



Microbac Laboratories, Inc. - Chicagoland

CERTIFICATE OF ANALYSIS

22L1182

Project Description

Specified Plating

For:

John Behrens

Environmental Restoration, LLC. - Fenton MO

3495 E 84th Place

Merrillville, IN 46410

Ron Misiunas

Lab Director

Tuesday, January 3, 2023

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories. Review and compilation of your report was completed by Microbac Laboratories, Inc. - Chicagoland. If you have any questions, comments, or require further assistance regarding this report, please contact your service representative listed above.

I certify that all test results meet all of the requirements of the accrediting authority listed within this report. Analytical results are reported on a 'as received' basis unless specified otherwise. Analytical results for solids with units ending in (dry) are reported on a dry weight basis. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories. The reported results are related only to the samples analyzed as received.

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Microbac Laboratories, Inc. - Chicagoland

CERTIFICATE OF ANALYSIS

22L1182

Environmental Restoration, LLC. - Fenton MO

Project Name: Specified Plating

John Behrens
3495 E 84th Place
Merrillville, IN 46410

Project / PO Number: N/A
Received: 12/20/2022
Reported: 01/03/2023

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
#1 Neutral Solids	22L1182-01	Solid			12/16/22 11:00	12/20/22 10:30
#2 Neutral Liquids	22L1182-02	Non-Aqueous Liquid			12/16/22 11:00	12/20/22 10:30
#3 Oxidizer Solids	22L1182-03	Solid			12/16/22 11:00	12/20/22 10:30
#4 Oxidizer Liquids	22L1182-04	Non-Aqueous Liquid			12/16/22 11:00	12/20/22 10:30
#5 Cyanide Liquids Neutral	22L1182-05	Non-Aqueous Liquid			12/16/22 11:00	12/20/22 10:30
#6 Cyanide Liquids Basic	22L1182-06	Non-Aqueous Liquid			12/16/22 11:00	12/20/22 10:30
#7 Cyanide Solids	22L1182-07	Solid			12/16/22 11:00	12/20/22 10:30
#8 Alkaline Liquids	22L1182-08	Non-Aqueous Liquid			12/16/22 11:00	12/20/22 10:30
#9 Alkaline Solids	22L1182-09	Solid			12/16/22 11:00	12/20/22 10:30
#10 Mixed Acids	22L1182-10	Non-Aqueous Liquid			12/16/22 11:00	12/20/22 10:30
#11 Chrome Liquids	22L1182-11	Non-Aqueous Liquid			12/16/22 11:00	12/20/22 10:30
#12 Nitric Acids	22L1182-12	Non-Aqueous Liquid			12/16/22 11:00	12/20/22 10:30
#13 Acidic Sludge	22L1182-13	Solid			12/16/22 11:00	12/20/22 10:30



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Analytical Testing Parameters

Client Sample ID: #1 Neutral Solids

Sample Matrix: Solid

Lab Sample ID: 22L1182-01

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	9.69	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1434	MRC
Temperature	16			°C	1		12/22/22 1407	12/22/22 1434	MRC
Method: Solid CN Distillation/EPA 9012B									
Cyanide, Total	830	52	65	mg/Kg	250	S	12/28/22 1503	12/30/22 1111	MTF
Method: SW-846 1010A/ASTM D92-90 Modified									
Ignitability	> 170	30.0	30.0	°F	1			12/22/22 1233	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	1.0	0.015	0.40	mg/Kg	1	M2, M5	12/28/22 1220	12/29/22 1742	ABG
Method: SW846 9012B/EPA 9012B									
Cyanide, Treated	710	19	23	mg/Kg	50		12/28/22 1503	12/30/22 1254	MTF
Method: SW-846 9030B MOD/EPA 9030B Modified									
Sulfide	180	4.8	6.0	mg/Kg	10		12/22/22 1141	12/27/22 2245	EF
General Parameters	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9012B									
Cyanide, Amenable to Chlorination	830	52	65	mg/L	250		12/28/22 1503	12/30/22 1111	MTF
Metals TCLP by CVAA	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1134	JNH
Metals TCLP by ICP	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3005A/EPA 6010C									
Arsenic	<0.052	0.052	0.10	mg/L	1		12/22/22 0825	12/22/22 1521	RPL
Barium	0.069	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1521	RPL
Cadmium	0.012	0.0030	0.020	mg/L	1	J	12/22/22 0825	12/22/22 1521	RPL
Chromium	18	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1521	RPL
Lead	<0.049	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1521	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1521	RPL
Silver	<0.013	0.013	0.10	mg/L	1		12/22/22 0825	12/22/22 1521	RPL
Volatile Organic Compounds by GCMS	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW-846 8260B/EPA 8260B									
1,1,1,2-Tetrachloroethane	<0.77	0.77	9.5	ug/kg	1			12/26/22 1707	JBS

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Client Sample ID: #1 Neutral Solids

Sample Matrix: Solid

Lab Sample ID: 22L1182-01

Collection Date: 12/16/2022 11:00

Volatile Organic Compounds by GCMS	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,1,1-Trichloroethane	<1.0	1.0	4.8	ug/kg	1			12/26/22 1707	JBS
1,1,2,2-Tetrachloroethane	<1.3	1.3	4.8	ug/kg	1			12/26/22 1707	JBS
1,1,2-Trichloroethane	<1.2	1.2	4.8	ug/kg	1			12/26/22 1707	JBS
1,1-Dichloroethane	<1.1	1.1	4.8	ug/kg	1	Q2		12/26/22 1707	JBS
1,1-Dichloroethene	<1.1	1.1	4.8	ug/kg	1			12/26/22 1707	JBS
1,2-Dichloroethane	<1.5	1.5	4.8	ug/kg	1			12/26/22 1707	JBS
1,2-Dichloropropane	<1.1	1.1	4.8	ug/kg	1			12/26/22 1707	JBS
2-Butanone	<1.1	1.1	9.5	ug/kg	1			12/26/22 1707	JBS
2-Hexanone	<2.1	2.1	9.5	ug/kg	1			12/26/22 1707	JBS
4-Methyl-2-pentanone	<2.0	2.0	9.5	ug/kg	1			12/26/22 1707	JBS
Acetone	72	4.2	48	ug/kg	1			12/26/22 1707	JBS
Acrolein	<22	22	95	ug/kg	1			12/26/22 1707	JBS
Acrylonitrile	<25	25	95	ug/kg	1			12/26/22 1707	JBS
Benzene	<0.81	0.81	4.8	ug/kg	1			12/26/22 1707	JBS
Bromodichloromethane	<0.80	0.80	4.8	ug/kg	1			12/26/22 1707	JBS
Bromoform	<1.5	1.5	4.8	ug/kg	1			12/26/22 1707	JBS
Bromomethane	<1.4	1.4	9.5	ug/kg	1			12/26/22 1707	JBS
Carbon Disulfide	2.6	0.98	9.5	ug/kg	1	J		12/26/22 1707	JBS
Carbon tetrachloride	<1.0	1.0	4.8	ug/kg	1			12/26/22 1707	JBS
Chlorobenzene	<0.51	0.51	4.8	ug/kg	1			12/26/22 1707	JBS
Chloroethane	<1.8	1.8	9.5	ug/kg	1			12/26/22 1707	JBS
Chloroform	<0.59	0.59	4.8	ug/kg	1			12/26/22 1707	JBS
Chloromethane	<1.1	1.1	9.5	ug/kg	1			12/26/22 1707	JBS
cis-1,2-Dichloroethene	<0.68	0.68	4.8	ug/kg	1			12/26/22 1707	JBS
cis-1,3-Dichloropropene	<0.50	0.50	4.8	ug/kg	1			12/26/22 1707	JBS
Dibromochloromethane	<0.95	0.95	4.8	ug/kg	1			12/26/22 1707	JBS
Ethylbenzene	1.6	0.88	4.8	ug/kg	1	J		12/26/22 1707	JBS
m,p-Xylene	6.1	1.7	4.8	ug/kg	1			12/26/22 1707	JBS
Methylene chloride	15	1.9	19	ug/kg	1	J		12/26/22 1707	JBS
Methyl-t-Butyl Ether	<1.7	1.7	4.8	ug/kg	1			12/26/22 1707	JBS
o-Xylene	1.3	0.86	4.8	ug/kg	1	J		12/26/22 1707	JBS
Styrene	<0.71	0.71	4.8	ug/kg	1			12/26/22 1707	JBS
Tetrachloroethene	<1.1	1.1	4.8	ug/kg	1			12/26/22 1707	JBS
Toluene	<0.74	0.74	4.8	ug/kg	1			12/26/22 1707	JBS
trans-1,2-Dichloroethene	2.2	0.93	4.8	ug/kg	1	J		12/26/22 1707	JBS
trans-1,3-Dichloropropene	<1.1	1.1	4.8	ug/kg	1			12/26/22 1707	JBS
Trichloroethene	<1.3	1.3	4.8	ug/kg	1			12/26/22 1707	JBS
Trichlorofluoromethane	<1.1	1.1	9.5	ug/kg	1			12/26/22 1707	JBS
Vinyl Acetate	<2.0	2.0	9.5	ug/kg	1			12/26/22 1707	JBS
Vinyl chloride	<1.2	1.2	9.5	ug/kg	1			12/26/22 1707	JBS
Total 1,2-Dichloroethene	2.2	1.5	4.8	ug/kg	1	J		12/26/22 1707	JBS
Total Xylenes	7.5	2.4	4.8	ug/kg	1			12/26/22 1707	JBS
Surrogate: 1,2-Dichloroethane-d4	105	Limit: 51.7-162	% Rec	1				12/26/22 1707	JBS



