	2-Hexanone	ND		63400	49800	79	63400	50800	80	2	45-144/16
98-82-8	Isopropylbenzene	8440		15800	22100	86	15800	21300	81	4	44-142/21
79-20-9	Methyl Acetate	ND		15800	17000	107	15800	16700	105	2	14-192/21
108-87-2	Methylcyclohexane	1970		15800	16900	94	15800	17100	95	1	27-149/23
1634-04-4	Methyl Tert Butyl Ether	ND		15800	15900	100	15800	15900	100	0	62-125/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD56475-1MS	3D185078.D	1	12/07/22	ED	n/a	n/a	V3D7776
JD56475-1MSD	3D185079.D	1	12/07/22	ED	n/a	n/a	V3D7776
JD56475-1	3D185077.D	1	12/07/22	ED	n/a	n/a	V3D7776

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-3, JD56558-4, JD56558-5

CAS No.	Compound	JD56475-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		63400	52500	83	63400	54000	85	3	50-138/14
75-09-2	Methylene chloride	ND		15800	15300	97	15800	15900	100	4	63-127/15
100-42-5	Styrene	ND		15800	16600	105	15800	16200	102	2	48-143/18
79-34-5	1,1,2,2-Tetrachloroethane	ND		15800	13700	86	15800	13900	88	1	44-135/20
127-18-4	Tetrachloroethene	ND		15800	13300	84	15800	13600	86	2	38-146/17
108-88-3	Toluene	4520		15800	18600	89	15800	18700	89	1	56-135/15
87-61-6	1,2,3-Trichlorobenzene	ND		15800	21700	137	15800	21300	134	2	10-153/27
120-82-1	1,2,4-Trichlorobenzene	ND		15800	21000	133	15800	20500	129	2	10-158/27
71-55-6	1,1,1-Trichloroethane	ND		15800	15000	95	15800	15400	97	3	61-134/14
79-00-5	1,1,2-Trichloroethane	ND		15800	14100	89	15800	13900	88	1	62-133/17
79-01-6	Trichloroethene	ND		15800	14400	91	15800	14800	93	3	52-144/15
75-69-4	Trichlorofluoromethane	ND		15800	17600	111	15800	17100	108	3	50-141/18
75-01-4	Vinyl chloride	ND		15800	12300	78	15800	12700	80	3	48-151/18
	m,p-Xylene	43700		31700	68000	77	31700	66900	73	2	51-135/18
95-47-6	o-Xylene	25200		15800	38300	83	15800	37900	80	1	52-137/18
1330-20-7	Xylene (total)	68900		47500	106000	78	47500	105000	76	1	50-138/17

CAS No.	Surrogate Recoveries	MS	MSD	JD56475-1	Limits
1868-53-7	Dibromofluoromethane	108%	105%	98%	80-124%
17060-07-0	1,2-Dichloroethane-D4	94%	95%	92%	75-133%
2037-26-5	Toluene-D8	97%	95%	96%	79-125%
460-00-4	4-Bromofluorobenzene	95%	95%	80%	58-148%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD56536-1MS	3D185127.D	1	12/08/22	ED	n/a	n/a	V3D7780
JD56536-1MSD	3D185128.D	1	12/08/22	ED	n/a	n/a	V3D7780
JD56536-1 [a]	3D185126.D	1	12/08/22	ED	n/a	n/a	V3D7780

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-4

CAS No.	Compound	JD56536-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-88-3	Toluene	1780		2750	3890	77	2750	3840	75	1	56-135/15

CAS No.	Surrogate Recoveries	MS	MSD	JD56536-1	Limits
1868-53-7	Dibromofluoromethane	109%	108%	101%	80-124%
17060-07-0	1,2-Dichloroethane-D4	97%	99%	102%	75-133%
2037-26-5	Toluene-D8	91%	91%	88%	79-125%
460-00-4	4-Bromofluorobenzene	108%	108%	112%	58-148%

(a) Dilution required due to high concentration of non-target compound.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD56558-1MS	2F0791.D	1	12/09/22	ED	n/a	n/a	V2F28
JD56558-1MSD	2F0792.D	1	12/09/22	ED	n/a	n/a	V2F28
JD56558-1	2F0795.D	1	12/09/22	ED	n/a	n/a	V2F28

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-1, JD56558-3

CAS No.	Compound	JD56558-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		100000	98900	99	100000	94300	94	5	10-170/24
71-43-2	Benzene	1240		25000	26400	101	25000	25900	99	2	61-132/13
74-97-5	Bromochloromethane	ND		25000	22400	90	25000	21300	85	5	68-126/13
75-27-4	Bromodichloromethane	ND		25000	24600	98	25000	23500	94	5	65-129/12
75-25-2	Bromoform	ND		25000	25100	100	25000	24100	96	4	52-136/16
74-83-9	Bromomethane	ND		25000	17000	68	25000	17900	72	5	23-158/29
78-93-3	2-Butanone (MEK)	ND		100000	98100	98	100000	93700	94	5	45-142/14
75-15-0	Carbon disulfide	ND		25000	24300	97	25000	23500	94	3	50-140/18
56-23-5	Carbon tetrachloride	ND		25000	23200	93	25000	22500	90	3	54-139/21
108-90-7	Chlorobenzene	ND		25000	24800	99	25000	24200	97	2	57-127/15
75-00-3	Chloroethane	ND		25000	16600	66	25000	16000	64	4	30-157/29
67-66-3	Chloroform	ND		25000	24000	96	25000	22800	91	5	59-127/16
74-87-3	Chloromethane	ND		25000	21900	88	25000	21700	87	1	49-145/21
110-82-7	Cyclohexane	1410		25000	22800	86	25000	22400	84	2	39-147/21
96-12-8	1,2-Dibromo-3-chloropropane	ND		25000	25400	102	25000	24600	98	3	35-140/17
124-48-1	Dibromochloromethane	ND		25000	24800	99	25000	24100	96	3	63-129/12
106-93-4	1,2-Dibromoethane	ND		25000	25800	103	25000	25100	100	3	45-141/12
95-50-1	1,2-Dichlorobenzene	ND		25000	25000	100	25000	24500	98	2	38-136/19
541-73-1	1,3-Dichlorobenzene	ND		25000	24500	98	25000	23600	94	4	37-135/19
106-46-7	1,4-Dichlorobenzene	ND		25000	23900	96	25000	23200	93	3	36-134/19
75-71-8	Dichlorodifluoromethane	ND		25000	21600	86	25000	20900	84	3	33-152/17
75-34-3	1,1-Dichloroethane	ND		25000	24300	97	25000	23300	93	4	68-131/13
107-06-2	1,2-Dichloroethane	ND		25000	24100	96	25000	23500	94	3	64-119/12
75-35-4	1,1-Dichloroethene	ND		25000	25500	102	25000	24500	98	4	60-133/15
156-59-2	cis-1,2-Dichloroethene	ND		25000	22900	92	25000	22800	91	0	58-133/15
156-60-5	trans-1,2-Dichloroethene	ND		25000	24500	98	25000	24200	97	1	62-130/16
78-87-5	1,2-Dichloropropane	ND		25000	26100	104	25000	25300	101	3	70-127/12
10061-01-5	cis-1,3-Dichloropropene	ND		25000	26800	107	25000	25500	102	5	64-126/16
10061-02-6	trans-1,3-Dichloropropene	ND		25000	27000	108	25000	26200	105	3	61-127/13
100-41-4	Ethylbenzene	8810		25000	33200	98	25000	32600	95	2	51-133/19
76-13-1	Freon 113	ND		25000	22300	89	25000	21900	88	2	46-138/17
591-78-6	2-Hexanone	ND		100000	112000	112	100000	106000	106	6	45-144/16
98-82-8	Isopropylbenzene	3800		25000	28600	99	25000	27800	96	3	44-142/21
79-20-9	Methyl Acetate	ND		25000	29300	117	25000	27600	110	6	14-192/21
108-87-2	Methylcyclohexane	8150		25000	36000	111	25000	35100	108	3	27-149/23
1634-04-4	Methyl Tert Butyl Ether	ND		25000	25800	103	25000	24000	96	7	62-125/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD56558-1MS	2F0791.D	1	12/09/22	ED	n/a	n/a	V2F28
JD56558-1MSD	2F0792.D	1	12/09/22	ED	n/a	n/a	V2F28
JD56558-1	2F0795.D	1	12/09/22	ED	n/a	n/a	V2F28

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-1, JD56558-3

CAS No.	Compound	JD56558-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	4770		100000	124000	119	100000	119000	114	4	50-138/14
75-09-2	Methylene chloride	ND		25000	23500	94	25000	22900	92	3	63-127/15
100-42-5	Styrene	245	J	25000	25500	101	25000	24500	97	4	48-143/18
79-34-5	1,1,2,2-Tetrachloroethane	ND		25000	28000	112	25000	26900	108	4	44-135/20
127-18-4	Tetrachloroethene	ND		25000	25500	102	25000	24800	99	3	38-146/17
108-88-3	Toluene	13200		25000	36600	94	25000	36000	91	2	56-135/15
87-61-6	1,2,3-Trichlorobenzene	ND		25000	29600	118	25000	29100	116	2	10-153/27
120-82-1	1,2,4-Trichlorobenzene	ND		25000	30300	121	25000	29100	116	4	10-158/27
71-55-6	1,1,1-Trichloroethane	ND		25000	23600	94	25000	23200	93	2	61-134/14
79-00-5	1,1,2-Trichloroethane	ND		25000	37200	149* [a]	25000	36300	145* [a]	2	62-133/17
79-01-6	Trichloroethene	ND		25000	24200	97	25000	23200	93	4	52-144/15
75-69-4	Trichlorofluoromethane	ND		25000	14700	59	25000	14000	56	5	50-141/18
75-01-4	Vinyl chloride	ND		25000	22600	90	25000	22600	90	0	48-151/18
	m,p-Xylene	25000		50000	71100	92	50000	69800	90	2	51-135/18
95-47-6	o-Xylene	12000		25000	35800	95	25000	34900	92	3	52-137/18
1330-20-7	Xylene (total)	37000		75000	107000	93	75000	105000	91	2	50-138/17

CAS No.	Surrogate Recoveries	MS	MSD	JD56558-1	Limits
1868-53-7	Dibromofluoromethane	90%	89%	90%	80-124%
17060-07-0	1,2-Dichloroethane-D4	105%	103%	111%	75-133%
2037-26-5	Toluene-D8	99%	101%	98%	79-125%
460-00-4	4-Bromofluorobenzene	105%	104%	105%	58-148%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD56615-1MS	3D185199.D	1	12/12/22	ED	n/a	n/a	V3D7783
JD56615-1MSD	3D185200.D	1	12/12/22	ED	n/a	n/a	V3D7783
JD56615-1 [a]	3D185189.D	1	12/12/22	ED	n/a	n/a	V3D7783

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-2, JD56558-5, JD56558-7, JD56558-8, JD56558-10

CAS No.	Compound	JD56615-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		18700	20200	108	18700	20000	107	1	10-170/24
71-43-2	Benzene	ND		4680	4100	88	4680	4080	87	0	61-132/13
74-97-5	Bromochloromethane	ND		4680	4850	104	4680	4900	105	1	68-126/13
75-27-4	Bromodichloromethane	ND		4680	4110	88	4680	4300	92	5	65-129/12
75-25-2	Bromoform	ND		4680	4420	94	4680	4540	97	3	52-136/16
74-83-9	Bromomethane	ND		4680	1300	28	4680	2560	55	65* [b]	23-158/29
78-93-3	2-Butanone (MEK)	ND		18700	19900	106	18700	18800	100	6	45-142/14
75-15-0	Carbon disulfide	ND		4680	4680	100	4680	5040	108	7	50-140/18
56-23-5	Carbon tetrachloride	ND		4680	4480	96	4680	4780	102	6	54-139/21
108-90-7	Chlorobenzene	ND		4680	4060	87	4680	4080	87	0	57-127/15
75-00-3	Chloroethane	ND		4680	7230	155	4680	6590	141	9	30-157/29
67-66-3	Chloroform	ND		4680	4430	95	4680	4590	98	4	59-127/16
74-87-3	Chloromethane	ND		4680	3670	78	4680	3900	83	6	49-145/21
110-82-7	Cyclohexane	ND		4680	3900	83	4680	3920	84	1	39-147/21
96-12-8	1,2-Dibromo-3-chloropropane	ND		4680	4870	104	4680	4460	95	9	35-140/17
124-48-1	Dibromochloromethane	ND		4680	4080	87	4680	4330	93	6	63-129/12
106-93-4	1,2-Dibromoethane	ND		4680	4030	86	4680	4110	88	2	45-141/12
95-50-1	1,2-Dichlorobenzene	ND		4680	4040	86	4680	3960	85	2	38-136/19
541-73-1	1,3-Dichlorobenzene	ND		4680	3690	79	4680	3680	79	0	37-135/19
106-46-7	1,4-Dichlorobenzene	ND		4680	3770	81	4680	3690	79	2	36-134/19
75-71-8	Dichlorodifluoromethane	ND		4680	4200	90	4680	5000	107	17	33-152/17
75-34-3	1,1-Dichloroethane	ND		4680	4450	95	4680	4400	94	1	68-131/13
107-06-2	1,2-Dichloroethane	ND		4680	4050	87	4680	4060	87	0	64-119/12
75-35-4	1,1-Dichloroethene	ND		4680	4660	100	4680	5040	108	8	60-133/15
156-59-2	cis-1,2-Dichloroethene	ND		4680	4540	97	4680	4500	96	1	58-133/15
156-60-5	trans-1,2-Dichloroethene	ND		4680	4620	99	4680	4800	103	4	62-130/16
78-87-5	1,2-Dichloropropane	ND		4680	3830	82	4680	3820	82	0	70-127/12
10061-01-5	cis-1,3-Dichloropropene	ND		4680	4260	91	4680	4360	93	2	64-126/16
10061-02-6	trans-1,3-Dichloropropene	ND		4680	4220	90	4680	4400	94	4	61-127/13
100-41-4	Ethylbenzene	ND		4680	3960	85	4680	3990	85	1	51-133/19
76-13-1	Freon 113	ND		4680	4970	106	4680	5260	112	6	46-138/17
591-78-6	2-Hexanone	ND		18700	15600	83	18700	14900	80	5	45-144/16
98-82-8	Isopropylbenzene	ND		4680	4140	88	4680	4120	88	0	44-142/21
79-20-9	Methyl Acetate	ND		4680	5240	112	4680	5060	108	3	14-192/21
108-87-2	Methylcyclohexane	ND		4680	4290	92	4680	4200	90	2	27-149/23
1634-04-4	Methyl Tert Butyl Ether	ND		4680	4890	105	4680	5000	107	2	62-125/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD56615-1MS	3D185199.D	1	12/12/22	ED	n/a	n/a	V3D7783
JD56615-1MSD	3D185200.D	1	12/12/22	ED	n/a	n/a	V3D7783
JD56615-1 [a]	3D185189.D	1	12/12/22	ED	n/a	n/a	V3D7783