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Client Sample ID: #1 Neutral Solids

Sample Matrix: Solid

Lab Sample ID: 22L1182-01

Collection Date: 12/16/2022 11:00

Volatile Organic Compounds by GCMS

Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Surrogate: 4-Bromofluorobenzene	79.1	Limit: 57.4-135	% Rec	1			12/26/22 1707	JBS
Surrogate: Dibromofluoromethane	98.1	Limit: 63.5-139	% Rec	1			12/26/22 1707	JBS
Surrogate: Toluene-d8	107	Limit: 66.6-143	% Rec	1			12/26/22 1707	JBS

Semivolatile Organic Compounds by GC/ECD

Method: SW846 3550B/EPA 8082A

Aroclor 1016	<9.7	9.7	33	ug/kg	1	M, M1	12/21/22	1354	12/31/22	0246	MTS
Aroclor 1221	<7.3	7.3	33	ug/kg	1		12/21/22	1354	12/31/22	0246	MTS
Aroclor 1232	<18	18	33	ug/kg	1		12/21/22	1354	12/31/22	0246	MTS
Aroclor 1242	<31	31	33	ug/kg	1		12/21/22	1354	12/31/22	0246	MTS
Aroclor 1248	<2.9	2.9	33	ug/kg	1		12/21/22	1354	12/31/22	0246	MTS
Aroclor 1254	<2.1	2.1	33	ug/kg	1	R1	12/21/22	1354	12/31/22	0246	MTS
Aroclor 1260	<13	13	33	ug/kg	1		12/21/22	1354	12/31/22	0246	MTS
Aroclor 1262	<13	13	33	ug/kg	1		12/21/22	1354	12/31/22	0246	MTS
Aroclor 1268	<2.2	2.2	33	ug/kg	1		12/21/22	1354	12/31/22	0246	MTS
Total PCB's	<2.1	2.1	33	ug/kg	1		12/21/22	1354	12/31/22	0246	MTS
Surrogate: Tetrachloro-m-xylene	45.0	Limit: 27.6-126	% Rec		1		12/21/22	1354	12/31/22	0246	MTS
Surrogate: Decachlorobiphenyl	0	Limit: 25.2-136	% Rec		1	M, S2	12/21/22	1354	12/31/22	0246	MTS

Semivolatile Organic Compounds by GCMS

Method: SW846 3550B/EPA 8270C

1,2,4-Trichlorobenzene	<23	23	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
1,2-Dichlorobenzene	<27	27	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
1,2-Diphenyl-hydrazine	<16	16	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
1,3-Dichlorobenzene	<24	24	320	ug/kg	1	M2	12/22/22	0943	01/02/23	0923	WEH
1,4-Dichlorobenzene	<18	18	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
2,2'-oxybis(1-chloropropane)	<23	23	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
2,4,5-Trichlorophenol	<29	29	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
2,4,6-Trichlorophenol	<18	18	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
2,4-Dichlorophenol	<18	18	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
2,4-Dimethylphenol	<21	21	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
2,4-Dinitrophenol	<11	11	1600	ug/kg	1	M2	12/22/22	0943	01/02/23	0923	WEH
2,4-Dinitrotoluene	<11	11	320	ug/kg	1	R1	12/22/22	0943	01/02/23	0923	WEH
2,6-Dichlorophenol	<17	17	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
2,6-Dinitrotoluene	<27	27	320	ug/kg	1	M2	12/22/22	0943	01/02/23	0923	WEH
2-Chloronaphthalene	<24	24	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
2-Chlorophenol	<19	19	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
2-Methylnaphthalene	<22	22	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
2-Methylphenol	<21	21	320	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH
2-Nitroaniline	<17	17	1600	ug/kg	1		12/22/22	0943	01/02/23	0923	WEH

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22L1182

Client Sample ID: #1 Neutral Solids

Sample Matrix: Solid

Lab Sample ID: 22L1182-01

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GCMS	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2-Nitrophenol	<24	24	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
3,3'-Dichlorobenzidine	<19	19	1600	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
3/4-Methylphenol	<24	24	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
3-Nitroaniline	<16	16	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
4,6-Dinitro-2-methylphenol	<12	12	1600	ug/kg	1	M2	12/22/22 0943	01/02/23 0923	WEH
4-Bromophenyl phenyl ether	<23	23	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
4-Chloro-3-methylphenol	<15	15	650	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
4-Chloroaniline	<21	21	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
4-Chlorophenyl phenyl ether	<17	17	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
4-Nitroaniline	<19	19	1600	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
4-Nitrophenol	<12	12	1600	ug/kg	1	M2	12/22/22 0943	01/02/23 0923	WEH
Acenaphthene	20	20	320	ug/kg	1	J	12/22/22 0943	01/02/23 0923	WEH
Acenaphthylene	<21	21	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Acetophenone	100	22	320	ug/kg	1	J	12/22/22 0943	01/02/23 0923	WEH
Aniline	<16	16	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Anthracene	680	14	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Benzidine	<1600	1600	1600	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Benzo[a]anthracene	460	11	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Benzo[a]pyrene	<11	11	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Benzo[b]fluoranthene	750	13	320	ug/kg	1	R1	12/22/22 0943	01/02/23 0923	WEH
Benzo[g,h,i]perylene	<11	11	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Benzo[k]fluoranthene	<28	28	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Benzoic acid	<27	27	1600	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Benzyl alcohol	53	36	650	ug/kg	1	J	12/22/22 0943	01/02/23 0923	WEH
Bis(2-chloroethoxy)methane	<21	21	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Bis(2-chloroethyl)ether	<23	23	320	ug/kg	1	M2	12/22/22 0943	01/02/23 0923	WEH
Bis(2-ethylhexyl)phthalate	4600	16	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Butyl benzyl phthalate	<18	18	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Carbazole	<15	15	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Chrysene	480	12	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Dibenz[a,h]anthracene	<16	16	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Dibenzofuran	<19	19	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Diethyl phthalate	26	13	320	ug/kg	1	J	12/22/22 0943	01/02/23 0923	WEH
Dimethyl phthalate	260	15	320	ug/kg	1	J	12/22/22 0943	01/02/23 0923	WEH
Di-n-butyl phthalate	<15	15	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Di-n-octyl phthalate	<12	12	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Fluoranthene	760	13	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Fluorene	<17	17	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Hexachlorobenzene	<14	14	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Hexachlorobutadiene	<28	28	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Hexachlorocyclopentadiene	<17	17	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Hexachloroethane	<30	30	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Indeno[1,2,3cd]pyrene	210	9.3	320	ug/kg	1	J	12/22/22 0943	01/02/23 0923	WEH



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22L1182

Client Sample ID: #1 Neutral Solids

Sample Matrix: Solid

Lab Sample ID: 22L1182-01

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GCMS	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Isophorone	<12	12	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Naphthalene	<22	22	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Nitrobenzene	<28	28	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
N-Nitrosodimethylamine	<26	26	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
N-Nitrosodi-n-propylamine	<28	28	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
N-Nitrosodiphenylamine	160	17	320	ug/kg	1	J	12/22/22 0943	01/02/23 0923	WEH
Pentachlorophenol	<6.8	6.8	1600	ug/kg	1	M2	12/22/22 0943	01/02/23 0923	WEH
Phenanthrene	670	13	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Phenol	<25	25	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Pyrene	900	13	320	ug/kg	1	M1, R1	12/22/22 0943	01/02/23 0923	WEH
Pyridine	170	20	320	ug/kg	1	J	12/22/22 0943	01/02/23 0923	WEH
Total Cresol	<44	44	320	ug/kg	1		12/22/22 0943	01/02/23 0923	WEH
Surrogate: 2,4,6-Tribromophenol	19.0	Limit: 13.9-145		% Rec	1		12/22/22 0943	01/02/23 0923	WEH
Surrogate: 2-Fluorobiphenyl	37.0	Limit: 28.1-110		% Rec	1		12/22/22 0943	01/02/23 0923	WEH
Surrogate: 2-Fluorophenol	20.2	Limit: 24.5-110		% Rec	1	M, S2	12/22/22 0943	01/02/23 0923	WEH
Surrogate: Nitrobenzene-d5	32.0	Limit: 33.6-110		% Rec	1	M, S2	12/22/22 0943	01/02/23 0923	WEH
Surrogate: Phenol-d5	28.5	Limit: 29.6-110		% Rec	1	M, S2	12/22/22 0943	01/02/23 0923	WEH
Surrogate: Terphenyl-d14	38.0	Limit: 35.8-121		% Rec	1		12/22/22 0943	01/02/23 0923	WEH



Microbac Laboratories, Inc. - Chicagoland

CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #2 Neutral Liquids
Sample Matrix: Non-Aqueous Liquid
Lab Sample ID: 22L1182-02

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	9.25	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1436	MRC
Temperature	17			°C	1		12/22/22 1407	12/22/22 1436	MRC
Method: Oil CN Distillation/EPA 9012B									
Cyanide, Total	2.5	0.20	0.25	mg/L	1		12/28/22 1503	12/30/22 1017	MTF
Method: SW-846 1010A/EPA 1010A									
Ignitability	> 170	30.0	30.0	°F	1			12/28/22 1038	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	0.82	0.15	3.8	mg/Kg	10	J	12/28/22 1220	12/29/22 1748	ABG
Method: SW846 9012B/EPA 9012B									
Cyanide, Treated	9.9	0.37	0.46	mg/Kg	1		12/28/22 1503	12/30/22 1219	MTF
Method: SW-846 9030B MOD/EPA 9030B Modified									
Sulfide	<0.40	0.40	0.50	mg/Kg	1		12/22/22 1141	12/27/22 2245	EF
Metals TCLP by CVAA	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1135	JNH
Metals TCLP by ICP	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3005A/EPA 6010C									
Arsenic	<0.052	0.052	0.10	mg/L	1		12/22/22 0825	12/22/22 1526	RPL
Barium	0.049	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1526	RPL
Cadmium	<0.0030	0.0030	0.020	mg/L	1		12/22/22 0825	12/22/22 1526	RPL
Chromium	0.46	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1526	RPL
Lead	<0.049	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1526	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1526	RPL
Silver	<0.013	0.013	0.10	mg/L	1		12/22/22 0825	12/22/22 1526	RPL
Volatile Organic Compounds by GCMS	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW-846 8260B/EPA 8260B									
1,1,1,2-Tetrachloroethane	<49	49	980	ug/kg	100			12/29/22 1431	JBS
1,1,1-Trichloroethane	<89	89	490	ug/kg	100			12/29/22 1431	JBS
1,1,2,2-Tetrachloroethane	<160	160	490	ug/kg	100			12/29/22 1431	JBS
1,1,2-Trichloroethane	<49	49	490	ug/kg	100			12/29/22 1431	JBS
1,1-Dichloroethane	<59	59	490	ug/kg	100			12/29/22 1431	JBS
1,1-Dichloroethene	<59	59	490	ug/kg	100			12/29/22 1431	JBS
1,2-Dichloroethane	<79	79	490	ug/kg	100			12/29/22 1431	JBS

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Microbac Laboratories, Inc. - Chicagoland

CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #2 Neutral Liquids

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-02

Collection Date: 12/16/2022 11:00

Volatile Organic Compounds by GCMS	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,2-Dichloropropane	<110	110	490	ug/kg	100			12/29/22 1431	JBS
2-Butanone	<140	140	980	ug/kg	100			12/29/22 1431	JBS
2-Hexanone	<69	69	490	ug/kg	100			12/29/22 1431	JBS
4-Methyl-2-pentanone	<69	69	490	ug/kg	100			12/29/22 1431	JBS
Acetone	<120	120	4900	ug/kg	100			12/29/22 1431	JBS
Acrolein	<500	500	9800	ug/kg	100			12/29/22 1431	JBS
Acrylonitrile	<1700	1700	9800	ug/kg	100			12/29/22 1431	JBS
Benzene	<100	100	490	ug/kg	100			12/29/22 1431	JBS
Bromodichloromethane	<110	110	490	ug/kg	100			12/29/22 1431	JBS
Bromoform	<69	69	490	ug/kg	100			12/29/22 1431	JBS
Bromomethane	<570	570	980	ug/kg	100			12/29/22 1431	JBS
Carbon Disulfide	<98	98	980	ug/kg	100			12/29/22 1431	JBS
Carbon tetrachloride	<69	69	490	ug/kg	100			12/29/22 1431	JBS
Chlorobenzene	<110	110	490	ug/kg	100			12/29/22 1431	JBS
Chloroethane	<390	390	980	ug/kg	100			12/29/22 1431	JBS
Chloroform	<110	110	490	ug/kg	100			12/29/22 1431	JBS
Chloromethane	<69	69	980	ug/kg	100			12/29/22 1431	JBS
cis-1,2-Dichloroethene	<130	130	490	ug/kg	100			12/29/22 1431	JBS
cis-1,3-Dichloropropene	<49	49	490	ug/kg	100			12/29/22 1431	JBS
Dibromochloromethane	<49	49	490	ug/kg	100			12/29/22 1431	JBS
Ethylbenzene	<110	110	490	ug/kg	100			12/29/22 1431	JBS
m,p-Xylene	<170	170	490	ug/kg	100			12/29/22 1431	JBS
Methylene chloride	<310	310	980	ug/kg	100			12/29/22 1431	JBS
Methyl-t-Butyl Ether	<120	120	490	ug/kg	100			12/29/22 1431	JBS
o-Xylene	<110	110	490	ug/kg	100			12/29/22 1431	JBS
Styrene	<89	89	490	ug/kg	100			12/29/22 1431	JBS
Tetrachloroethene	<110	110	490	ug/kg	100			12/29/22 1431	JBS
Toluene	<59	59	490	ug/kg	100			12/29/22 1431	JBS
trans-1,2-Dichloroethene	<59	59	490	ug/kg	100			12/29/22 1431	JBS
trans-1,3-Dichloropropene	<49	49	490	ug/kg	100			12/29/22 1431	JBS
Trichloroethene	<89	89	490	ug/kg	100			12/29/22 1431	JBS
Trichlorofluoromethane	<170	170	980	ug/kg	100			12/29/22 1431	JBS
Vinyl Acetate	<120	120	980	ug/kg	100			12/29/22 1431	JBS
Vinyl chloride	<69	69	980	ug/kg	100			12/29/22 1431	JBS
Total 1,2-Dichloroethene	<190	190	490	ug/kg	100			12/29/22 1431	JBS
Total Xylenes	<280	280	490	ug/kg	100			12/29/22 1431	JBS
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 66-154	% Rec	100				12/29/22 1431	JBS
Surrogate: 4-Bromofluorobenzene	108	Limit: 48.2-167	% Rec	100				12/29/22 1431	JBS
Surrogate: Dibromofluoromethane	100	Limit: 74.1-124	% Rec	100				12/29/22 1431	JBS
Surrogate: Toluene-d8	94.2	Limit: 82.7-122	% Rec	100				12/29/22 1431	JBS



Microbac Laboratories, Inc. - Chicagoland

CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #2 Neutral Liquids

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-02

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3580A/EPA 8082A									
Aroclor 1016	<140	140	860	ug/kg	1		12/28/22 0929	12/29/22 1131	MTS
Aroclor 1221	<410	410	860	ug/kg	1		12/28/22 0929	12/29/22 1131	MTS
Aroclor 1232	<110	110	860	ug/kg	1		12/28/22 0929	12/29/22 1131	MTS
Aroclor 1242	<60	60	860	ug/kg	1		12/28/22 0929	12/29/22 1131	MTS
Aroclor 1248	<100	100	860	ug/kg	1		12/28/22 0929	12/29/22 1131	MTS
Aroclor 1254	<170	170	860	ug/kg	1		12/28/22 0929	12/29/22 1131	MTS
Aroclor 1260	<160	160	860	ug/kg	1	Q	12/28/22 0929	12/29/22 1131	MTS
Aroclor 1262	<160	160	860	ug/kg	1		12/28/22 0929	12/29/22 1131	MTS
Aroclor 1268	<220	220	860	ug/kg	1		12/28/22 0929	12/29/22 1131	MTS
Surrogate: Decachlorobiphenyl	75.0	Limit: 30.8-143		% Rec	1		12/28/22 0929	12/29/22 1131	MTS
Surrogate: Tetrachloro-m-xylene	75.0	Limit: 24.4-120		% Rec	1		12/28/22 0929	12/29/22 1131	MTS
Total PCB's	<60	60	860	ug/kg	1		12/28/22 0929	12/29/22 1131	MTS

Semivolatile Organic Compounds by GCMS	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3580A/EPA 8270C									
1,2,4-Trichlorobenzene	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
1,2-Dichlorobenzene	<20	20	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
1,2-Diphenyl-hydrazine	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
1,3-Dichlorobenzene	<23	23	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
1,4-Dichlorobenzene	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2,2'-oxybis(1-chloropropane)	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2,4,5-Trichlorophenol	<42	42	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2,4,6-Trichlorophenol	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2,4-Dichlorophenol	<20	20	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2,4-Dimethylphenol	<23	23	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2,4-Dinitrophenol	<270	270	47	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2,4-Dinitrotoluene	<23	23	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2,6-Dichlorophenol	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2,6-Dinitrotoluene	<31	31	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2-Chloronaphthalene	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2-Chlorophenol	<20	20	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2-Methylnaphthalene	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2-Methylphenol	<20	20	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2-Nitroaniline	<28	28	47	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
2-Nitrophenol	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
3,3'-Dichlorobenzidine	<20	20	47	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
3/4-Methylphenol	<23	23	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
3-Nitroaniline	<37	37	47	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
4,6-Dinitro-2-methylphenol	<31	31	47	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
4-Bromophenyl phenyl ether	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
4-Chloro-3-methylphenol	<34	34	19	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH

Microbac Laboratories, Inc.