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-2, JD56558-5, JD56558-7, JD56558-8, JD56558-10

CAS No.	Compound	JD56615-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		18700	15900	85	18700	15000	80	6	50-138/14
75-09-2	Methylene chloride	ND		4680	4680	100	4680	5060	108	8	63-127/15
100-42-5	Styrene	ND		4680	4350	93	4680	4330	93	0	48-143/18
79-34-5	1,1,2,2-Tetrachloroethane	ND		4680	3790	81	4680	3740	80	1	44-135/20
127-18-4	Tetrachloroethene	ND		4680	3610	77	4680	3810	81	5	38-146/17
108-88-3	Toluene	ND		4680	3870	83	4680	3860	83	0	56-135/15
87-61-6	1,2,3-Trichlorobenzene	ND		4680	5460	117	4680	5290	113	3	10-153/27
120-82-1	1,2,4-Trichlorobenzene	ND		4680	5230	112	4680	4950	106	6	10-158/27
71-55-6	1,1,1-Trichloroethane	ND		4680	4390	94	4680	4570	98	4	61-134/14
79-00-5	1,1,2-Trichloroethane	ND		4680	3830	82	4680	3940	84	3	62-133/17
79-01-6	Trichloroethene	ND		4680	4140	88	4680	4130	88	0	52-144/15
75-69-4	Trichlorofluoromethane	ND		4680	5170	111	4680	5900	126	13	50-141/18
75-01-4	Vinyl chloride	ND		4680	3870	83	4680	3890	83	1	48-151/18
	m,p-Xylene	ND		9360	8010	86	9360	7960	85	1	51-135/18
95-47-6	o-Xylene	ND		4680	4200	90	4680	4080	87	3	52-137/18
1330-20-7	Xylene (total)	47.3	J	14000	12200	87	14000	12000	85	2	50-138/17

CAS No.	Surrogate Recoveries	MS	MSD	JD56615-1	Limits
1868-53-7	Dibromofluoromethane	112%	114%	106%	80-124%
17060-07-0	1,2-Dichloroethane-D4	95%	96%	95%	75-133%
2037-26-5	Toluene-D8	95%	95%	95%	79-125%
460-00-4	4-Bromofluorobenzene	99%	101%	97%	58-148%

(a) Confirmation run.
(b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD57004-3MS	3D185250.D	1	12/13/22	PS	n/a	n/a	V3D7785
JD57004-3MSD	3D185251.D	1	12/13/22	PS	n/a	n/a	V3D7785
JD57004-3	3D185249.D	1	12/13/22	PS	n/a	n/a	V3D7785

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-6, JD56558-9, JD56558-12

CAS No.	Compound	JD57004-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		22800	21500	94	22800	25100	110	15	10-170/24
71-43-2	Benzene	ND		5700	5530	97	5700	5050	89	9	61-132/13
74-97-5	Bromochloromethane	ND		5700	6310	111	5700	6250	110	1	68-126/13
75-27-4	Bromodichloromethane	ND		5700	5610	99	5700	5250	92	7	65-129/12
75-25-2	Bromoform	ND		5700	5150	90	5700	4940	87	4	52-136/16
74-83-9	Bromomethane	ND		5700	4090	72	5700	4240	74	4	23-158/29
78-93-3	2-Butanone (MEK)	ND		22800	23100	101	22800	25100	110	8	45-142/14
75-15-0	Carbon disulfide	ND		5700	5910	104	5700	5630	99	5	50-140/18
56-23-5	Carbon tetrachloride	ND		5700	6130	108	5700	5670	100	8	54-139/21
108-90-7	Chlorobenzene	ND		5700	5510	97	5700	5020	88	9	57-127/15
75-00-3	Chloroethane	ND		5700	12300	216* [a]	5700	11300	198* [a]	8	30-157/29
67-66-3	Chloroform	ND		5700	5710	100	5700	5340	94	7	59-127/16
74-87-3	Chloromethane	ND		5700	5370	94	5700	5010	88	7	49-145/21
110-82-7	Cyclohexane	ND		5700	5850	103	5700	5290	93	10	39-147/21
96-12-8	1,2-Dibromo-3-chloropropane	ND		5700	5520	97	5700	5410	95	2	35-140/17
124-48-1	Dibromochloromethane	ND		5700	5620	99	5700	5410	95	4	63-129/12
106-93-4	1,2-Dibromoethane	ND		5700	5460	96	5700	5190	91	5	45-141/12
95-50-1	1,2-Dichlorobenzene	ND		5700	5480	96	5700	5280	93	4	38-136/19
541-73-1	1,3-Dichlorobenzene	ND		5700	5250	92	5700	4900	86	7	37-135/19
106-46-7	1,4-Dichlorobenzene	ND		5700	5370	94	5700	5170	91	4	36-134/19
75-71-8	Dichlorodifluoromethane	ND		5700	5340	94	5700	5000	88	7	33-152/17
75-34-3	1,1-Dichloroethane	ND		5700	5460	96	5700	5230	92	4	68-131/13
107-06-2	1,2-Dichloroethane	ND		5700	5330	94	5700	5160	91	3	64-119/12
75-35-4	1,1-Dichloroethene	ND		5700	6010	106	5700	5450	96	10	60-133/15
156-59-2	cis-1,2-Dichloroethene	ND		5700	5700	100	5700	5270	93	8	58-133/15
156-60-5	trans-1,2-Dichloroethene	ND		5700	5980	105	5700	5470	96	9	62-130/16
78-87-5	1,2-Dichloropropane	ND		5700	5120	90	5700	4830	85	6	70-127/12
10061-01-5	cis-1,3-Dichloropropene	ND		5700	5450	96	5700	5290	93	3	64-126/16
10061-02-6	trans-1,3-Dichloropropene	ND		5700	5340	94	5700	5190	91	3	61-127/13
100-41-4	Ethylbenzene	ND		5700	5230	92	5700	4740	83	10	51-133/19
76-13-1	Freon 113	ND		5700	5740	101	5700	5570	98	3	46-138/17
591-78-6	2-Hexanone	ND		22800	19100	84	22800	19700	86	3	45-144/16
98-82-8	Isopropylbenzene	ND		5700	5100	90	5700	4680	82	9	44-142/21
79-20-9	Methyl Acetate	ND		5700	6480	114	5700	6700	118	3	14-192/21
108-87-2	Methylcyclohexane	ND		5700	5110	90	5700	4600	81	11	27-149/23
1634-04-4	Methyl Tert Butyl Ether	ND		5700	5980	105	5700	6080	107	2	62-125/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD57004-3MS	3D185250.D	1	12/13/22	PS	n/a	n/a	V3D7785
JD57004-3MSD	3D185251.D	1	12/13/22	PS	n/a	n/a	V3D7785
JD57004-3	3D185249.D	1	12/13/22	PS	n/a	n/a	V3D7785

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-6, JD56558-9, JD56558-12

CAS No.	Compound	JD57004-3 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		22800	20700	91	22800	19700	86	5	50-138/14
75-09-2	Methylene chloride	ND		5700	5910	104	5700	5770	101	2	63-127/15
100-42-5	Styrene	ND		5700	5610	99	5700	5360	94	5	48-143/18
79-34-5	1,1,2,2-Tetrachloroethane	ND		5700	5240	92	5700	4980	87	5	44-135/20
127-18-4	Tetrachloroethene	ND		5700	5160	91	5700	4730	83	9	38-146/17
108-88-3	Toluene	ND		5700	5100	90	5700	4570	80	11	56-135/15
87-61-6	1,2,3-Trichlorobenzene	ND		5700	5460	96	5700	5200	91	5	10-153/27
120-82-1	1,2,4-Trichlorobenzene	ND		5700	5500	97	5700	5280	93	4	10-158/27
71-55-6	1,1,1-Trichloroethane	ND		5700	5760	101	5700	5420	95	6	61-134/14
79-00-5	1,1,2-Trichloroethane	ND		5700	5120	90	5700	5110	90	0	62-133/17
79-01-6	Trichloroethene	ND		5700	6020	106	5700	5350	94	12	52-144/15
75-69-4	Trichlorofluoromethane	ND		5700	7280	128	5700	6700	118	8	50-141/18
75-01-4	Vinyl chloride	ND		5700	5960	105	5700	5370	94	10	48-151/18
	m,p-Xylene	ND		11400	10300	90	11400	9600	84	7	51-135/18
95-47-6	o-Xylene	ND		5700	5340	94	5700	4950	87	8	52-137/18
1330-20-7	Xylene (total)	ND		17100	15600	91	17100	14500	85	7	50-138/17

CAS No.	Surrogate Recoveries	MS	MSD	JD57004-3	Limits
1868-53-7	Dibromofluoromethane	109%	104%	96%	80-124%
17060-07-0	1,2-Dichloroethane-D4	91%	90%	90%	75-133%
2037-26-5	Toluene-D8	91%	89%	92%	79-125%
460-00-4	4-Bromofluorobenzene	95%	92%	95%	58-148%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD57010-2MS [a]	L350853.D	1	12/14/22	TS	n/a	n/a	VL10625
JD57010-2MSD [a]	L350854.D	1	12/14/22	TS	n/a	n/a	VL10625
JD57010-2 [a]	L350842.D	1	12/14/22	TS	n/a	n/a	VL10625

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-11A

CAS No.	Compound	JD57010-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		200	129	65	200	183	92	35* [b]	22-134/19
71-43-2	Benzene	ND		50	45.4	91	50	49.3	99	8	49-137/12
74-97-5	Bromochloromethane	ND		50	54.4	109	50	58.1	116	7	78-122/12
75-27-4	Bromodichloromethane	ND		50	50.0	100	50	54.1	108	8	76-121/12
75-25-2	Bromoform	ND		50	50.9	102	50	55.2	110	8	70-133/13
74-83-9	Bromomethane	ND		50	47.4	95	50	57.0	114	18	27-164/38
78-93-3	2-Butanone (MEK)	ND		200	184	92	200	219	110	17	52-137/17
75-15-0	Carbon disulfide	ND		50	46.6	93	50	49.5	99	6	54-136/16
56-23-5	Carbon tetrachloride	ND		50	51.8	104	50	55.5	111	7	70-132/13
108-90-7	Chlorobenzene	ND		50	48.8	98	50	53.8	108	10	68-123/12
75-00-3	Chloroethane	ND		50	51.7	103	50	54.3	109	5	48-152/17
67-66-3	Chloroform	ND		50	46.8	94	50	49.5	99	6	68-120/13
74-87-3	Chloromethane	ND		50	50.6	101	50	53.7	107	6	35-156/18
110-82-7	Cyclohexane	ND		50	49.3	99	50	51.4	103	4	53-146/14
96-12-8	1,2-Dibromo-3-chloropropane	ND		50	56.2	112	50	62.5	125	11	63-134/16
124-48-1	Dibromochloromethane	ND		50	48.9	98	50	52.9	106	8	75-122/12
106-93-4	1,2-Dibromoethane	ND		50	49.5	99	50	53.8	108	8	63-134/12
95-50-1	1,2-Dichlorobenzene	ND		50	50.9	102	50	55.2	110	8	74-119/12
541-73-1	1,3-Dichlorobenzene	ND		50	49.8	100	50	54.1	108	8	75-117/12
106-46-7	1,4-Dichlorobenzene	ND		50	49.4	99	50	53.7	107	8	72-117/12
75-71-8	Dichlorodifluoromethane	ND		50	61.8	124	50	65.6	131	6	34-163/16
75-34-3	1,1-Dichloroethane	0.76	J	50	49.4	97	50	51.0	100	3	68-129/13
107-06-2	1,2-Dichloroethane	ND		50	47.5	95	50	50.6	101	6	66-120/13
75-35-4	1,1-Dichloroethene	0.89	J	50	53.2	105	50	57.4	113	8	59-133/15
156-59-2	cis-1,2-Dichloroethene	ND		50	48.6	97	50	52.0	104	7	52-140/12
156-60-5	trans-1,2-Dichloroethene	ND		50	50.0	100	50	53.7	107	7	70-125/13
78-87-5	1,2-Dichloropropane	ND		50	47.5	95	50	51.3	103	8	73-124/12
10061-01-5	cis-1,3-Dichloropropene	ND		50	48.8	98	50	52.9	106	8	75-125/13
10061-02-6	trans-1,3-Dichloropropene	ND		50	47.8	96	50	51.4	103	7	75-122/12
100-41-4	Ethylbenzene	ND		50	43.8	88	50	47.5	95	8	37-144/12
76-13-1	Freon 113	ND		50	54.2	108	50	57.7	115	6	61-142/14
591-78-6	2-Hexanone	ND		200	185	93	200	204	102	10	56-132/16
98-82-8	Isopropylbenzene	ND		50	47.1	94	50	51.5	103	9	71-126/13
79-20-9	Methyl Acetate	ND		50	51.6	103	50	54.2	108	5	51-139/18
108-87-2	Methylcyclohexane	ND		50	45.8	92	50	50.3	101	9	59-137/16
1634-04-4	Methyl Tert Butyl Ether	ND		50	48.4	97	50	51.4	103	6	66-124/12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD57010-2MS [a]	L350853.D	1	12/14/22	TS	n/a	n/a	VL10625
JD57010-2MSD [a]	L350854.D	1	12/14/22	TS	n/a	n/a	VL10625
JD57010-2 [a]	L350842.D	1	12/14/22	TS	n/a	n/a	VL10625