Microbac Laboratories, Inc. - Chicagoland

CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #2 Neutral Liquids

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-02

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GCMS	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
4-Chloroaniline	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
4-Chlorophenyl phenyl ether	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
4-Nitroaniline	<48	48	47	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
4-Nitrophenol	<120	120	47	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Acenaphthene	<23	23	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Acenaphthylene	<20	20	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Acetophenone	<20	20	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Aniline	<11	11	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Anthracene	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Benzidine	<14000	14000	47	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Benzo[a]anthracene	<23	23	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Benzo[a]pyrene	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Benzo[b]fluoranthene	<45	45	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Benzo[g,h,i]perylene	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Benzo[k]fluoranthene	<62	62	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Benzoic acid	<450	450	47	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Benzyl alcohol	<25	25	19	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Bis(2-chloroethoxy)methane	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Bis(2-chloroethyl)ether	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Bis(2-ethylhexyl)phthalate	<31	31	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Butyl benzyl phthalate	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Carbazole	<34	34	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Chrysene	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Dibenz[a,h]anthracene	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Dibenzofuran	<23	23	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Diethyl phthalate	<31	31	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Dimethyl phthalate	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Di-n-butyl phthalate	<34	34	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Di-n-octyl phthalate	<31	31	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Fluoranthene	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Fluorene	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Hexachlorobenzene	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Hexachlorobutadiene	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Hexachlorocyclopentadiene	<17	17	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Hexachloroethane	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Indeno[1,2,3cd]pyrene	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Isophorone	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Naphthalene	<20	20	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Nitrobenzene	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
N-Nitrosodimethylamine	<20	20	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
N-Nitrosodi-n-propylamine	<28	28	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
N-Nitrosodiphenylamine	<20	20	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Pentachlorophenol	<37	37	47	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH



Microbac Laboratories, Inc. - Chicagoland

CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #2 Neutral Liquids

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-02

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GCMS	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Phenanthrene	<23	23	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Phenol	<11	11	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Pyrene	<25	25	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Pyridine	<93	93	9.3	mg/Kg	1	D1	12/29/22 0927	01/01/23 1151	WEH
Total Cresol	<20	20	2800	mg/Kg	1		12/29/22 0927	01/01/23 1151	WEH
Surrogate: 2,4,6-Tribromophenol	81.5	Limit: 48-177		% Rec	1		12/29/22 0927	01/01/23 1151	WEH
Surrogate: 2-Fluorobiphenyl	73.9	Limit: 36-167		% Rec	1		12/29/22 0927	01/01/23 1151	WEH
Surrogate: 2-Fluorophenol	59.4	Limit: 35-133		% Rec	1		12/29/22 0927	01/01/23 1151	WEH
Surrogate: Nitrobenzene-d5	70.7	Limit: 50-159		% Rec	1		12/29/22 0927	01/01/23 1151	WEH
Surrogate: Phenol-d5	65.7	Limit: 43-136		% Rec	1		12/29/22 0927	01/01/23 1151	WEH
Surrogate: Terphenyl-d14	86.6	Limit: 40-183		% Rec	1		12/29/22 0927	01/01/23 1151	WEH



Microbac Laboratories, Inc. - Chicagoland

CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #3 Oxidizer Solids

Sample Matrix: Solid

Lab Sample ID: 22L1182-03

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	9.36	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1439	MRC
Temperature	16			°C	1		12/22/22 1407	12/22/22 1439	MRC
Method: Solid CN Distillation/EPA 9012B									
Cyanide, Total	390	13	16	mg/Kg	50		12/28/22 1503	12/30/22 1117	MTF
Method: SW-846 1010A/ASTM D92-90 Modified									
Ignitability	> 170	30.0	30.0	°F	1			12/23/22 1016	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	<0.15	0.15	4.0	mg/Kg	10		12/28/22 1220	12/29/22 1711	ABG
Method: SW846 9012B/EPA 9012B									
Cyanide, Treated	7.7	0.36	0.45	mg/Kg	1		12/28/22 1503	12/30/22 1221	MTF
Method: SW-846 9030B MOD/EPA 9030B Modified									
Sulfide	140	4.0	5.0	mg/Kg	10		12/22/22 1141	12/27/22 2245	EF
General Parameters	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9012B									
Cyanide, Amenable to Chlorination	390	13	16	mg/L	50		12/28/22 1503	12/30/22 1117	MTF
Metals TCLP by CVAA	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1136	JNH
Metals TCLP by ICP	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3005A/EPA 6010C									
Arsenic	<0.052	0.052	0.10	mg/L	1		12/22/22 0825	12/22/22 1531	RPL
Barium	0.013	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1531	RPL
Cadmium	<0.0030	0.0030	0.020	mg/L	1		12/22/22 0825	12/22/22 1531	RPL
Chromium	0.22	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1531	RPL
Lead	<0.049	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1531	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1531	RPL
Silver	0.022	0.013	0.10	mg/L	1	J	12/22/22 0825	12/22/22 1531	RPL
Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3550B/EPA 8082A									
Aroclor 1016	<9.8	9.8	33	ug/kg	1		12/21/22 1354	12/29/22 0750	MTS
Aroclor 1221	<7.4	7.4	33	ug/kg	1		12/21/22 1354	12/29/22 0750	MTS



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22L1182

Client Sample ID: #3 Oxidizer Solids

Sample Matrix: Solid

Lab Sample ID: 22L1182-03

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Aroclor 1232	<18	18	33	ug/kg	1		12/21/22 1354	12/29/22 0750	MTS
Aroclor 1242	<31	31	33	ug/kg	1		12/21/22 1354	12/29/22 0750	MTS
Aroclor 1248	<2.9	2.9	33	ug/kg	1		12/21/22 1354	12/29/22 0750	MTS
Aroclor 1254	<2.1	2.1	33	ug/kg	1		12/21/22 1354	12/29/22 0750	MTS
Aroclor 1260	<13	13	33	ug/kg	1		12/21/22 1354	12/29/22 0750	MTS
Aroclor 1262	<13	13	33	ug/kg	1		12/21/22 1354	12/29/22 0750	MTS
Aroclor 1268	<2.2	2.2	33	ug/kg	1		12/21/22 1354	12/29/22 0750	MTS
Total PCB's	<2.1	2.1	33	ug/kg	1		12/21/22 1354	12/29/22 0750	MTS
Surrogate: Tetrachloro-m-xylene	45.0	Limit: 27.6-126		% Rec	1		12/21/22 1354	12/29/22 0750	MTS
Surrogate: Decachlorobiphenyl	95.0	Limit: 25.2-136		% Rec	1		12/21/22 1354	12/29/22 0750	MTS



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CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #4 Oxidizer Liquids

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-04

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	9.45	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1441	MRC
Temperature	17			°C	1		12/22/22 1407	12/22/22 1441	MRC
Method: Oil CN Distillation/EPA 9012B									
Cyanide, Total	1.1	0.22	0.27	mg/L	1		12/28/22 1503	12/30/22 1023	MTF
Method: SW-846 1010A/EPA 1010A									
Ignitability	> 170	30.0	30.0	°F	1			12/28/22 1127	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	1.2	0.015	0.40	mg/Kg	1		12/28/22 1220	12/29/22 1755	ABG
Method: SW846 9012B/EPA 9012B									
Cyanide, Treated	2.7	0.34	0.42	mg/Kg	1		12/28/22 1503	12/30/22 1223	MTF
Method: SW-846 9030B MOD/EPA 9030B Modified									
Sulfide	<0.40	0.40	0.50	mg/Kg	1		12/22/22 1141	12/27/22 2245	EF
Metals TCLP by CVAA	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1137	JNH
Metals TCLP by ICP	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3005A/EPA 6010C									
Arsenic	<0.052	0.052	0.10	mg/L	1		12/22/22 0825	12/22/22 1536	RPL
Barium	0.021	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1536	RPL
Cadmium	<0.0030	0.0030	0.020	mg/L	1		12/22/22 0825	12/22/22 1536	RPL
Chromium	1.9	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1536	RPL
Lead	<0.049	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1536	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1536	RPL
Silver	<0.013	0.013	0.10	mg/L	1		12/22/22 0825	12/22/22 1536	RPL
Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3580A/EPA 8082A									
Aroclor 1016	<150	150	960	ug/kg	1		12/28/22 0929	12/29/22 1149	MTS
Aroclor 1221	<460	460	960	ug/kg	1		12/28/22 0929	12/29/22 1149	MTS
Aroclor 1232	<120	120	960	ug/kg	1		12/28/22 0929	12/29/22 1149	MTS
Aroclor 1242	<67	67	960	ug/kg	1		12/28/22 0929	12/29/22 1149	MTS
Aroclor 1248	<120	120	960	ug/kg	1		12/28/22 0929	12/29/22 1149	MTS
Aroclor 1254	<190	190	960	ug/kg	1		12/28/22 0929	12/29/22 1149	MTS
Aroclor 1260	<180	180	960	ug/kg	1	Q	12/28/22 0929	12/29/22 1149	MTS

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22L1182

Client Sample ID: #4 Oxidizer Liquids

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-04

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Aroclor 1262	<170	170	960	ug/kg	1		12/28/22 0929	12/29/22 1149	MTS
Aroclor 1268	<240	240	960	ug/kg	1		12/28/22 0929	12/29/22 1149	MTS
Surrogate: Decachlorobiphenyl	70.0	Limit: 30.8-143		% Rec	1		12/28/22 0929	12/29/22 1149	MTS
Surrogate: Tetrachloro-m-xylene	70.0	Limit: 24.4-120		% Rec	1		12/28/22 0929	12/29/22 1149	MTS
Total PCB's	<67	67	960	ug/kg	1		12/28/22 0929	12/29/22 1149	MTS



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CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #5 Cyanide Liquids Neutral

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-05

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	9.19	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1443	MRC
Temperature	17			°C	1		12/22/22 1407	12/22/22 1443	MRC
Method: Oil CN Distillation/EPA 9012B									
Cyanide, Total	1300	63	79	mg/L	250		12/28/22 1503	12/30/22 1137	MTF
Method: SW-846 1010A/EPA 1010A									
Ignitability	> 170	30.0	30.0	°F	1			12/29/22 1029	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	41	0.076	2.0	mg/Kg	5		12/28/22 1220	12/29/22 1715	ABG
Method: SW846 9012B/EPA 9012B									
Cyanide, Treated	250	19	24	mg/Kg	50		12/28/22 1503	12/30/22 1255	MTF
Method: SW-846 9030B MOD/EPA 9030B Modified									
Sulfide	<0.37	0.37	0.46	mg/Kg	1		12/22/22 1141	12/27/22 2245	EF
Metals TCLP by CVAA	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1138	JNH
Metals TCLP by ICP	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3005A/EPA 6010C									
Arsenic	0.052	0.052	0.10	mg/L	1	J	12/22/22 0825	12/22/22 1541	RPL
Barium	0.14	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1541	RPL
Cadmium	<0.0030	0.0030	0.020	mg/L	1		12/22/22 0825	12/22/22 1541	RPL
Chromium	57	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1541	RPL
Lead	<0.049	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1541	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1541	RPL
Silver	0.46	0.013	0.10	mg/L	1		12/22/22 0825	12/22/22 1541	RPL
Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3580A/EPA 8082A									
Aroclor 1016	<130	130	800	ug/kg	1		12/28/22 0929	12/29/22 1207	MTS
Aroclor 1221	<380	380	800	ug/kg	1		12/28/22 0929	12/29/22 1207	MTS
Aroclor 1232	<100	100	800	ug/kg	1		12/28/22 0929	12/29/22 1207	MTS
Aroclor 1242	<56	56	800	ug/kg	1		12/28/22 0929	12/29/22 1207	MTS
Aroclor 1248	<96	96	800	ug/kg	1		12/28/22 0929	12/29/22 1207	MTS
Aroclor 1254	<160	160	800	ug/kg	1		12/28/22 0929	12/29/22 1207	MTS
Aroclor 1260	<150	150	800	ug/kg	1	Q	12/28/22 0929	12/29/22 1207	MTS

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22L1182

Client Sample ID: #5 Cyanide Liquids Neutral

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-05

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Aroclor 1262	<140	140	800	ug/kg	1		12/28/22 0929	12/29/22 1207	MTS
Aroclor 1268	<200	200	800	ug/kg	1		12/28/22 0929	12/29/22 1207	MTS
Surrogate: Decachlorobiphenyl	70.0	Limit: 30.8-143		% Rec	1		12/28/22 0929	12/29/22 1207	MTS
Surrogate: Tetrachloro-m-xylene	65.0	Limit: 24.4-120		% Rec	1		12/28/22 0929	12/29/22 1207	MTS
Total PCB's	<56	56	800	ug/kg	1		12/28/22 0929	12/29/22 1207	MTS



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CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #6 Cyanide Liquids Basic

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-06

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	> 12.50	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1444	MRC
Temperature	17			°C	1		12/22/22 1407	12/22/22 1444	MRC
Method: Oil CN Distillation/EPA 9012B									
Cyanide, Total	4200	210	260	mg/L	962		12/28/22 1503	12/30/22 1121	MTF
Method: SW-846 1010A/EPA 1010A									
Ignitability	> 170	30.0	30.0	°F	1			12/29/22 1112	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	<0.015	0.015	0.40	mg/Kg	1		12/28/22 1220	12/29/22 1757	ABG
Method: SW846 9012B/EPA 9012B									
Cyanide, Treated	670	19	24	mg/Kg	50		12/28/22 1503	12/30/22 1257	MTF
Method: SW-846 9030B MOD/EPA 9030B Modified									
Sulfide	<0.44	0.44	0.55	mg/Kg	1		12/22/22 1141	12/27/22 2245	EF
Metals TCLP by CVAA									
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1140	JNH
Metals TCLP by ICP									
Method: SW846 3005A/EPA 6010C									
Arsenic	0.28	0.052	0.10	mg/L	1		12/22/22 0825	12/22/22 1547	RPL
Barium	0.13	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1547	RPL
Cadmium	<0.0030	0.0030	0.020	mg/L	1		12/22/22 0825	12/22/22 1547	RPL
Chromium	0.16	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1547	RPL
Lead	<0.049	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1547	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1547	RPL
Silver	0.18	0.013	0.10	mg/L	1		12/22/22 0825	12/22/22 1547	RPL
Semivolatile Organic Compounds by GC/ECD									
Method: SW846 3580A/EPA 8082A									
Aroclor 1016	<130	130	790	ug/kg	1		12/28/22 0929	12/29/22 1225	MTS
Aroclor 1221	<380	380	790	ug/kg	1		12/28/22 0929	12/29/22 1225	MTS
Aroclor 1232	<100	100	790	ug/kg	1		12/28/22 0929	12/29/22 1225	MTS
Aroclor 1242	<56	56	790	ug/kg	1		12/28/22 0929	12/29/22 1225	MTS
Aroclor 1248	<95	95	790	ug/kg	1		12/28/22 0929	12/29/22 1225	MTS
Aroclor 1254	<160	160	790	ug/kg	1		12/28/22 0929	12/29/22 1225	MTS
Aroclor 1260	<150	150	790	ug/kg	1	Q	12/28/22 0929	12/29/22 1225	MTS

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22L1182

Client Sample ID: #6 Cyanide Liquids Basic

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-06

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Aroclor 1262	<140	140	790	ug/kg	1		12/28/22 0929	12/29/22 1225	MTS
Aroclor 1268	<200	200	790	ug/kg	1		12/28/22 0929	12/29/22 1225	MTS
Surrogate: Decachlorobiphenyl	65.0	Limit: 30.8-143		% Rec	1		12/28/22 0929	12/29/22 1225	MTS
Surrogate: Tetrachloro-m-xylene	70.0	Limit: 24.4-120		% Rec	1		12/28/22 0929	12/29/22 1225	MTS
Total PCB's	<56	56	790	ug/kg	1		12/28/22 0929	12/29/22 1225	MTS