The QC reported here applies to the following samples: **Method:** SW846 8260D

JD56558-11A

CAS No.	Compound	JD57010-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		200	202	101	200	214	107	6	65-135/14
75-09-2	Methylene chloride	ND		50	48.4	97	50	51.6	103	6	66-125/14
100-42-5	Styrene	ND		50	45.3	91	50	50.2	100	10	71-133/12
79-34-5	1,1,2,2-Tetrachloroethane	ND		50	53.0	106	50	56.2	112	6	68-127/14
127-18-4	Tetrachloroethene	ND		50	49.0	98	50	53.9	108	10	58-132/13
108-88-3	Toluene	ND		50	46.5	93	50	50.9	102	9	46-139/12
87-61-6	1,2,3-Trichlorobenzene	ND		50	53.3	107	50	60.3	121	12	57-136/17
120-82-1	1,2,4-Trichlorobenzene	ND		50	51.9	104	50	58.6	117	12	61-137/16
71-55-6	1,1,1-Trichloroethane	5.4		50	58.2	106	50	61.0	111	5	67-132/13
79-00-5	1,1,2-Trichloroethane	ND		50	48.1	96	50	52.4	105	9	75-120/12
79-01-6	Trichloroethene	1.1		50	51.1	100	50	54.7	107	7	56-136/12
75-69-4	Trichlorofluoromethane	ND		50	56.3	113	50	58.5	117	4	61-145/16
75-01-4	Vinyl chloride	ND		50	53.6	107	50	56.9	114	6	41-156/16
	m,p-Xylene	ND		100	89.4	89	100	97.7	98	9	32-151/12
95-47-6	o-Xylene	ND		50	47.3	95	50	51.6	103	9	50-139/12
1330-20-7	Xylene (total)	ND		150	137	91	150	149	99	8	38-147/12

CAS No.	Surrogate Recoveries	MS	MSD	JD57010-2	Limits
1868-53-7	Dibromofluoromethane	107%	106%	105%	80-120%
17060-07-0	1,2-Dichloroethane-D4	100%	100%	110%	80-120%
2037-26-5	Toluene-D8	92%	92%	103%	80-120%
460-00-4	4-Bromofluorobenzene	98%	98%	96%	82-114%

(a) (pH= 6) Sample is not acid preserved per method/client criteria. Sample analyzed within 7 days holding time.
(b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: V2F14-BFB
Lab File ID: 2F0342.D
Instrument ID: GCMS2F
Injection Date: 11/19/22
Injection Time: 23:53

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	25035	22.3		Pass
75	30.0 - 60.0% of mass 95	55840	49.7		Pass
95	Base peak, 100% relative abundance	112435	100.0		Pass
96	5.0 - 9.0% of mass 95	6968	6.20		Pass
173	Less than 2.0% of mass 174	459	0.41	(0.49) [a]	Pass
174	50.0 - 120.0% of mass 95	94611	84.1		Pass
175	5.0 - 9.0% of mass 174	7368	6.55	(7.79) [a]	Pass
176	95.0 - 101.0% of mass 174	91683	81.5	(96.9) [a]	Pass
177	5.0 - 9.0% of mass 176	5724	5.09	(6.24) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2F14-IC14	2F0344.D	11/20/22	00:57	01:04	Initial cal 0.2
V2F14-IC14	2F0346.D	11/20/22	01:35	01:42	Initial cal 0.5
V2F14-IC14	2F0348.D	11/20/22	02:14	02:21	Initial cal 1
V2F14-IC14	2F0350.D	11/20/22	02:52	02:59	Initial cal 2
V2F14-IC14	2F0352.D	11/20/22	03:31	03:38	Initial cal 4
V2F14-IC14	2F0354.D	11/20/22	04:09	04:16	Initial cal 8
V2F14-IC14	2F0356.D	11/20/22	04:47	04:54	Initial cal 20
V2F14-ICC14	2F0358.D	11/20/22	05:26	05:33	Initial cal 50
V2F14-IC14	2F0360.D	11/20/22	06:04	06:11	Initial cal 100
V2F14-IC14	2F0362.D	11/20/22	06:42	06:49	Initial cal 200
V2F14-ICV14	2F0368.D	11/20/22	08:36	08:43	Initial cal verification 50
V2F14-ICV14	2F0370.D	11/20/22	09:14	09:21	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: V2F28-BFB
Lab File ID: 2F0780.D
Instrument ID: GCMS2F
Injection Date: 12/09/22
Injection Time: 12:19

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	26051	24.8		Pass
75	30.0 - 60.0% of mass 95	54592	51.9		Pass
95	Base peak, 100% relative abundance	105112	100.0		Pass
96	5.0 - 9.0% of mass 95	7243	6.89		Pass
173	Less than 2.0% of mass 174	545	0.52	(0.63) [a]	Pass
174	50.0 - 120.0% of mass 95	86747	82.5		Pass
175	5.0 - 9.0% of mass 174	7075	6.73	(8.16) [a]	Pass
176	95.0 - 101.0% of mass 174	83021	79.0	(95.7) [a]	Pass
177	5.0 - 9.0% of mass 176	5831	5.55	(7.02) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V2F28-CC14	2F0780.D	12/09/22	12:19	00:00	Continuing cal 20
V2F28-BS	2F0782.D	12/09/22	13:39	01:20	Blank Spike
ZZZZZZ	2F0784A.D	12/09/22	14:29	02:10	(unrelated sample)
V2F28-MB	2F0784.D	12/09/22	14:29	02:10	Method Blank
ZZZZZZ	2F0785.D	12/09/22	14:55	02:36	(unrelated sample)
ZZZZZZ	2F0786.D	12/09/22	15:20	03:01	(unrelated sample)
ZZZZZZ	2F0787.D	12/09/22	15:45	03:26	(unrelated sample)
ZZZZZZ	2F0788.D	12/09/22	16:11	03:52	(unrelated sample)
ZZZZZZ	2F0789.D	12/09/22	16:36	04:17	(unrelated sample)
ZZZZZZ	2F0790.D	12/09/22	17:02	04:43	(unrelated sample)
JD56558-1MS	2F0791.D	12/09/22	17:27	05:08	Matrix Spike
JD56558-1MSD	2F0792.D	12/09/22	17:52	05:33	Matrix Spike Duplicate
ZZZZZZ	2F0793.D	12/09/22	18:18	05:59	(unrelated sample)
ZZZZZZ	2F0794.D	12/09/22	18:43	06:24	(unrelated sample)
JD56558-1	2F0795.D	12/09/22	19:09	06:50	DRUM-01
ZZZZZZ	2F0796.D	12/09/22	19:34	07:15	(unrelated sample)
ZZZZZZ	2F0799.D	12/09/22	20:50	08:31	(unrelated sample)
ZZZZZZ	2F0800.D	12/09/22	21:16	08:57	(unrelated sample)
ZZZZZZ	2F0801.D	12/09/22	21:41	09:22	(unrelated sample)
ZZZZZZ	2F0802.D	12/09/22	22:06	09:47	(unrelated sample)
ZZZZZZ	2F0803.D	12/09/22	22:32	10:13	(unrelated sample)
ZZZZZZ	2F0804.D	12/09/22	22:57	10:38	(unrelated sample)
ZZZZZZ	2F0805.D	12/09/22	23:22	11:03	(unrelated sample)
JD56558-3	2F0807.D	12/10/22	00:13	11:54	DRUM-03

Instrument Performance Check (BFB)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: V3D7767-BFB
Lab File ID: 3D184804.D
Instrument ID: GCMS3D
Injection Date: 11/29/22
Injection Time: 19:49

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	33693	19.9		Pass
75	30.0 - 60.0% of mass 95	90824	53.6		Pass
95	Base peak, 100% relative abundance	169301	100.0		Pass
96	5.0 - 9.0% of mass 95	11073	6.54		Pass
173	Less than 2.0% of mass 174	1440	0.85	(0.80) [a]	Pass
174	50.0 - 120.0% of mass 95	180906	106.9		Pass
175	5.0 - 9.0% of mass 174	12873	7.60	(7.12) [a]	Pass
176	95.0 - 101.0% of mass 174	176917	104.5	(97.8) [a]	Pass
177	5.0 - 9.0% of mass 176	11748	6.94	(6.64) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D7767-IC7767	3D184805.D	11/29/22	20:20	00:31	Initial cal 0.2
V3D7767-IC7767	3D184806.D	11/29/22	20:43	00:54	Initial cal 0.5
V3D7767-IC7767	3D184807.D	11/29/22	21:07	01:18	Initial cal 1
V3D7767-IC7767	3D184808.D	11/29/22	21:30	01:41	Initial cal 2
V3D7767-IC7767	3D184809.D	11/29/22	21:54	02:05	Initial cal 4
V3D7767-IC7767	3D184810.D	11/29/22	22:17	02:28	Initial cal 8
V3D7767-IC7767	3D184811.D	11/29/22	22:40	02:51	Initial cal 20
V3D7767-ICC7767	3D184812.D	11/29/22	23:04	03:15	Initial cal 50
V3D7767-IC7767	3D184813.D	11/29/22	23:27	03:38	Initial cal 100
V3D7767-IC7767	3D184814.D	11/29/22	23:51	04:02	Initial cal 200
V3D7767-ICV7767	3D184817.D	11/30/22	01:01	05:12	Initial cal verification 50
V3D7767-ICV7767	3D184818.D	11/30/22	01:24	05:35	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: V3D7776-BFB
Lab File ID: 3D185068.D
Instrument ID: GCMS3D
Injection Date: 12/07/22
Injection Time: 07:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	29211	17.6		Pass
75	30.0 - 60.0% of mass 95	84570	50.9		Pass
95	Base peak, 100% relative abundance	166208	100.0		Pass
96	5.0 - 9.0% of mass 95	10610	6.38		Pass
173	Less than 2.0% of mass 174	1990	1.20	(1.12) [a]	Pass
174	50.0 - 120.0% of mass 95	178332	107.3		Pass
175	5.0 - 9.0% of mass 174	13075	7.87	(7.33) [a]	Pass
176	95.0 - 101.0% of mass 174	175616	105.7	(98.5) [a]	Pass
177	5.0 - 9.0% of mass 176	12000	7.22	(6.83) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D7776-CC7767	3D185068.D	12/07/22	07:48	00:00	Continuing cal 20
V3D7776-BS	3D185070.D	12/07/22	08:50	01:02	Blank Spike
V3D7776-MB	3D185072.D	12/07/22	09:37	01:49	Method Blank
ZZZZZZ	3D185072.D	12/07/22	09:37	01:49	(unrelated sample)
ZZZZZZ	3D185073.D	12/07/22	10:01	02:13	(unrelated sample)
ZZZZZZ	3D185074.D	12/07/22	10:24	02:36	(unrelated sample)
JD56475-1	3D185077.D	12/07/22	11:35	03:47	(used for QC only; not part of job JD56558)
JD56475-1MS	3D185078.D	12/07/22	11:58	04:10	Matrix Spike
JD56475-1MSD	3D185079.D	12/07/22	12:22	04:34	Matrix Spike Duplicate
ZZZZZZ	3D185082.D	12/07/22	13:32	05:44	(unrelated sample)
JD56558-3	3D185085.D	12/07/22	14:42	06:54	DRUM-03
JD56558-4	3D185086.D	12/07/22	15:06	07:18	DRUM-04
JD56558-5	3D185087.D	12/07/22	15:29	07:41	DRUM-05
ZZZZZZ	3D185095.D	12/07/22	18:37	10:49	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: V3D7780-BFB
Lab File ID: 3D185114.D
Instrument ID: GCMS3D
Injection Date: 12/08/22
Injection Time: 11:12