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22L1182

Client Sample ID: #7 Cyanide Solids

Sample Matrix: Solid

Lab Sample ID: 22L1182-07

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	9.43	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1449	MRC
Temperature	18			°C	1		12/22/22 1407	12/22/22 1449	MRC
Method: Solid CN Distillation/EPA 9012B									
Cyanide, Total	6800	140	170	mg/Kg	500		12/28/22 1503	12/30/22 1139	MTF
Method: SW-846 1010A/ASTM D92-90 Modified									
Ignitability	> 170	30.0	30.0	°F	1			12/23/22 1016	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	<0.15	0.15	3.9	mg/Kg	10		12/28/22 1220	12/29/22 1720	ABG
Method: SW846 9012B/EPA 9012B									
Cyanide, Treated	840	17	21	mg/Kg	50		12/28/22 1503	12/30/22 1259	MTF
Method: SW-846 9030B MOD/EPA 9030B Modified									
Sulfide	73	4.8	6.0	mg/Kg	10		12/22/22 1141	12/27/22 2245	EF
General Parameters	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9012B									
Cyanide, Amenable to Chlorination	6800	140	170	mg/L	500		12/28/22 1503	12/30/22 1139	MTF
Metals TCLP by CVAA	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1141	JNH
Metals TCLP by ICP	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3005A/EPA 6010C									
Arsenic	<0.052	0.052	0.10	mg/L	1		12/22/22 0825	12/22/22 1602	RPL
Barium	0.11	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1602	RPL
Cadmium	0.024	0.0030	0.020	mg/L	1		12/22/22 0825	12/22/22 1602	RPL
Chromium	0.39	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1602	RPL
Lead	<0.049	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1602	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1602	RPL
Silver	0.40	0.013	0.10	mg/L	1		12/22/22 0825	12/22/22 1602	RPL
Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3550B/EPA 8082A									
Aroclor 1016	<9.6	9.6	32	ug/kg	1		12/21/22 1354	01/03/23 1201	MTS
Aroclor 1221	<7.2	7.2	32	ug/kg	1		12/21/22 1354	01/03/23 1201	MTS



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22L1182

Client Sample ID: #7 Cyanide Solids

Sample Matrix: Solid

Lab Sample ID: 22L1182-07

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Aroclor 1232	<18	18	32	ug/kg	1		12/21/22 1354	01/03/23 1201	MTS
Aroclor 1242	160	30	32	ug/kg	1		12/21/22 1354	01/03/23 1201	MTS
Aroclor 1248	<2.8	2.8	32	ug/kg	1		12/21/22 1354	01/03/23 1201	MTS
Aroclor 1254	<2.1	2.1	32	ug/kg	1		12/21/22 1354	01/03/23 1201	MTS
Aroclor 1260	<13	13	32	ug/kg	1		12/21/22 1354	01/03/23 1201	MTS
Aroclor 1262	<12	12	32	ug/kg	1		12/21/22 1354	01/03/23 1201	MTS
Aroclor 1268	<2.1	2.1	32	ug/kg	1		12/21/22 1354	01/03/23 1201	MTS
Total PCB's	160	2.1	32	ug/kg	1		12/21/22 1354	01/03/23 1201	MTS
Surrogate: Tetrachloro-m-xylene	90.0	Limit: 27.6-126		% Rec	1		12/21/22 1354	01/03/23 1201	MTS
Surrogate: Decachlorobiphenyl	135	Limit: 25.2-136		% Rec	1		12/21/22 1354	01/03/23 1201	MTS



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CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #8 Alkaline Liquids
Sample Matrix: Non-Aqueous Liquid
Lab Sample ID: 22L1182-08

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	> 12.50	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1451	MRC
Temperature	16			°C	1		12/22/22 1407	12/22/22 1451	MRC
Method: Oil CN Distillation/EPA 9012B									
Cyanide, Total	5.6	0.26	0.33	mg/L	1		12/28/22 1503	12/30/22 1025	MTF
Method: SW-846 1010A/EPA 1010A									
Ignitability	> 170	30.0	30.0	°F	1			12/29/22 1237	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	14	0.073	1.9	mg/Kg	5		12/28/22 1220	12/29/22 1722	ABG
Method: SW846 9012B/EPA 9012B									
Cyanide, Treated	2.8	0.38	0.47	mg/Kg	1		12/28/22 1503	12/30/22 1230	MTF
Method: SW-846 9030B MOD/EPA 9030B Modified									
Sulfide	<0.44	0.44	0.55	mg/Kg	1		12/22/22 1141	12/27/22 2245	EF
Metals TCLP by CVAA	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1142	JNH
Metals TCLP by ICP	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3005A/EPA 6010C									
Arsenic	3.3	0.052	0.10	mg/L	1		12/22/22 0825	12/22/22 1622	RPL
Barium	0.14	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1622	RPL
Cadmium	<0.0030	0.0030	0.020	mg/L	1		12/22/22 0825	12/22/22 1622	RPL
Chromium	22	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1622	RPL
Lead	0.078	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1622	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1622	RPL
Silver	0.030	0.013	0.10	mg/L	1	J	12/22/22 0825	12/23/22 1559	RPL
Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3580A/EPA 8082A									
Aroclor 1016	<140	140	870	ug/kg	1		12/28/22 0929	12/29/22 1243	MTS
Aroclor 1221	<420	420	870	ug/kg	1		12/28/22 0929	12/29/22 1243	MTS
Aroclor 1232	<110	110	870	ug/kg	1		12/28/22 0929	12/29/22 1243	MTS
Aroclor 1242	<61	61	870	ug/kg	1		12/28/22 0929	12/29/22 1243	MTS
Aroclor 1248	<100	100	870	ug/kg	1		12/28/22 0929	12/29/22 1243	MTS
Aroclor 1254	<170	170	870	ug/kg	1		12/28/22 0929	12/29/22 1243	MTS
Aroclor 1260	<170	170	870	ug/kg	1	Q	12/28/22 0929	12/29/22 1243	MTS

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22L1182

Client Sample ID: #8 Alkaline Liquids

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-08

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Aroclor 1262	<160	160	870	ug/kg	1		12/28/22 0929	12/29/22 1243	MTS
Aroclor 1268	<220	220	870	ug/kg	1		12/28/22 0929	12/29/22 1243	MTS
Surrogate: Decachlorobiphenyl	55.0	Limit: 30.8-143		% Rec	1		12/28/22 0929	12/29/22 1243	MTS
Surrogate: Tetrachloro-m-xylene	65.0	Limit: 24.4-120		% Rec	1		12/28/22 0929	12/29/22 1243	MTS
Total PCB's	<61	61	870	ug/kg	1		12/28/22 0929	12/29/22 1243	MTS



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22L1182

Client Sample ID: #9 Alkaline Solids

Sample Matrix: Solid

Lab Sample ID: 22L1182-09

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	10.3	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1453	MRC
Temperature	16			°C	1		12/22/22 1407	12/22/22 1453	MRC
Method: Solid CN Distillation/EPA 9012B									
Cyanide, Total	230	5.6	7.0	mg/Kg	19		12/28/22 1503	12/30/22 1046	MTF
Method: SW-846 1010A/ASTM D92-90 Modified									
Ignitability	> 170	30.0	30.0	°F	1			12/23/22 1154	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	78	0.15	3.9	mg/Kg	10		12/28/22 1220	12/29/22 1728	ABG
Method: SW846 9012B/EPA 9012B									
Cyanide, Treated	400	6.5	8.1	mg/Kg	19		12/28/22 1503	12/30/22 1232	MTF
Method: SW-846 9030B MOD/EPA 9030B Modified									
Sulfide	<0.40	0.40	0.50	mg/Kg	1		12/22/22 1141	12/27/22 2245	EF
General Parameters	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9012B									
Cyanide, Amenable to Chlorination	230	5.6	7.0	mg/L	19		12/28/22 1503	12/30/22 1046	MTF
Metals TCLP by CVAA	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1148	JNH
Metals TCLP by ICP	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3005A/EPA 6010C									
Arsenic	<0.052	0.052	0.10	mg/L	1		12/22/22 0825	12/22/22 1627	RPL
Barium	0.46	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1627	RPL
Cadmium	0.030	0.0030	0.020	mg/L	1		12/22/22 0825	12/22/22 1627	RPL
Chromium	0.60	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1627	RPL
Lead	<0.049	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1627	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1627	RPL
Silver	<0.013	0.013	0.10	mg/L	1		12/22/22 0825	12/23/22 1604	MCD
Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: SW846 3550B/EPA 8082A									
Aroclor 1016	<9.6	9.6	32	ug/kg	1		12/21/22 1354	12/29/22 0826	MTS
Aroclor 1221	<7.3	7.3	32	ug/kg	1		12/21/22 1354	12/29/22 0826	MTS



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22L1182

Client Sample ID: #9 Alkaline Solids

Sample Matrix: Solid

Lab Sample ID: 22L1182-09

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Aroclor 1232	<18	18	32	ug/kg	1		12/21/22 1354	12/29/22 0826	MTS
Aroclor 1242	<30	30	32	ug/kg	1		12/21/22 1354	12/29/22 0826	MTS
Aroclor 1248	<2.8	2.8	32	ug/kg	1		12/21/22 1354	12/29/22 0826	MTS
Aroclor 1254	<2.1	2.1	32	ug/kg	1		12/21/22 1354	12/29/22 0826	MTS
Aroclor 1260	<13	13	32	ug/kg	1		12/21/22 1354	12/29/22 0826	MTS
Aroclor 1262	<12	12	32	ug/kg	1		12/21/22 1354	12/29/22 0826	MTS
Aroclor 1268	<2.2	2.2	32	ug/kg	1		12/21/22 1354	12/29/22 0826	MTS
Total PCB's	<2.1	2.1	32	ug/kg	1		12/21/22 1354	12/29/22 0826	MTS
Surrogate: Tetrachloro-m-xylene	45.0	Limit: 27.6-126		% Rec	1		12/21/22 1354	12/29/22 0826	MTS
Surrogate: Decachlorobiphenyl	50.0	Limit: 25.2-136		% Rec	1		12/21/22 1354	12/29/22 0826	MTS



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CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #10 Mixed Acids

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-10

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	< 2.00			S.U.	1		12/22/22 1407	12/22/22 1455	MRC
Temperature	17			°C	1		12/22/22 1407	12/22/22 1455	MRC
Method: SW-846 1010A/EPA 1010A									
Ignitability	> 170	30.0	30.0	°F	1			12/29/22 1521	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	<0.015	0.015	0.40	mg/Kg	1		12/28/22 1220	12/29/22 1759	ABG
Metals TCLP by CVAA									
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1150	JNH
Metals TCLP by ICP									
Method: SW846 3005A/EPA 6010C									
Arsenic	0.14	0.052	0.10	mg/L	1		12/22/22 0825	12/22/22 1632	RPL
Barium	0.16	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1632	RPL
Cadmium	0.69	0.0030	0.020	mg/L	1		12/22/22 0825	12/22/22 1632	RPL
Chromium	200	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1632	RPL
Lead	0.43	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1632	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1632	RPL
Silver	0.096	0.013	0.10	mg/L	1	J	12/22/22 0825	12/23/22 1609	MCD
Semivolatile Organic Compounds by GC/ECD									
Method: SW846 3580A/EPA 8082A									
Aroclor 1016	<150	150	940	ug/kg	1		12/28/22 0929	12/29/22 1301	MTS
Aroclor 1221	<450	450	940	ug/kg	1		12/28/22 0929	12/29/22 1301	MTS
Aroclor 1232	<120	120	940	ug/kg	1		12/28/22 0929	12/29/22 1301	MTS
Aroclor 1242	<66	66	940	ug/kg	1		12/28/22 0929	12/29/22 1301	MTS
Aroclor 1248	<110	110	940	ug/kg	1		12/28/22 0929	12/29/22 1301	MTS
Aroclor 1254	<190	190	940	ug/kg	1		12/28/22 0929	12/29/22 1301	MTS
Aroclor 1260	<180	180	940	ug/kg	1	Q	12/28/22 0929	12/29/22 1301	MTS
Aroclor 1262	<170	170	940	ug/kg	1		12/28/22 0929	12/29/22 1301	MTS
Aroclor 1268	<240	240	940	ug/kg	1		12/28/22 0929	12/29/22 1301	MTS
Surrogate: Decachlorobiphenyl	65.0	Limit: 30.8-143	% Rec	1			12/28/22 0929	12/29/22 1301	MTS
Surrogate: Tetrachloro-m-xylene	65.0	Limit: 24.4-120	% Rec	1			12/28/22 0929	12/29/22 1301	MTS
Total PCB's	<66	66	940	ug/kg	1		12/28/22 0929	12/29/22 1301	MTS



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22L1182

Client Sample ID: #11 Chrome Liquids

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-11

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	2.51	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1457	MRC
Temperature	17			°C	1		12/22/22 1407	12/22/22 1457	MRC
Method: Oil CN Distillation/EPA 9012B									
Cyanide, Total	0.29	0.23	0.29	mg/L	1		12/28/22 1503	12/30/22 1048	MTF
Method: SW-846 1010A/EPA 1010A									
Ignitability	> 170	30.0	30.0	°F	1			12/29/22 1604	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	3100	7.6	200	mg/Kg	500		12/28/22 1220	12/29/22 1802	ABG
Method: SW846 9012B/EPA 9012B									
Cyanide, Treated	<0.37	0.37	0.46	mg/Kg	1		12/28/22 1503	12/30/22 1234	MTF
Method: SW-846 9030B MOD/EPA 9030B Modified									
Sulfide	<0.48	0.48	0.60	mg/Kg	1		12/22/22 1141	12/27/22 2245	EF
Metals TCLP by CVAA									
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1151	JNH
Metals TCLP by ICP									
Method: SW846 3005A/EPA 6010C									
Arsenic	3.6	0.52	1.0	mg/L	10		12/22/22 0825	12/23/22 1614	MCD
Barium	0.10	0.068	50	mg/L	10	J	12/22/22 0825	12/23/22 1614	MCD
Cadmium	<0.030	0.030	0.20	mg/L	10	D3	12/22/22 0825	12/23/22 1614	MCD
Chromium	16000	1.5	5.0	mg/L	100		12/22/22 0825	12/27/22 1909	MCD
Lead	<0.49	0.49	0.75	mg/L	10	D3	12/22/22 0825	12/23/22 1614	MCD
Selenium	<0.58	0.58	3.0	mg/L	10	D3	12/22/22 0825	12/23/22 1614	MCD
Silver	<0.13	0.13	1.0	mg/L	10	D3	12/22/22 0825	12/23/22 1614	MCD
Semivolatile Organic Compounds by GC/ECD									
Method: SW846 3580A/EPA 8082A									
Aroclor 1016	<160	160	970	ug/kg	1		12/28/22 0929	12/29/22 1319	MTS
Aroclor 1221	<470	470	970	ug/kg	1		12/28/22 0929	12/29/22 1319	MTS
Aroclor 1232	<130	130	970	ug/kg	1		12/28/22 0929	12/29/22 1319	MTS
Aroclor 1242	<68	68	970	ug/kg	1		12/28/22 0929	12/29/22 1319	MTS
Aroclor 1248	<120	120	970	ug/kg	1		12/28/22 0929	12/29/22 1319	MTS
Aroclor 1254	<190	190	970	ug/kg	1		12/28/22 0929	12/29/22 1319	MTS
Aroclor 1260	<180	180	970	ug/kg	1	Q	12/28/22 0929	12/29/22 1319	MTS

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22L1182

Client Sample ID: #11 Chrome Liquids

Sample Matrix: Non-Aqueous Liquid

Lab Sample ID: 22L1182-11

Collection Date: 12/16/2022 11:00

Semivolatile Organic Compounds by GC/ECD	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Aroclor 1262	<170	170	970	ug/kg	1		12/28/22 0929	12/29/22 1319	MTS
Aroclor 1268	<240	240	970	ug/kg	1		12/28/22 0929	12/29/22 1319	MTS
Surrogate: Decachlorobiphenyl	65.0	Limit: 30.8-143		% Rec	1		12/28/22 0929	12/29/22 1319	MTS
Surrogate: Tetrachloro-m-xylene	65.0	Limit: 24.4-120		% Rec	1		12/28/22 0929	12/29/22 1319	MTS
Total PCB's	<68	68	970	ug/kg	1		12/28/22 0929	12/29/22 1319	MTS



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CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #12 Nitric Acids
Sample Matrix: Non-Aqueous Liquid
Lab Sample ID: 22L1182-12

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	9.26	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1500	MRC
Temperature	16			°C	1		12/22/22 1407	12/22/22 1500	MRC
Method: SW-846 1010A/EPA 1010A									
Ignitability	> 170	30.0	30.0	°F	1			12/30/22 1016	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	11	0.072	1.9	mg/Kg	5		12/28/22 1220	12/29/22 1735	ABG
Metals TCLP by CVAA									
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1152	JNH
Metals TCLP by ICP									
Method: SW846 3005A/EPA 6010C									
Arsenic	<0.052	0.052	0.10	mg/L	1		12/22/22 0825	12/22/22 1642	RPL
Barium	0.032	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1642	RPL
Cadmium	<0.0030	0.0030	0.020	mg/L	1		12/22/22 0825	12/22/22 1642	RPL
Chromium	1.3	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1642	RPL
Lead	<0.049	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1642	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1642	RPL
Silver	<0.013	0.013	0.10	mg/L	1		12/22/22 0825	12/23/22 1619	MCD
Semivolatile Organic Compounds by GC/ECD									
Method: SW846 3580A/EPA 8082A									
Aroclor 1016	<150	150	930	ug/kg	1		12/28/22 0929	12/29/22 1337	MTS
Aroclor 1221	<450	450	930	ug/kg	1		12/28/22 0929	12/29/22 1337	MTS
Aroclor 1232	<120	120	930	ug/kg	1		12/28/22 0929	12/29/22 1337	MTS
Aroclor 1242	<65	65	930	ug/kg	1		12/28/22 0929	12/29/22 1337	MTS
Aroclor 1248	<110	110	930	ug/kg	1		12/28/22 0929	12/29/22 1337	MTS
Aroclor 1254	<190	190	930	ug/kg	1		12/28/22 0929	12/29/22 1337	MTS
Aroclor 1260	<180	180	930	ug/kg	1	Q	12/28/22 0929	12/29/22 1337	MTS
Aroclor 1262	<170	170	930	ug/kg	1		12/28/22 0929	12/29/22 1337	MTS
Aroclor 1268	<230	230	930	ug/kg	1		12/28/22 0929	12/29/22 1337	MTS
Surrogate: Decachlorobiphenyl	70.0	Limit: 30.8-143	% Rec	1			12/28/22 0929	12/29/22 1337	MTS
Surrogate: Tetrachloro-m-xylene	80.0	Limit: 24.4-120	% Rec	1			12/28/22 0929	12/29/22 1337	MTS
Total PCB's	<65	65	930	ug/kg	1		12/28/22 0929	12/29/22 1337	MTS