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	27904	19.4		Pass
75	30.0 - 60.0% of mass 95	76662	53.2		Pass
95	Base peak, 100% relative abundance	144176	100.0		Pass
96	5.0 - 9.0% of mass 95	9450	6.55		Pass
173	Less than 2.0% of mass 174	2750	1.91	(1.76) [a]	Pass
174	50.0 - 120.0% of mass 95	156605	108.6		Pass
175	5.0 - 9.0% of mass 174	12451	8.64	(7.95) [a]	Pass
176	95.0 - 101.0% of mass 174	152443	105.7	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	9988	6.93	(6.55) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D7780-CC7767	3D185114.D	12/08/22	11:12	00:00	Continuing cal 20
V3D7780-BS	3D185118.D	12/08/22	13:13	02:01	Blank Spike
ZZZZZZ	3D185120A.D	12/08/22	14:00	02:48	(unrelated sample)
V3D7780-MB	3D185120.D	12/08/22	14:00	02:48	Method Blank
ZZZZZZ	3D185121.D	12/08/22	14:23	03:11	(unrelated sample)
ZZZZZZ	3D185122.D	12/08/22	14:47	03:35	(unrelated sample)
ZZZZZZ	3D185123.D	12/08/22	15:10	03:58	(unrelated sample)
ZZZZZZ	3D185125.D	12/08/22	15:58	04:46	(unrelated sample)
JD56536-1	3D185126.D	12/08/22	16:21	05:09	(used for QC only; not part of job JD56558)
JD56536-1MS	3D185127.D	12/08/22	16:44	05:32	Matrix Spike
JD56536-1MSD	3D185128.D	12/08/22	17:08	05:56	Matrix Spike Duplicate
ZZZZZZ	3D185129.D	12/08/22	17:31	06:19	(unrelated sample)
ZZZZZZ	3D185130.D	12/08/22	17:55	06:43	(unrelated sample)
JD56558-4	3D185131.D	12/08/22	18:18	07:06	DRUM-04
ZZZZZZ	3D185132.D	12/08/22	18:42	07:30	(unrelated sample)
ZZZZZZ	3D185133.D	12/08/22	19:05	07:53	(unrelated sample)
ZZZZZZ	3D185134.D	12/08/22	19:29	08:17	(unrelated sample)
V3D7781-BS	3D185149.D	12/09/22	08:46	21:34	Blank Spike

Instrument Performance Check (BFB)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: V3D7783-BFB
Lab File ID: 3D185183.D
Instrument ID: GCMS3D
Injection Date: 12/12/22
Injection Time: 11:11

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	31072	18.4		Pass
75	30.0 - 60.0% of mass 95	84219	50.0		Pass
95	Base peak, 100% relative abundance	168512	100.0		Pass
96	5.0 - 9.0% of mass 95	10730	6.37		Pass
173	Less than 2.0% of mass 174	2304	1.37	(1.28) [a]	Pass
174	50.0 - 120.0% of mass 95	180306	107.0		Pass
175	5.0 - 9.0% of mass 174	15037	8.92	(8.34) [a]	Pass
176	95.0 - 101.0% of mass 174	176960	105.0	(98.1) [a]	Pass
177	5.0 - 9.0% of mass 176	11033	6.55	(6.23) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D7783-CC7767	3D185183.D	12/12/22	11:11	00:00	Continuing cal 20
V3D7783-BS	3D185185.D	12/12/22	12:17	01:06	Blank Spike
ZZZZZZ	3D185187.D	12/12/22	13:04	01:53	(unrelated sample)
V3D7783-MB	3D185187.D	12/12/22	13:04	01:53	Method Blank
ZZZZZZ	3D185188.D	12/12/22	13:27	02:16	(unrelated sample)
JD56615-1	3D185189.D	12/12/22	13:51	02:40	(used for QC only; not part of job JD56558)
ZZZZZZ	3D185191.D	12/12/22	14:38	03:27	(unrelated sample)
ZZZZZZ	3D185192.D	12/12/22	15:01	03:50	(unrelated sample)
ZZZZZZ	3D185193.D	12/12/22	15:25	04:14	(unrelated sample)
ZZZZZZ	3D185194.D	12/12/22	15:48	04:37	(unrelated sample)
ZZZZZZ	3D185195.D	12/12/22	16:12	05:01	(unrelated sample)
ZZZZZZ	3D185196.D	12/12/22	16:35	05:24	(unrelated sample)
ZZZZZZ	3D185197.D	12/12/22	16:58	05:47	(unrelated sample)
ZZZZZZ	3D185198.D	12/12/22	17:22	06:11	(unrelated sample)
JD56615-1MS	3D185199.D	12/12/22	17:45	06:34	Matrix Spike
JD56615-1MSD	3D185200.D	12/12/22	18:09	06:58	Matrix Spike Duplicate
JD56558-2	3D185202.D	12/12/22	18:56	07:45	DRUM-02
ZZZZZZ	3D185203.D	12/12/22	19:19	08:08	(unrelated sample)
ZZZZZZ	3D185204.D	12/12/22	19:43	08:32	(unrelated sample)
ZZZZZZ	3D185205.D	12/12/22	20:06	08:55	(unrelated sample)
JD56558-7	3D185206.D	12/12/22	20:30	09:19	DRUM-07
JD56558-5	3D185207.D	12/12/22	20:53	09:42	DRUM-05
JD56558-2	3D185208.D	12/12/22	21:17	10:06	DRUM-02
JD56558-10	3D185210.D	12/12/22	22:03	10:52	DRUM-10

Instrument Performance Check (BFB)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample:	V3D7783-BFB	**Injection Date:**	12/12/22
Lab File ID:	3D185183.D	**Injection Time:**	11:11
Instrument ID:	GCMS3D		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD56558-8	3D185211.D	12/12/22	22:27	11:16	DRUM-08

Instrument Performance Check (BFB)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: V3D7785-BFB
Lab File ID: 3D185242.D
Instrument ID: GCMS3D
Injection Date: 12/13/22
Injection Time: 10:45

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	27556	18.5		Pass
75	30.0 - 60.0% of mass 95	78669	52.7		Pass
95	Base peak, 100% relative abundance	149286	100.0		Pass
96	5.0 - 9.0% of mass 95	9945	6.66		Pass
173	Less than 2.0% of mass 174	2151	1.44	(1.33) [a]	Pass
174	50.0 - 120.0% of mass 95	161523	108.2		Pass
175	5.0 - 9.0% of mass 174	13908	9.32	(8.61) [a]	Pass
176	95.0 - 101.0% of mass 174	154741	103.7	(95.8) [a]	Pass
177	5.0 - 9.0% of mass 176	9861	6.61	(6.37) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V3D7785-CC7767	3D185242.D	12/13/22	10:45	00:00	Continuing cal 50
V3D7785-BS	3D185243.D	12/13/22	11:20	00:35	Blank Spike
ZZZZZZ	3D185245A.D	12/13/22	12:26	01:41	(unrelated sample)
V3D7785-MB	3D185245.D	12/13/22	12:26	01:41	Method Blank
ZZZZZZ	3D185246.D	12/13/22	12:49	02:04	(unrelated sample)
ZZZZZZ	3D185247.D	12/13/22	13:13	02:28	(unrelated sample)
ZZZZZZ	3D185248.D	12/13/22	13:36	02:51	(unrelated sample)
JD57004-3	3D185249.D	12/13/22	14:00	03:15	(used for QC only; not part of job JD56558)
JD57004-3MS	3D185250.D	12/13/22	14:23	03:38	Matrix Spike
JD57004-3MSD	3D185251.D	12/13/22	14:47	04:02	Matrix Spike Duplicate
ZZZZZZ	3D185253.D	12/13/22	15:34	04:49	(unrelated sample)
JD56558-6	3D185255.D	12/13/22	16:20	05:35	DRUM-06
JD56558-9	3D185256.D	12/13/22	16:44	05:59	DRUM-09
JD56558-12	3D185257.D	12/13/22	17:08	06:23	DRUM-12
JD56558-6	3D185259.D	12/13/22	17:55	07:10	DRUM-06

Instrument Performance Check (BFB)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: VL10602-BFB
Lab File ID: L350201.D
Instrument ID: GCMSL
Injection Date: 12/01/22
Injection Time: 00:17

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	19216	20.0		Pass
75	30.0 - 60.0% of mass 95	46347	48.3		Pass
95	Base peak, 100% relative abundance	96032	100.0		Pass
96	5.0 - 9.0% of mass 95	6524	6.79		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	69664	72.5		Pass
175	5.0 - 9.0% of mass 174	5163	5.38	(7.41) [a]	Pass
176	95.0 - 101.0% of mass 174	67269	70.0	(96.6) [a]	Pass
177	5.0 - 9.0% of mass 176	4271	4.45	(6.35) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL10602-IC10602	L350202.D	12/01/22	00:47	00:30	Initial cal 0.2
VL10602-IC10602	L350203.D	12/01/22	01:10	00:53	Initial cal 0.5
VL10602-IC10602	L350204.D	12/01/22	01:33	01:16	Initial cal 1
VL10602-IC10602	L350205.D	12/01/22	01:56	01:39	Initial cal 2
VL10602-IC10602	L350206.D	12/01/22	02:19	02:02	Initial cal 4
VL10602-IC10602	L350207.D	12/01/22	02:42	02:25	Initial cal 8
VL10602-IC10602	L350208.D	12/01/22	03:05	02:48	Initial cal 20
VL10602-ICC10602	L350209.D	12/01/22	03:28	03:11	Initial cal 50
VL10602-IC10602	L350210.D	12/01/22	03:51	03:34	Initial cal 100
VL10602-IC10602	L350211.D	12/01/22	04:14	03:57	Initial cal 200
VL10602-ICV10602	L350214.D	12/01/22	05:23	05:06	Initial cal verification 50
VL10602-ICV10602	L350215.D	12/01/22	05:46	05:29	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: VL10625-BFB
Lab File ID: L350835.D
Instrument ID: GCMSL
Injection Date: 12/14/22
Injection Time: 08:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	18747	20.4		Pass
75	30.0 - 60.0% of mass 95	46365	50.5		Pass
95	Base peak, 100% relative abundance	91901	100.0		Pass
96	5.0 - 9.0% of mass 95	6617	7.20		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 120.0% of mass 95	70395	76.6		Pass
175	5.0 - 9.0% of mass 174	5295	5.76	(7.52) [a]	Pass
176	95.0 - 101.0% of mass 174	69613	75.7	(98.9) [a]	Pass
177	5.0 - 9.0% of mass 176	4436	4.83	(6.37) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VL10625-CC10602	L350835.D	12/14/22	08:48	00:00	Continuing cal 20
VL10625-BS	L350837.D	12/14/22	09:43	00:55	Blank Spike
VL10625-MB	L350839.D	12/14/22	10:29	01:41	Method Blank
JD56558-11A	L350840.D	12/14/22	10:58	02:10	DRUM-11
ZZZZZZ	L350841.D	12/14/22	11:26	02:38	(unrelated sample)
JD57010-2	L350842.D	12/14/22	11:49	03:01	(used for QC only; not part of job JD56558)
ZZZZZZ	L350843.D	12/14/22	12:12	03:24	(unrelated sample)
ZZZZZZ	L350844.D	12/14/22	12:35	03:47	(unrelated sample)
ZZZZZZ	L350845.D	12/14/22	12:58	04:10	(unrelated sample)
ZZZZZZ	L350846.D	12/14/22	13:21	04:33	(unrelated sample)
ZZZZZZ	L350847.D	12/14/22	13:44	04:56	(unrelated sample)
ZZZZZZ	L350849.D	12/14/22	14:31	05:43	(unrelated sample)
ZZZZZZ	L350850.D	12/14/22	14:54	06:06	(unrelated sample)
ZZZZZZ	L350851.D	12/14/22	15:17	06:29	(unrelated sample)
ZZZZZZ	L350852.D	12/14/22	15:40	06:52	(unrelated sample)
JD57010-2MS	L350853.D	12/14/22	16:03	07:15	Matrix Spike
JD57010-2MSD	L350854.D	12/14/22	16:26	07:38	Matrix Spike Duplicate
ZZZZZZ	L350855.D	12/14/22	16:49	08:01	(unrelated sample)
ZZZZZZ	L350856.D	12/14/22	17:13	08:25	(unrelated sample)
ZZZZZZ	L350857.D	12/14/22	17:36	08:48	(unrelated sample)
ZZZZZZ	L350858.D	12/14/22	17:59	09:11	(unrelated sample)
ZZZZZZ	L350859.D	12/14/22	18:22	09:34	(unrelated sample)
ZZZZZZ	L350860.D	12/14/22	18:45	09:57	(unrelated sample)
ZZZZZZ	L350861.D	12/14/22	19:08	10:20	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample:	VL10625-BFB	**Injection Date:**	12/14/22
Lab File ID:	L350835.D	**Injection Time:**	08:48
Instrument ID:	GCMSL		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	L350862.D	12/14/22	19:31	10:43	(unrelated sample)
ZZZZZZ	L350863.D	12/14/22	19:54	11:06	(unrelated sample)
ZZZZZZ	L350864.D	12/14/22	20:17	11:29	(unrelated sample)
ZZZZZZ	L350865.D	12/14/22	20:40	11:52	(unrelated sample)

Surrogate Recovery Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Method: SW846 8260D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD56558-11A	L350840.D	103	106	104	96
JD57010-2MS	L350853.D	107	100	92	98
JD57010-2MSD	L350854.D	106	100	92	98
VL10625-BS	L350837.D	105	102	94	97
VL10625-MB	L350839.D	103	109	103	97

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-120%
S2 = 1,2-Dichloroethane-D4	80-120%
S3 = Toluene-D8	80-120%
S4 = 4-Bromofluorobenzene	82-114%

Surrogate Recovery Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Method: SW846 8260D **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD56558-1	2F0795.D	90	111	98	105
JD56558-2	3D185202.D	106	94	96	99
JD56558-2	3D185208.D	108	100	101	102
JD56558-3	2F0807.D	86	101	100	114
JD56558-3	3D185085.D	101	92	95	100
JD56558-4	3D185131.D	105	101	98	110
JD56558-4	3D185086.D	97	92	92	94
JD56558-5	3D185207.D	107	95	99	107
JD56558-5	3D185087.D	99	95	99	94
JD56558-6	3D185259.D	103	89	97	104
JD56558-6	3D185255.D	98	95	98	93
JD56558-7	3D185206.D	107	95	96	88
JD56558-8	3D185211.D	106	100	97	105
JD56558-9	3D185256.D	100	91	99	98
JD56558-10	3D185210.D	106	95	95	98
JD56558-12	3D185257.D	100	95	94	104
JD56475-1MS	3D185078.D	108	94	97	95
JD56475-1MSD	3D185079.D	105	95	95	95
JD56536-1MS	3D185127.D	109	97	91	108
JD56536-1MSD	3D185128.D	108	99	91	108
JD56558-1MS	2F0791.D	90	105	99	105
JD56558-1MSD	2F0792.D	89	103	101	104
JD56615-1MS	3D185199.D	112	95	95	99
JD56615-1MSD	3D185200.D	114	96	95	101
JD57004-3MS	3D185250.D	109	91	91	95
JD57004-3MSD	3D185251.D	104	90	89	92
V2F28-BS	2F0782.D	89	98	99	95
V2F28-MB	2F0784.D	92	102	99	96
V3D7776-BS	3D185070.D	104	90	94	98
V3D7776-MB	3D185072.D	99	97	96	95
V3D7780-BS	3D185118.D	109	91	93	84
V3D7780-MB	3D185120.D	104	95	95	96
V3D7783-BS	3D185185.D	111	90	92	96
V3D7783-MB	3D185187.D	107	94	96	94
V3D7785-BS	3D185243.D	104	91	90	90
V3D7785-MB	3D185245.D	101	90	94	93

Surrogate Compounds	Recovery Limits

Surrogate Recovery Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Method: SW846 8260D **Matrix:** SO

Samples and QC shown here apply to the above method

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	80-124%
S2 = 1,2-Dichloroethane-D4	75-133%
S3 = Toluene-D8	79-125%
S4 = 4-Bromofluorobenzene	58-148%

MS Semi-volatiles

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QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43515-MB1	M185620.D	1	12/16/22	CS	12/07/22	OP43515	EM8027

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	20000	4900	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	50000	6100	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	50000	8500	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	50000	18000	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	50000	38000	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	50000	11000	ug/kg	
95-48-7	2-Methylphenol	ND	20000	6400	ug/kg	
	3&4-Methylphenol	ND	20000	8200	ug/kg	
88-75-5	2-Nitrophenol	ND	50000	6600	ug/kg	
100-02-7	4-Nitrophenol	ND	100000	27000	ug/kg	
87-86-5	Pentachlorophenol	ND	40000	9400	ug/kg	
108-95-2	Phenol	ND	20000	5200	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	50000	6600	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	50000	7500	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	50000	6000	ug/kg	
83-32-9	Acenaphthene	ND	10000	3500	ug/kg	
208-96-8	Acenaphthylene	ND	10000	5100	ug/kg	
98-86-2	Acetophenone	ND	50000	2200	ug/kg	
120-12-7	Anthracene	ND	10000	6100	ug/kg	
1912-24-9	Atrazine	ND	20000	4300	ug/kg	
56-55-3	Benzo(a)anthracene	ND	10000	2800	ug/kg	
50-32-8	Benzo(a)pyrene	ND	10000	4600	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	10000	4400	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	10000	5000	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	10000	4700	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	20000	3900	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	20000	2400	ug/kg	
92-52-4	1,1'-Biphenyl	ND	20000	1400	ug/kg	
100-52-7	Benzaldehyde	ND	50000	2500	ug/kg	
91-58-7	2-Chloronaphthalene	ND	20000	2400	ug/kg	
106-47-8	4-Chloroaniline	ND	50000	3600	ug/kg	
86-74-8	Carbazole	ND	20000	1500	ug/kg	
105-60-2	Caprolactam	ND	20000	4000	ug/kg	
218-01-9	Chrysene	ND	10000	3200	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	20000	2100	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	20000	4300	ug/kg	

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43515-MB1	M185620.D	1	12/16/22	CS	12/07/22	OP43515	EM8027

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	2,2'-Oxybis(1-chloropropane)	ND	20000	3600	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	20000	3200	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	10000	3100	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	10000	5000	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	20000	8300	ug/kg	
123-91-1	1,4-Dioxane	ND	10000	6600	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	10000	4400	ug/kg	
132-64-9	Dibenzofuran	ND	20000	4100	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	20000	1600	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	20000	2500	ug/kg	
84-66-2	Diethyl phthalate	ND	20000	2100	ug/kg	
131-11-3	Dimethyl phthalate	ND	20000	1800	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	20000	2300	ug/kg	
206-44-0	Fluoranthene	ND	10000	4500	ug/kg	
86-73-7	Fluorene	ND	10000	4600	ug/kg	
118-74-1	Hexachlorobenzene	ND	20000	2500	ug/kg	
87-68-3	Hexachlorobutadiene	ND	10000	4000	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	100000	4000	ug/kg	
67-72-1	Hexachloroethane	ND	50000	5000	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	10000	4700	ug/kg	
78-59-1	Isophorone	ND	20000	2100	ug/kg	
91-57-6	2-Methylnaphthalene	ND	10000	2300	ug/kg	
88-74-4	2-Nitroaniline	ND	50000	2400	ug/kg	
99-09-2	3-Nitroaniline	ND	50000	2500	ug/kg	
100-01-6	4-Nitroaniline	ND	50000	2600	ug/kg	
91-20-3	Naphthalene	ND	10000	2800	ug/kg	
98-95-3	Nitrobenzene	ND	20000	3900	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	20000	2900	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	50000	3700	ug/kg	
85-01-8	Phenanthrene	ND	10000	3400	ug/kg	
129-00-0	Pyrene	ND	10000	3200	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	50000	2500	ug/kg	

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43515-MB1	M185620.D	1	12/16/22	CS	12/07/22	OP43515	EM8027

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	100%* [a]	10-99%
4165-62-2	Phenol-d5	105%* [a]	10-96%
118-79-6	2,4,6-Tribromophenol	127%* [a]	10-123%
4165-60-0	Nitrobenzene-d5	143%* [a]	10-109%
321-60-8	2-Fluorobiphenyl	108%	11-109%
1718-51-0	Terphenyl-d14	106%	10-120%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/kg	

(a) Outside control limits due to dilution.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43515-BS1	M185621.D	1	12/16/22	CS	12/07/22	OP43515	EM8027

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	50000	55000	110	10-135
59-50-7	4-Chloro-3-methyl phenol	50000	59200	118	10-141
120-83-2	2,4-Dichlorophenol	50000	57400	115	10-139
105-67-9	2,4-Dimethylphenol	50000	62600	125	10-141
51-28-5	2,4-Dinitrophenol	100000	110000	110	10-138
534-52-1	4,6-Dinitro-o-cresol	50000	59300	119	10-156
95-48-7	2-Methylphenol	50000	55700	111	10-139
	3&4-Methylphenol	100000	114000	114	10-174
88-75-5	2-Nitrophenol	50000	65200	130	10-142
100-02-7	4-Nitrophenol	50000	50600	101	10-144
87-86-5	Pentachlorophenol	100000	101000	101	10-165
108-95-2	Phenol	50000	60100	120* [a]	23-115
58-90-2	2,3,4,6-Tetrachlorophenol	50000	60200	120	10-146
95-95-4	2,4,5-Trichlorophenol	50000	61600	123	13-136
88-06-2	2,4,6-Trichlorophenol	50000	62700	125	10-142
83-32-9	Acenaphthene	50000	58400	117	10-141
208-96-8	Acenaphthylene	50000	59300	119	10-133
98-86-2	Acetophenone	50000	58900	118* [a]	23-115
120-12-7	Anthracene	50000	58900	118	10-144
1912-24-9	Atrazine	50000	71300	143	17-149
56-55-3	Benzo(a)anthracene	50000	53100	106	11-139
50-32-8	Benzo(a)pyrene	50000	56500	113	13-141
205-99-2	Benzo(b)fluoranthene	50000	54800	110	14-140
191-24-2	Benzo(g,h,i)perylene	50000	56200	112	13-138
207-08-9	Benzo(k)fluoranthene	50000	59800	120	12-140
101-55-3	4-Bromophenyl phenyl ether	50000	59300	119	10-146
85-68-7	Butyl benzyl phthalate	50000	55600	111	10-150
92-52-4	1,1'-Biphenyl	50000	59100	118	10-141
100-52-7	Benzaldehyde	50000	60300	121	10-146
91-58-7	2-Chloronaphthalene	50000	59300	119	10-142
106-47-8	4-Chloroaniline	50000	44700	89	10-108
86-74-8	Carbazole	50000	55200	110	10-145
105-60-2	Caprolactam	50000	131000	262* [a]	10-187
218-01-9	Chrysene	50000	58400	117	11-139
111-91-1	bis(2-Chloroethoxy)methane	50000	60700	121	10-144
111-44-4	bis(2-Chloroethyl)ether	50000	55200	110	10-145

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43515-BS1	M185621.D	1	12/16/22	CS	12/07/22	OP43515	EM8027

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	2,2'-Oxybis(1-chloropropane)	50000	58200	116	10-145
7005-72-3	4-Chlorophenyl phenyl ether	50000	60600	121	10-145
121-14-2	2,4-Dinitrotoluene	50000	66300	133	10-148
606-20-2	2,6-Dinitrotoluene	50000	63900	128	12-145
91-94-1	3,3'-Dichlorobenzidine	50000	55600	111* [a]	10-100
123-91-1	1,4-Dioxane	50000	59100	118* [a]	10-97
53-70-3	Dibenzo(a,h)anthracene	50000	54600	109	14-142
132-64-9	Dibenzofuran	50000	57200	114	10-140
84-74-2	Di-n-butyl phthalate	50000	58400	117	11-147
117-84-0	Di-n-octyl phthalate	50000	55600	111	15-145
84-66-2	Diethyl phthalate	50000	55600	111	10-145
131-11-3	Dimethyl phthalate	50000	53400	107	10-144
117-81-7	bis(2-Ethylhexyl)phthalate	50000	58300	117	26-132
206-44-0	Fluoranthene	50000	56000	112	10-147
86-73-7	Fluorene	50000	57300	115	12-139
118-74-1	Hexachlorobenzene	50000	62300	125	10-144
87-68-3	Hexachlorobutadiene	50000	63700	127	10-142
77-47-4	Hexachlorocyclopentadiene	100000	92100	92	10-120
67-72-1	Hexachloroethane	50000	60800	122	10-141
193-39-5	Indeno(1,2,3-cd)pyrene	50000	58000	116	13-144
78-59-1	Isophorone	50000	64100	128	10-139
91-57-6	2-Methylnaphthalene	50000	56500	113	10-140
88-74-4	2-Nitroaniline	50000	73500	147	10-148
99-09-2	3-Nitroaniline	50000	54700	109	10-127
100-01-6	4-Nitroaniline	50000	57300	115	10-143
91-20-3	Naphthalene	50000	59200	118	10-141
98-95-3	Nitrobenzene	50000	75000	150* [a]	10-139
621-64-7	N-Nitroso-di-n-propylamine	50000	67600	135	10-143
86-30-6	N-Nitrosodiphenylamine	50000	60000	120	10-145
85-01-8	Phenanthrene	50000	58800	118	10-142
129-00-0	Pyrene	50000	57300	115	13-141
95-94-3	1,2,4,5-Tetrachlorobenzene	50000	64900	130	10-143

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43515-BS1	M185621.D	1	12/16/22	CS	12/07/22	OP43515	EM8027

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	106%* [b]	10-99%
4165-62-2	Phenol-d5	110%* [b]	10-96%
118-79-6	2,4,6-Tribromophenol	131%* [b]	10-123%
4165-60-0	Nitrobenzene-d5	148%* [b]	10-109%
321-60-8	2-Fluorobiphenyl	123%* [b]	11-109%
1718-51-0	Terphenyl-d14	115%	10-120%

(a) Outside of in house control limits.
(b) Outside control limits due to dilution.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43515-MS [a]	M185638.D	10	12/16/22	CS	12/07/22	OP43515	EM8027
OP43515-MSD [a]	M185639.D	10	12/16/22	CS	12/07/22	OP43515	EM8027
JD56558-1 [a]	M185640.D	10	12/16/22	CS	12/07/22	OP43515	EM8027

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Compound	JD56558-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		50000	49400	99	50000	ND	0* [b]	200* [c]	10-137/86
59-50-7	4-Chloro-3-methyl phenol	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-146/84
120-83-2	2,4-Dichlorophenol	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-145/86
105-67-9	2,4-Dimethylphenol	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-148/87
51-28-5	2,4-Dinitrophenol	ND		100000	ND	0* [b]	100000	ND	0* [b]	nc	10-118/90
534-52-1	4,6-Dinitro-o-cresol	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-131/97
95-48-7	2-Methylphenol	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-143/86
	3&4-Methylphenol	ND		100000	99500	100	100000	97400	97	2	10-162/87
88-75-5	2-Nitrophenol	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-147/93
100-02-7	4-Nitrophenol	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-152/85
87-86-5	Pentachlorophenol	ND		100000	ND	0* [b]	100000	ND	0* [b]	nc	10-146/89
108-95-2	Phenol	ND		50000	63200	126* [b]	50000	70700	141* [b]	11	10-118/84
58-90-2	2,3,4,6-Tetrachlorophenol	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-139/87
95-95-4	2,4,5-Trichlorophenol	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-140/86
88-06-2	2,4,6-Trichlorophenol	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-141/86
83-32-9	Acenaphthene	ND		50000	54100	108	50000	55100	110	2	10-156/87
208-96-8	Acenaphthylene	ND		50000	55900	112	50000	55500	111	1	10-143/84
98-86-2	Acetophenone	ND		50000	77700	155* [b]	50000	75600	151* [b]	3	10-130/90
120-12-7	Anthracene	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-166/88
1912-24-9	Atrazine	ND		50000	56000	112	50000	57700	115	3	10-148/86
56-55-3	Benzo(a)anthracene	ND		50000	65300	131	50000	63500	127	3	10-163/88
50-32-8	Benzo(a)pyrene	ND		50000	67800	136	50000	62400	125	8	10-163/89
205-99-2	Benzo(b)fluoranthene	ND		50000	59900	120	50000	65200	130	8	10-156/91
191-24-2	Benzo(g,h,i)perylene	ND		50000	58700	117	50000	64200	128	9	10-158/89
207-08-9	Benzo(k)fluoranthene	ND		50000	69900	140	50000	54100	108	25	10-157/86
101-55-3	4-Bromophenyl phenyl ether	ND		50000	54500	109	50000	44400	89	20	10-143/87
85-68-7	Butyl benzyl phthalate	ND		50000	76000	152	50000	78500	157	3	10-161/89
92-52-4	1,1'-Biphenyl	ND		50000	50400	101	50000	52500	105	4	10-143/86
100-52-7	Benzaldehyde	ND		50000	84300	169* [b]	50000	85800	172* [b]	2	10-148/88
91-58-7	2-Chloronaphthalene	ND		50000	56900	114	50000	50100	100	13	10-145/86
106-47-8	4-Chloroaniline	ND		50000	ND	0* [b]	50000	38200	76	200* [c]	10-109/87
86-74-8	Carbazole	ND		50000	54600	109	50000	57200	114	5	10-158/87
105-60-2	Caprolactam	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-150/82
218-01-9	Chrysene	ND		50000	60900	122	50000	63400	127	4	10-164/87
111-91-1	bis(2-Chloroethoxy)methane	ND		50000	52200	104	50000	57600	115	10	10-152/86
111-44-4	bis(2-Chloroethyl)ether	ND		50000	49300	99	50000	61000	122	21	10-147/86