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CERTIFICATE OF ANALYSIS

22L1182

Client Sample ID: #13 Acidic Sludge

Sample Matrix: Solid

Lab Sample ID: 22L1182-13

Collection Date: 12/16/2022 11:00

Inorganics Total	Result	MDL	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Method: EPA 9045D									
pH	8.52	2.00	2.00	S.U.	1		12/22/22 1407	12/22/22 1501	MRC
Temperature	16			°C	1		12/22/22 1407	12/22/22 1501	MRC
Method: SW-846 1010A/ASTM D92-90 Modified									
Ignitability	> 170	30.0	30.0	°F	1			12/23/22 1154	MTF
Method: SW846 3060A/EPA 7196A									
Chromium, Hexavalent	0.043	0.015	0.39	mg/Kg	1	J	12/28/22 1220	12/29/22 1804	ABG
Metals TCLP by CVAA									
Method: SW-846 7470/EPA 7470A									
Mercury	<0.0050	0.0050	0.0050	mg/L	1		12/22/22 0835	12/23/22 1153	JNH
Metals TCLP by ICP									
Method: SW846 3005A/EPA 6010C									
Arsenic	<0.052	0.052	0.10	mg/L	1		12/22/22 0825	12/22/22 1647	RPL
Barium	0.015	0.0068	5.0	mg/L	1	J	12/22/22 0825	12/22/22 1647	RPL
Cadmium	0.026	0.0030	0.020	mg/L	1		12/22/22 0825	12/22/22 1647	RPL
Chromium	0.40	0.015	0.050	mg/L	1		12/22/22 0825	12/22/22 1647	RPL
Lead	<0.049	0.049	0.075	mg/L	1		12/22/22 0825	12/22/22 1647	RPL
Selenium	<0.058	0.058	0.30	mg/L	1		12/22/22 0825	12/22/22 1647	RPL
Silver	<0.013	0.013	0.10	mg/L	1		12/22/22 0825	12/23/22 1624	MCD
Semivolatile Organic Compounds by GC/ECD									
Method: SW846 3550B/EPA 8082A									
Aroclor 1016	<9.6	9.6	32	ug/kg	1		12/21/22 1354	12/29/22 0844	MTS
Aroclor 1221	<7.3	7.3	32	ug/kg	1		12/21/22 1354	12/29/22 0844	MTS
Aroclor 1232	<18	18	32	ug/kg	1		12/21/22 1354	12/29/22 0844	MTS
Aroclor 1242	<31	31	32	ug/kg	1		12/21/22 1354	12/29/22 0844	MTS
Aroclor 1248	<2.9	2.9	32	ug/kg	1		12/21/22 1354	12/29/22 0844	MTS
Aroclor 1254	<2.1	2.1	32	ug/kg	1		12/21/22 1354	12/29/22 0844	MTS
Aroclor 1260	<13	13	32	ug/kg	1		12/21/22 1354	12/29/22 0844	MTS
Aroclor 1262	<13	13	32	ug/kg	1		12/21/22 1354	12/29/22 0844	MTS
Aroclor 1268	<2.2	2.2	32	ug/kg	1		12/21/22 1354	12/29/22 0844	MTS
Total PCB's	<2.1	2.1	32	ug/kg	1		12/21/22 1354	12/29/22 0844	MTS
Surrogate: Tetrachloro-m-xylene	20.0	Limit: 27.6-126	% Rec		1	M, S2	12/21/22 1354	12/29/22 0844	MTS
Surrogate: Decachlorobiphenyl	0	Limit: 25.2-136	% Rec		1	M, S2	12/21/22 1354	12/29/22 0844	MTS



Microbac Laboratories, Inc. - Chicagoland

CERTIFICATE OF ANALYSIS

22L1182

Definitions

°C:	Degrees Celsius
°F:	Degrees Fahrenheit
D1:	Dilution was performed due to matrix interference.
D3:	Dilution was performed due to high target analyte concentration.
DF:	Dilution Factor representing the amount the sample was diluted during analysis and may not represent preparation factors.
I1:	Internal standard was outside of acceptance limits.
J:	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
M:	Matrix interference is present.
M1:	Matrix spike recovery is outside of acceptance limits, biased high.
M2:	Matrix spike recovery is outside of acceptance limits, biased low.
M5:	Post digestion spike is outside of acceptance limits.
MDL:	Minimum Detection Limit
mg/Kg:	Milligrams per Kilogram
mg/L:	Milligrams per Liter
Q:	One or more quality control criteria failed.
Q2:	LCS recovery is above acceptance limits. However there is no impact on the reported value.
R1:	Duplicate RPD is outside of acceptance limits.
RL:	Reporting Limit
S:	Spike recovery outside of acceptance limits.
S.U.:	Standard Units
S2:	Surrogate recovery is below acceptance limits.
ug/kg:	Micrograms per Kilogram
ug/L:	Micrograms per Liter
ug/mL:	Micrograms per Milliliter

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 14.9°C

Cooler Inspection Checklist

Ice Present or not required?	No	Shipping containers sealed or not required?	Yes
Custody seals intact or not required?	Yes	Chain of Custody (COC) Present?	Yes
COC includes customer information?	Yes	Relinquished and received signature on COC?	Yes
Sample collector identified on COC?	Yes	Sample type identified on COC?	Yes
Correct type of Containers Received	Yes	Correct number of containers listed on COC?	Yes
Containers Intact?	Yes	COC includes requested analyses?	Yes
Enough sample volume for indicated tests received?	Yes	Sample labels match COC (Name, Date & Time?)	Yes
Samples arrived within hold time?	Yes	Correct preservatives on COC or not required?	Yes
Chemical preservations checked or not required?	Yes	Preservation checks meet method requirements?	Yes
VOA vials have zero headspace, or not recd.?	Yes		

Report Comments

The data and information on this, and other accompanying documents, represents only the sample(s) analyzed. This report is incomplete unless all pages indicated in the footnote are present and an authorized signature is included. The services were provided under and subject to Microbac's standard terms and conditions which can be located and reviewed at <https://www.microbac.com/standard-terms-conditions>.

Reviewed and Approved By:

Ron Misiunas
Lab Director
ron.misiunas@microbac.com
01/03/2023 18:47

Microbac Laboratories, Inc.

250 West 84th Drive | Merrillville, IN 46410 | 219.769.8378 p | www.microbac.com

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Number **168380**

Instructions on back

Lab Report Address

Client Name: Environmental Restoration
 Address: 1666 Fabick Dr
 City, State, Zip: St. Louis MO 63025
 Contact: Gary Acquero
 Telephone No.: 314 922 7037

Invoice Address

Client Name: same as client
 Address: same as client
 City, State, Zip: same as client
 Contact: AP
 Telephone No.: 636 203 5053

Turnaround Time

☒ Routine (5 to 7 business days)
☐ RUSH* (notify lab)

(needed by)

Report Type

☒ Results Only ☐ Level 1 ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ EDD

TO BE COMPLETED BY MICROBAC

Temperature Upon Receipt (°C) 14.8
 Therm ID 10.1
 Holding Time 14.9
 Samples Received on Ice? ☐ Yes ☐ No ☒ N/A
 Custody Seals Intact? ☐ Yes ☐ No ☒ N/A

Send Report via: ☐ Mail ☐ Fax ☒ e-mail (address) g.acquero@erllc.com

Project: Specified PlottingLocation: Chicago IL

PO No.:

Compliance Monitoring? ☐ Yes ☒ No
☐ Agency/Program

Sampled by (PRINT): Gary AcqueroSampler Signature: [Signature]Sampler Phone No.: 314 922 7037* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify) LW Liquid Waste** Preservative Types: (1) HNO₃, (2) H₂SO₄, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	TECP RESA 8 metals	Total VOC	Total SVOC	Total Hex	Chlorine	Total CN	amenable sulfide	cyanoide	RB	Flash point	pH	Additional Notes
	#1 Neutral Solids	12/19/22