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43515-MS [a]	M185638.D	10	12/16/22	CS	12/07/22	OP43515	EM8027
OP43515-MSD [a]	M185639.D	10	12/16/22	CS	12/07/22	OP43515	EM8027
JD56558-1 [a]	M185640.D	10	12/16/22	CS	12/07/22	OP43515	EM8027

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Compound	JD56558-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
108-60-1	2,2'-Oxybis(1-chloropropane)	ND		50000	55000	110	50000	60500	121	10	10-134/88
7005-72-3	4-Chlorophenyl phenyl ether	ND		50000	54700	109	50000	46700	93	16	10-142/87
121-14-2	2,4-Dinitrotoluene	ND		50000	96500	193* [b]	50000	86000	172* [b]	12	10-147/86
606-20-2	2,6-Dinitrotoluene	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-147/88
91-94-1	3,3'-Dichlorobenzidine	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-106/93
123-91-1	1,4-Dioxane	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-102/85
53-70-3	Dibenzo(a,h)anthracene	ND		50000	64300	129	50000	58300	117	10	10-149/89
132-64-9	Dibenzofuran	ND		50000	52800	106	50000	52800	106	0	10-155/86
84-74-2	Di-n-butyl phthalate	ND		50000	77400	155	50000	70500	141	9	10-158/86
117-84-0	Di-n-octyl phthalate	ND		50000	53800	108	50000	61700	123	14	10-154/84
84-66-2	Diethyl phthalate	ND		50000	45700	91	50000	48100	96	5	10-148/84
131-11-3	Dimethyl phthalate	ND		50000	43800	88	50000	43300	87	1	10-144/85
117-81-7	bis(2-Ethylhexyl)phthalate	ND		50000	101000	202* [b]	50000	85800	172* [b]	16	10-153/84
206-44-0	Fluoranthene	ND		50000	55500	111	50000	55700	111	0	10-165/93
86-73-7	Fluorene	ND		50000	54500	109	50000	58700	117	7	10-158/87
118-74-1	Hexachlorobenzene	ND		50000	48100	96	50000	53900	108	11	10-139/85
87-68-3	Hexachlorobutadiene	ND		50000	65900	132	50000	54600	109	19	10-139/88
77-47-4	Hexachlorocyclopentadiene	ND		100000	ND	0* [b]	100000	ND	0* [b]	nc	10-116/30
67-72-1	Hexachloroethane	ND		50000	ND	0* [b]	50000	ND	0* [b]	nc	10-141/93
193-39-5	Indeno(1,2,3-cd)pyrene	ND		50000	60700	121	50000	62000	124	2	10-160/91
78-59-1	Isophorone	ND		50000	64300	129	50000	61300	123	5	10-150/86
91-57-6	2-Methylnaphthalene	ND		50000	65400	131	50000	62200	124	5	10-145/86
88-74-4	2-Nitroaniline	ND		50000	67000	134	50000	71500	143	6	10-152/77
99-09-2	3-Nitroaniline	ND		50000	37400	75	50000	37300	75	0	10-136/83
100-01-6	4-Nitroaniline	ND		50000	27800	56	50000	36600	73	27	10-140/81
91-20-3	Naphthalene	ND		50000	56600	113	50000	61500	123	8	10-146/87
98-95-3	Nitrobenzene	ND		50000	78500	157* [b]	50000	79700	159* [b]	2	10-146/88
621-64-7	N-Nitroso-di-n-propylamine	ND		50000	84300	169* [b]	50000	87500	175* [b]	4	10-147/77
86-30-6	N-Nitrosodiphenylamine	ND		50000	59100	118	50000	54200	108	9	10-159/78
85-01-8	Phenanthrene	ND		50000	59900	120	50000	59300	119	1	10-158/95
129-00-0	Pyrene	ND		50000	62900	126	50000	65500	131	4	10-176/90
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		50000	56800	114	50000	53400	107	6	10-137/87

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43515-MS [a]	M185638.D	10	12/16/22	CS	12/07/22	OP43515	EM8027
OP43515-MSD [a]	M185639.D	10	12/16/22	CS	12/07/22	OP43515	EM8027
JD56558-1 [a]	M185640.D	10	12/16/22	CS	12/07/22	OP43515	EM8027

The QC reported here applies to the following samples: **Method:** SW846 8270E

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Surrogate Recoveries	MS	MSD	JD56558-1	Limits
367-12-4	2-Fluorophenol	104%* [d]	96%	107%* [d]	10-99%
4165-62-2	Phenol-d5	96%	106%* [d]	85%	10-96%
118-79-6	2,4,6-Tribromophenol	78%	114%	105%	10-123%
4165-60-0	Nitrobenzene-d5	151%* [d]	141%* [d]	170%* [e]	10-109%
321-60-8	2-Fluorobiphenyl	98%	107%	105%	11-109%
1718-51-0	Terphenyl-d14	116%	117%	117%	10-120%

(a) Dilution required due to viscosity of the extract matrix.
(b) Outside control limits due to matrix interference and dilution.
(c) Outside of in house control limits.
(d) Outside control limits due to dilution.
(e) High percent recoveries and no positive found in the sample.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: E2P5030-DFTPP
Lab File ID: 2P111195.D
Instrument ID: GCMS2P
Injection Date: 12/19/22
Injection Time: 15:56

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	74310	37.3		Pass
68	Less than 2.0% of mass 69	1252	0.63	(1.52) [a]	Pass
69	Mass 69 relative abundance	82172	41.2		Pass
70	Less than 2.0% of mass 69	480	0.24	(0.58) [a]	Pass
127	40.0 - 60.0% of mass 198	100440	50.4		Pass
197	Less than 1.0% of mass 198	654	0.33		Pass
198	Base peak, 100% relative abundance	199330	100.0		Pass
199	5.0 - 9.0% of mass 198	13651	6.85		Pass
275	10.0 - 30.0% of mass 198	48795	24.5		Pass
365	1.0 - 100.0% of mass 198	7088	3.56		Pass
441	Present, but less than mass 443	33191	16.7	(89.1) [b]	Pass
442	40.0 - 100.0% of mass 198	195997	98.3		Pass
443	17.0 - 23.0% of mass 442	37231	18.7	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P5030-IC5030	2P111196.D	12/19/22	16:09	00:13	Initial cal 1
E2P5030-IC5030	2P111197.D	12/19/22	16:34	00:38	Initial cal 100
E2P5030-IC5030	2P111198.D	12/19/22	17:00	01:04	Initial cal 2
E2P5030-IC5030	2P111199.D	12/19/22	17:25	01:29	Initial cal 80
E2P5030-IC5030	2P111200.D	12/19/22	17:50	01:54	Initial cal 5
E2P5030-ICC5030	2P111201.D	12/19/22	18:16	02:20	Initial cal 50
E2P5030-IC5030	2P111202.D	12/19/22	18:41	02:45	Initial cal 10
E2P5030-IC5030	2P111203.D	12/19/22	19:07	03:11	Initial cal 25
E2P5030-ICV5030	2P111204.D	12/19/22	19:32	03:36	Initial cal verification 50
E2P5030-ICV5030	2P111205.D	12/19/22	19:57	04:01	Initial cal verification 50
E2P5030-ICV5030	2P111206.D	12/19/22	20:22	04:26	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample:	E2P5031-DFTPP	**Injection Date:**	12/19/22
Lab File ID:	2P111210.D	**Injection Time:**	21:44
Instrument ID:	GCMS2P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	66879	40.7		Pass
68	Less than 2.0% of mass 69	986	0.60	(1.39) [a]	Pass
69	Mass 69 relative abundance	70862	43.1		Pass
70	Less than 2.0% of mass 69	379	0.23	(0.53) [a]	Pass
127	40.0 - 60.0% of mass 198	87123	53.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	164402	100.0		Pass
199	5.0 - 9.0% of mass 198	11522	7.01		Pass
275	10.0 - 30.0% of mass 198	36035	21.9		Pass
365	1.0 - 100.0% of mass 198	5016	3.05		Pass
441	Present, but less than mass 443	21818	13.3	(85.2) [b]	Pass
442	40.0 - 100.0% of mass 198	132189	80.4		Pass
443	17.0 - 23.0% of mass 442	25613	15.6	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P5031-IC5031	2P111211.D	12/19/22	22:00	00:16	Initial cal 100
E2P5031-IC5031	2P111212.D	12/19/22	22:25	00:41	Initial cal 80
E2P5031-ICC5031	2P111213.D	12/19/22	22:50	01:06	Initial cal 50
E2P5031-IC5031	2P111214.D	12/19/22	23:15	01:31	Initial cal 25
E2P5031-IC5031	2P111215.D	12/19/22	23:41	01:57	Initial cal 10
E2P5031-IC5031	2P111216.D	12/20/22	00:06	02:22	Initial cal 5
E2P5031-IC5031	2P111217.D	12/20/22	00:31	02:47	Initial cal 2
E2P5031-IC5031	2P111218.D	12/20/22	00:56	03:12	Initial cal 1
E2P5031-ICV5031	2P111219.D	12/20/22	01:22	03:38	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample:	E2P5036-DFTPP	**Injection Date:**	12/29/22
Lab File ID:	2P111317.D	**Injection Time:**	16:13
Instrument ID:	GCMS2P		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	27496	38.0		Pass
68	Less than 2.0% of mass 69	429	0.59	(1.37) [a]	Pass
69	Mass 69 relative abundance	31363	43.4		Pass
70	Less than 2.0% of mass 69	175	0.24	(0.56) [a]	Pass
127	40.0 - 60.0% of mass 198	36163	50.0		Pass
197	Less than 1.0% of mass 198	197	0.27		Pass
198	Base peak, 100% relative abundance	72272	100.0		Pass
199	5.0 - 9.0% of mass 198	4671	6.46		Pass
275	10.0 - 30.0% of mass 198	17865	24.7		Pass
365	1.0 - 100.0% of mass 198	2624	3.63		Pass
441	Present, but less than mass 443	11140	15.4	(83.2) [b]	Pass
442	40.0 - 100.0% of mass 198	69392	96.0		Pass
443	17.0 - 23.0% of mass 442	13389	18.5	(19.3) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P5036-CC5030	2P111318.D	12/29/22	16:24	00:11	Continuing cal 25
E2P5036-CC5031	2P111319.D	12/29/22	16:49	00:36	Continuing cal 25
OP43821-MB1	2P111322.D	12/29/22	18:21	02:08	Method Blank
OP43821-BS1	2P111323.D	12/29/22	18:46	02:33	Blank Spike
ZZZZZZ	2P111324.D	12/29/22	19:12	02:59	(unrelated sample)
ZZZZZZ	2P111325.D	12/29/22	19:37	03:24	(unrelated sample)
ZZZZZZ	2P111326.D	12/29/22	20:02	03:49	(unrelated sample)
JD56558-6	2P111327.D	12/29/22	20:28	04:15	DRUM-06
OP43822-MS	2P111328.D	12/29/22	20:53	04:40	Matrix Spike
OP43822-MSD	2P111329.D	12/29/22	21:19	05:06	Matrix Spike Duplicate
ZZZZZZ	2P111330.D	12/29/22	21:44	05:31	(unrelated sample)
JD57511-2	2P111331.D	12/29/22	22:09	05:56	(used for QC only; not part of job JD56558)
OP43775-MS	2P111332.D	12/29/22	22:35	06:22	Matrix Spike
OP43775-MSD	2P111333.D	12/29/22	23:00	06:47	Matrix Spike Duplicate
OP43821-MS	2P111334.D	12/29/22	23:25	07:12	Matrix Spike
OP43821-MSD	2P111335.D	12/29/22	23:50	07:37	Matrix Spike Duplicate
ZZZZZZ	2P111336.D	12/30/22	00:16	08:03	(unrelated sample)
JD57695-1	2P111337.D	12/30/22	00:41	08:28	(used for QC only; not part of job JD56558)
ZZZZZZ	2P111338.D	12/30/22	01:06	08:53	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample:	E2P5036-DFTPP	**Injection Date:**	12/29/22
Lab File ID:	2P111317.D	**Injection Time:**	16:13
Instrument ID:	GCMS2P		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	2P111339.D	12/30/22	01:31	09:18	(unrelated sample)
ZZZZZZ	2P111340.D	12/30/22	01:56	09:43	(unrelated sample)
ZZZZZZ	2P111341.D	12/30/22	02:21	10:08	(unrelated sample)
ZZZZZZ	2P111342.D	12/30/22	02:46	10:33	(unrelated sample)
ZZZZZZ	2P111343.D	12/30/22	03:11	10:58	(unrelated sample)
ZZZZZZ	2P111344.D	12/30/22	03:36	11:23	(unrelated sample)
ZZZZZZ	2P111345.D	12/30/22	04:01	11:48	(unrelated sample)
ZZZZZZ	2P111346.D	12/30/22	04:27	12:14	(unrelated sample)
ZZZZZZ	2P111347.D	12/30/22	04:52	12:39	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: EM8003-DFTPP
Lab File ID: M185063.D
Instrument ID: GCMSM
Injection Date: 11/24/22
Injection Time: 08:14

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	57057	30.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	76456	41.3		Pass
70	Less than 2.0% of mass 69	518	0.28	(0.68) [a]	Pass
127	40.0 - 60.0% of mass 198	93648	50.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	185069	100.0		Pass
199	5.0 - 9.0% of mass 198	12479	6.74		Pass
275	10.0 - 30.0% of mass 198	49344	26.7		Pass
365	1.0 - 100.0% of mass 198	7618	4.12		Pass
441	Present, but less than mass 443	22720	12.3	(79.6) [b]	Pass
442	40.0 - 100.0% of mass 198	147064	79.5		Pass
443	17.0 - 23.0% of mass 442	28554	15.4	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM8003-IC8003	M185064.D	11/24/22	08:27	00:13	Initial cal 1
EM8003-IC8003	M185065.D	11/24/22	08:58	00:44	Initial cal 100
EM8003-IC8003	M185066.D	11/24/22	09:28	01:14	Initial cal 2
EM8003-IC8003	M185067.D	11/24/22	09:59	01:45	Initial cal 80
EM8003-ICC8003	M185068.D	11/24/22	10:30	02:16	Initial cal 50
EM8003-IC8003	M185069.D	11/24/22	11:00	02:46	Initial cal 5
EM8003-IC8003	M185070.D	11/24/22	11:31	03:17	Initial cal 10
EM8003-IC8003	M185071.D	11/24/22	12:02	03:48	Initial cal 25
EM8003-ICV8003	M185072.D	11/24/22	12:32	04:18	Initial cal verification 50
EM8003-ICV8003	M185073.D	11/24/22	13:03	04:49	Initial cal verification 50
EM8003-ICV8003	M185074.D	11/24/22	13:34	05:20	Initial cal verification 50
EM8003-ICV8003	M185075.D	11/24/22	14:04	05:50	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample:	EM8005-DFTPP	**Injection Date:**	11/26/22
Lab File ID:	M185086.D	**Injection Time:**	10:32
Instrument ID:	GCMSM		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	62729	32.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	82552	42.7		Pass
70	Less than 2.0% of mass 69	547	0.28	(0.66) [a]	Pass
127	40.0 - 60.0% of mass 198	99184	51.3		Pass
197	Less than 1.0% of mass 198	250	0.13		Pass
198	Base peak, 100% relative abundance	193493	100.0		Pass
199	5.0 - 9.0% of mass 198	13644	7.05		Pass
275	10.0 - 30.0% of mass 198	49245	25.5		Pass
365	1.0 - 100.0% of mass 198	6499	3.36		Pass
441	Present, but less than mass 443	21925	11.3	(78.0) [b]	Pass
442	40.0 - 100.0% of mass 198	145117	75.0		Pass
443	17.0 - 23.0% of mass 442	28109	14.5	(19.4) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM8005-IC8005	M185087.D	11/26/22	10:46	00:14	Initial cal 100
EM8005-IC8005	M185088.D	11/26/22	11:17	00:45	Initial cal 80
EM8005-ICC8005	M185089.D	11/26/22	11:48	01:16	Initial cal 50
EM8005-IC8005	M185090.D	11/26/22	12:19	01:47	Initial cal 25
EM8005-IC8005	M185091.D	11/26/22	12:50	02:18	Initial cal 10
EM8005-IC8005	M185092.D	11/26/22	13:21	02:49	Initial cal 5
EM8005-IC8005	M185093.D	11/26/22	13:52	03:20	Initial cal 2
EM8005-IC8005	M185094.D	11/26/22	14:23	03:51	Initial cal 1
EM8005-ICV8005	M185095.D	11/26/22	14:54	04:22	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample:	EM8027-DFTPP	**Injection Date:**	12/16/22
Lab File ID:	M185617.D	**Injection Time:**	01:32
Instrument ID:	GCMSM		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	28654	38.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	33912	45.8		Pass
70	Less than 2.0% of mass 69	271	0.37	(0.80) [a]	Pass
127	40.0 - 60.0% of mass 198	37145	50.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	74005	100.0		Pass
199	5.0 - 9.0% of mass 198	5406	7.30		Pass
275	10.0 - 30.0% of mass 198	19426	26.2		Pass
365	1.0 - 100.0% of mass 198	2820	3.81		Pass
441	Present, but less than mass 443	7779	10.5	(74.9) [b]	Pass
442	40.0 - 100.0% of mass 198	52294	70.7		Pass
443	17.0 - 23.0% of mass 442	10390	14.0	(19.9) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM8027-CC8003	M185618.D	12/16/22	01:54	00:22	Continuing cal 50
EM8027-CC8005	M185619.D	12/16/22	02:24	00:52	Continuing cal 50
OP43515-MB1	M185620.D	12/16/22	03:06	01:34	Method Blank
OP43515-BS1	M185621.D	12/16/22	03:36	02:04	Blank Spike
ZZZZZZ	M185622.D	12/16/22	04:08	02:36	(unrelated sample)
ZZZZZZ	M185623.D	12/16/22	04:45	03:13	(unrelated sample)
ZZZZZZ	M185624.D	12/16/22	05:15	03:43	(unrelated sample)
ZZZZZZ	M185625.D	12/16/22	05:47	04:15	(unrelated sample)
ZZZZZZ	M185626.D	12/16/22	06:17	04:45	(unrelated sample)
OP43549-MS	M185627.D	12/16/22	06:47	05:15	Matrix Spike
OP43549-MSD	M185628.D	12/16/22	07:17	05:45	Matrix Spike Duplicate
JD56666-9	M185629.D	12/16/22	07:47	06:15	(used for QC only; not part of job JD56558)
JD56558-9	M185630.D	12/16/22	08:17	06:45	DRUM-09
JD56558-10	M185631.D	12/16/22	08:47	07:15	DRUM-10
JD56558-11	M185632.D	12/16/22	09:17	07:45	DRUM-11
JD56558-4	M185633.D	12/16/22	09:48	08:16	DRUM-04
JD56558-2	M185634.D	12/16/22	10:18	08:46	DRUM-02
JD56558-6	M185635.D	12/16/22	10:48	09:16	DRUM-06
JD56558-7	M185636.D	12/16/22	11:18	09:46	DRUM-07

Instrument Performance Check (DFTPP)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample:	EM8027-DFTPP	**Injection Date:**	12/16/22
Lab File ID:	M185617.D	**Injection Time:**	01:32
Instrument ID:	GCMSM		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JD56558-8	M185637.D	12/16/22	11:48	10:16	DRUM-08
OP43515-MS	M185638.D	12/16/22	12:18	10:46	Matrix Spike
OP43515-MSD	M185639.D	12/16/22	12:48	11:16	Matrix Spike Duplicate
JD56558-1	M185640.D	12/16/22	13:19	11:47	DRUM-01

Instrument Performance Check (DFTPP)

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample: EM8030-DFTPP
Lab File ID: M185702.D
Instrument ID: GCMSM
Injection Date: 12/19/22
Injection Time: 08:40

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	50817	36.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	59246	42.3		Pass
70	Less than 2.0% of mass 69	579	0.41	(0.98) [a]	Pass
127	40.0 - 60.0% of mass 198	70410	50.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	140048	100.0		Pass
199	5.0 - 9.0% of mass 198	9836	7.02		Pass
275	10.0 - 30.0% of mass 198	36610	26.1		Pass
365	1.0 - 100.0% of mass 198	5228	3.73		Pass
441	Present, but less than mass 443	15259	10.9	(78.2) [b]	Pass
442	40.0 - 100.0% of mass 198	102589	73.3		Pass
443	17.0 - 23.0% of mass 442	19523	13.9	(19.0) [c]	Pass

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM8030-CC8003	M185703.D	12/19/22	08:52	00:12	Continuing cal 25
EM8030-CC8005	M185704.D	12/19/22	09:21	00:41	Continuing cal 25
OP43675-MB1	M185706.D	12/19/22	10:20	01:40	Method Blank
OP43675-LB12	M185707.D	12/19/22	10:50	02:10	Leachate Blank
OP43675-LB13	M185708.D	12/19/22	11:20	02:40	Leachate Blank
OP43675-BS1	M185709.D	12/19/22	11:49	03:09	Blank Spike
OP43675-BSD	M185710.D	12/19/22	12:19	03:39	Blank Spike Duplicate
ZZZZZZ	M185711.D	12/19/22	12:48	04:08	(unrelated sample)
ZZZZZZ	M185712.D	12/19/22	13:18	04:38	(unrelated sample)
ZZZZZZ	M185713.D	12/19/22	13:48	05:08	(unrelated sample)
ZZZZZZ	M185714.D	12/19/22	14:18	05:38	(unrelated sample)
ZZZZZZ	M185715.D	12/19/22	14:47	06:07	(unrelated sample)
ZZZZZZ	M185716.D	12/19/22	15:17	06:37	(unrelated sample)
JD56558-3	M185717.D	12/19/22	16:16	07:36	DRUM-03
JD56558-5	M185718.D	12/19/22	16:46	08:06	DRUM-05
JD56558-12	M185719.D	12/19/22	17:15	08:35	DRUM-12
ZZZZZZ	M185721.D	12/19/22	18:14	09:34	(unrelated sample)
ZZZZZZ	M185722.D	12/19/22	18:44	10:04	(unrelated sample)

Surrogate Recovery Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Method: SW846 8270E **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
JD56558-1	M185640.D	107* a	85	105	170* b	105	117
JD56558-2	M185634.D	212* b	194* b	0* a	289* b	217* b	234* b
JD56558-3	M185717.D	101* a	100* a	125* a	134* a	115* a	120
JD56558-4	M185633.D	101* a	179* a	112	221* a	108	119
JD56558-5	M185718.D	124* a	121* a	106	230* a	124* a	126* a
JD56558-6	2P111327.D	94	105* c	86	109	75	100
JD56558-6	M185635.D	226* d	222* d	241* d	358* d	246* d	274* d
JD56558-7	M185636.D	97	112* a	78	163* b	122* b	119
JD56558-8	M185637.D	183* b	180* b	179* b	265* b	209* b	210* b
JD56558-9	M185630.D	158* a	138* a	99	998* a	116* a	110
JD56558-10	M185631.D	106* a	105* a	0* a	151* a	112* a	129* a
JD56558-11	M185632.D	82	99* a	0* a	125* b	102	103
JD56558-12	M185719.D	132* a	126* a	121	279* a	122* a	115
OP43515-BS1	M185621.D	106* a	110* a	131* a	148* a	123* a	115
OP43515-MB1	M185620.D	100* a	105* a	127* a	143* a	108	106
OP43515-MS	M185638.D	104* a	96	78	151* a	98	116
OP43515-MSD	M185639.D	96	106* a	114	141* a	107	117

Surrogate Compounds	Recovery Limits
S1 = 2-Fluorophenol	10-99%
S2 = Phenol-d5	10-96%
S3 = 2,4,6-Tribromophenol	10-123%
S4 = Nitrobenzene-d5	10-109%
S5 = 2-Fluorobiphenyl	11-109%
S6 = Terphenyl-d14	10-120%

(a) Outside control limits due to dilution.
(b) High percent recoveries and no positive found in the sample.
(c) Outside of in house control limits, but within reasonable method recovery limits.
(d) Outside control limits due to analytical spiking error. Sample re-extracted for confirmation.

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries

Method Blank Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43508-MB1	5G126160.D	1	12/08/22	MLC	12/07/22	OP43508	G5G3190

The QC reported here applies to the following samples: **Method:** SW846 8082A

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	500	230	ug/kg	
11104-28-2	Aroclor 1221	ND	500	310	ug/kg	
11141-16-5	Aroclor 1232	ND	500	320	ug/kg	
53469-21-9	Aroclor 1242	ND	500	210	ug/kg	
12672-29-6	Aroclor 1248	ND	500	450	ug/kg	
11097-69-1	Aroclor 1254	ND	500	270	ug/kg	
11096-82-5	Aroclor 1260	ND	500	210	ug/kg	
11100-14-4	Aroclor 1268	ND	500	210	ug/kg	
37324-23-5	Aroclor 1262	ND	500	330	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	170%* [a]	10-163%
877-09-8	Tetrachloro-m-xylene	130%	10-163%
2051-24-3	Decachlorobiphenyl	231%* [a]	10-215%
2051-24-3	Decachlorobiphenyl	137%	10-215%

(a) Outside of in house control limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43508-BS1	5G126161.D	1	12/08/22	MLC	12/07/22	OP43508	G5G3190
OP43508-BSD	5G126162.D	1	12/08/22	MLC	12/07/22	OP43508	G5G3190

The QC reported here applies to the following samples: **Method:** SW846 8082A

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	BSD ug/kg	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	2000	3250	163* [a]	3080	154	5	53-157/32
11104-28-2	Aroclor 1221		ND		ND		nc	50-150/30
11141-16-5	Aroclor 1232		ND		ND		nc	50-150/30
53469-21-9	Aroclor 1242		ND		ND		nc	50-150/30
12672-29-6	Aroclor 1248		ND		ND		nc	50-150/30
11097-69-1	Aroclor 1254		ND		ND		nc	50-150/30
11096-82-5	Aroclor 1260	2000	3410	171* [a]	3130	157	9	53-159/45
11100-14-4	Aroclor 1268		ND		ND		nc	50-150/30
37324-23-5	Aroclor 1262		ND		ND		nc	50-150/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	168%* [a]	167%* [a]	10-163%
877-09-8	Tetrachloro-m-xylene	133%	133%	10-163%
2051-24-3	Decachlorobiphenyl	238%* [a]	246%* [a]	10-215%
2051-24-3	Decachlorobiphenyl	144%	136%	10-215%

(a) Outside of in house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP43508-MS [a]	5G126164.D	10	12/08/22	MLC	12/07/22	OP43508	G5G3190
OP43508-MSD [a]	5G126165.D	10	12/08/22	MLC	12/07/22	OP43508	G5G3190
JD56558-1 [a]	5G126166.D	10	12/08/22	MLC	12/07/22	OP43508	G5G3190

The QC reported here applies to the following samples: **Method:** SW846 8082A

JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

CAS No.	Compound	JD56558-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND		1820	4330	238	1820	3700	203	16	10-243/69
11104-28-2	Aroclor 1221	ND			ND			ND		nc	50-150/30
11141-16-5	Aroclor 1232	ND			ND			ND		nc	50-150/30
53469-21-9	Aroclor 1242	ND			ND			ND		nc	50-150/11
12672-29-6	Aroclor 1248	ND			ND			ND		nc	50-150/19
11097-69-1	Aroclor 1254	ND			ND			ND		nc	50-150/67
11096-82-5	Aroclor 1260	ND		1820	3300	181	1820	3300	181	0	10-200/64
11100-14-4	Aroclor 1268	ND			ND			ND		nc	50-150/30
37324-23-5	Aroclor 1262	ND			ND			ND		nc	50-150/5

CAS No.	Surrogate Recoveries	MS	MSD	JD56558-1	Limits
877-09-8	Tetrachloro-m-xylene	214%* [b]	163%	180%* [b]	10-163%
877-09-8	Tetrachloro-m-xylene	140%	116%	116%	10-163%
2051-24-3	Decachlorobiphenyl	235%* [b]	256%* [b]	229%* [b]	10-215%
2051-24-3	Decachlorobiphenyl	148%	133%	134%	10-215%

(a) Dilution required due to viscosity of the extract matrix.
(b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Surrogate Recovery Summary

Job Number: JD56558
Account: MONTPAVF Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Method: SW846 8082A **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JD56558-1	5G126166.D	180* [c]	116	229* [c]	134
JD56558-2	5G126176.D	96	121	255* [c]	166
JD56558-3	5G126182.D	350* [c]	141	396* [c]	355* [c]
JD56558-4	5G126172.D	95	82	160	137
JD56558-5	5G126183.D	194* [c]	82	236* [c]	152
JD56558-6	5G126173.D	242* [c]	92	248* [c]	263* [c]
JD56558-7	5G126184.D	35	90	488* [c]	156
JD56558-8	5G126185.D	165* [c]	89	542* [c]	120
JD56558-9	5G126171.D	132	73	172	102
JD56558-10	5G126174.D	400* [c]	64	675* [c]	246* [c]
JD56558-11	5G126895.D	140	130	112	99
JD56558-12	5G126175.D	339* [c]	157	462* [c]	143
OP43508-BS1	5G126161.D	168* [d]	133	238* [d]	144
OP43508-BSD	5G126162.D	167* [d]	133	246* [d]	136
OP43508-MB1	5G126160.D	170* [d]	130	231* [d]	137
OP43508-MS	5G126164.D	214* [c]	140	235* [c]	148
OP43508-MSD	5G126165.D	163	116	256* [c]	133

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	10-163%
S2 = Decachlorobiphenyl	10-215%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside control limits due to matrix interference.
(d) Outside of in house control limits.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771
Matrix Type: SOLID

Methods: SW846 6010D
Units: mg/kg

Prep Date: 12/06/22

Metal	RL	IDL	MDL	MB raw	final
Aluminum	50	1.6	8.1		
Antimony	2.0	.17	.41		
Arsenic	2.0	.2	.28	0.080	<2.0
Barium	20	.04	1.9	0.030	<20
Beryllium	0.20	.03	.08		
Bismuth	2.0	.23	.52		
Boron	10	.19	3.7		
Cadmium	0.50	.03	.07	0.020	<0.50
Calcium	500	.56	21		
Chromium	1.0	.03	.37	0.070	<1.0
Cobalt	5.0	.04	.28		
Copper	2.5	.08	.84		
Iron	50	.53	19		
Lead	2.0	.11	.41	0.10	<2.0
Lithium	5.0	.23	.92		
Magnesium	500	3.2	14		
Manganese	1.5	.01	.41		
Molybdenum	2.0	.04	.32		
Nickel	4.0	.03	.35		
Phosphorus	20	.12	3.3		
Potassium	1000	5.5	32		
Selenium	2.0	.32	.65	0.18	<2.0
Silicon	20	.16	11		
Silver	0.50	.1	.17	0.0	<0.50
Sodium	1000	1.1	78		
Strontium	5.0	.01	.18		
Sulfur	10	.3	3.9		
Thallium	1.0	.18	.58		
Tin	20	.08	3.8		
Titanium	1.0	.04	.34		
Tungsten	5.0	.26	1.8		
Vanadium	5.0	.06	.19		
Zinc	5.0	.01	2.3		

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771 Methods: SW846 6010D
Matrix Type: SOLID Units: mg/kg

Prep Date: 12/06/22

Metal	RL	IDL	MDL	MB raw	final
Zirconium	2.0	.03	.54		

Associated samples MP36771: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771
Matrix Type: SOLID

Methods: SW846 6010D
Units: mg/kg

Prep Date: 12/06/22

Metal	JD56522-1 Original	MS	Spikelot MPSPK2	% Rec	QC Limits
Aluminum	anr				
Antimony	anr				
Arsenic	4.9	201	226	86.7	75-125
Barium	155	376	226	97.7	75-125
Beryllium	anr				
Bismuth					
Boron					
Cadmium	0.81	209	226	92.0	75-125
Calcium	anr				
Chromium	44.1	258	226	94.5	75-125
Cobalt	anr				
Copper	anr				
Iron	anr				
Lead	211	695	226	213.9N(a	75-125
Lithium					
Magnesium	anr				
Manganese	anr				
Molybdenum					
Nickel	anr				
Phosphorus					
Potassium	anr				
Selenium	0.0	199	226	87.4	75-125
Silicon					
Silver	0.71	27.4	28.3	92.6	75-125
Sodium	anr				
Strontium					
Sulfur					
Thallium	anr				
Tin					
Titanium					
Tungsten					
Vanadium	anr				
Zinc	anr				

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771 Methods: SW846 6010D
Matrix Type: SOLID Units: mg/kg

Prep Date: 12/06/22

Metal	JD56522-1 Original MS	Spikelot MPSPK2	% Rec	QC Limits
Zirconium				

Associated samples MP36771: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771
Matrix Type: SOLID

Methods: SW846 6010D
Units: mg/kg

Prep Date: 12/06/22

Metal	JD56522-1 Original	MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	4.9	189	211	87.2	6.2	20
Barium	155	329	211	82.4	13.3	20
Beryllium	anr					
Bismuth						
Boron						
Cadmium	0.81	195	211	91.9	6.9	20
Calcium	anr					
Chromium	44.1	236	211	90.9	8.9	20
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	178	373	211	76.7	60.3 (a)	20
Lithium						
Magnesium	anr					
Manganese	anr					
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium	anr					
Selenium	0.0	186	211	87.5	6.8	20
Silicon						
Silver	0.71	25.8	26.4	93.2	6.0	20
Sodium	anr					
Strontium						
Sulfur						
Thallium	anr					
Tin						
Titanium						
Tungsten						
Vanadium	anr					
Zinc	anr					

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771 Methods: SW846 6010D
Matrix Type: SOLID Units: mg/kg

Prep Date: 12/06/22

Metal	JD56522-1 Original	MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Zirconium						

Associated samples MP36771: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested
(a) High rpd due to possible sample nonhomogeneity.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771
Matrix Type: SOLID

Methods: SW846 6010D
Units: mg/kg

Prep Date: 12/06/22

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	179	200	89.5	80-120
Barium	190	200	95.0	80-120
Beryllium	anr			
Bismuth				
Boron				
Cadmium	186	200	93.0	80-120
Calcium	anr			
Chromium	189	200	94.5	80-120
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	188	200	94.0	80-120
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium	179	200	89.5	80-120
Silicon				
Silver	23.1	25	92.4	80-120
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	anr			

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771
Matrix Type: SOLID

Methods: SW846 6010D
Units: mg/kg

Prep Date: 12/06/22

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Zirconium				

Associated samples MP36771: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771
Matrix Type: SOLID

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/06/22

Metal	JD56522-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	44.6	54.4	22.0 (a)	0-10
Barium	1410	1530	8.6	0-10
Beryllium	anr			
Bismuth				
Boron				
Cadmium	7.40	8.10	0.0	0-10
Calcium	anr			
Chromium	402	417	3.8	0-10
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	1920	1930	0.2	0-10
Lithium				
Magnesium	anr			
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	anr			
Selenium	0.00	0.00	NC (a)	0-10
Silicon				
Silver	6.50	0.00	100.0(a)	0-10
Sodium	anr			
Strontium				
Sulfur				
Thallium	anr			
Tin				
Titanium				
Tungsten				
Vanadium	anr			
Zinc	anr			

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771
Matrix Type: SOLID

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/06/22

Metal	JD56522-1 Original SDL 1:5	%DIF	QC Limits
Zirconium			

Associated samples MP36771: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771
Matrix Type: SOLID

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/06/22

Metal	Sample ml	Final ml	JD56522-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium	19.25	20	1409	1356.163	3252	0.2	200	2000	94.8	80-120
Beryllium										
Bismuth										
Boron										
Cadmium										
Calcium										
Chromium										
Cobalt										
Copper										
Iron										
Lead	19.25	20	1924	1565.025	3384	0.2	200	2000	90.9	80-120
Lithium										
Magnesium										
Manganese										
Molybdenum										
Nickel										
Phosphorus										
Potassium										
Selenium										
Silicon										
Silver										
Sodium										
Strontium										
Sulfur										
Thallium										
Tin										
Titanium										
Tungsten										
Vanadium										
Zinc										

POST DIGESTATE SPIKE SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36771 Methods: SW846 6010D
Matrix Type: SOLID Units: ug/l

Prep Date: 12/06/22

Metal	Sample ml	Final ml	JD56522-1 Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Zirconium										

Associated samples MP36771: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36796 Methods: SW846 7471B
Matrix Type: SOLID Units: mg/kg

Prep Date: 12/06/22

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.033	.0057	.015	0.0042	<0.033

Associated samples MP36796: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36796
Matrix Type: SOLID

Methods: SW846 7471B
Units: mg/kg

Prep Date: 12/06/22

Metal	JD56558-1 Original	MS	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.0	0.29	0.333	87.0	80-120

Associated samples MP36796: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36796 Methods: SW846 7471B
Matrix Type: SOLID Units: mg/kg

Prep Date: 12/06/22

Metal	JD56558-1 Original	MSD	Spikelot HGPWS1	% Rec	MSD RPD	QC Limit
Mercury	0.0	0.29	0.333	87.0	0.0	20

Associated samples MP36796: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

QC Batch ID: MP36796
Matrix Type: SOLID

Methods: SW846 7471B
Units: mg/kg

Prep Date: 12/06/22

Metal	BSP Result	Spikelot HGPWS1	% Rec	QC Limits
Mercury	0.33	0.333	99.0	80-120

Associated samples MP36796: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Cyanide Reactivity	GP43908/GN36394	10	0.0	mg/kg	100	6.55	6.5	.25-27%
Solids, Total	GN36312	100	<100	mg/kg				
Sulfide Reactivity	GP43904/GN36351	100	0.0	mg/kg	460	280	60.9	42-107%

Associated Samples:
Batch GN36312: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12
Batch GP43904: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12
Batch GP43908: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Corrosivity as pH	GN36318	JD56483-1	su	11.24	11.27	0.3	0-5%
Cyanide Reactivity	GP43908/GN36394	JD56558-1	mg/kg	0.0	0.0	0.0	0-20%
Ignitability (Flashpoint)	GN36322	JD56558-9	Deg. F	141	141	0.0	0-10%
Solids, Total	GN36312	JD56558-1	mg/kg	937000	883000	5.9(a)	0-5%
Solids, Total	GN36312	JD56558-2	mg/kg	905000	945000	4.3	0-5%
Sulfide Reactivity	GP43904/GN36351	JD56558-1	mg/kg	0.0	0.0	0.0	0-20%

Associated Samples:
Batch GN36312: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12
Batch GN36318: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12
Batch GN36322: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12
Batch GP43904: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12
Batch GP43908: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12
(*) Outside of QC limits
(a) High RPD due to nature of sample matrix.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD56558
Account: MONTPAVF - Montrose Environmental Solutions Inc.
Project: Yaffa Drum Characterization

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Sulfide Reactivity	GP43904/GN36351	JD56558-1	mg/kg	0.0	460	155	33.7	20-82%

Associated Samples:
Batch GP43904: JD56558-1, JD56558-2, JD56558-3, JD56558-4, JD56558-5, JD56558-6, JD56558-7, JD56558-8, JD56558-9, JD56558-10, JD56558-11, JD56558-12
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits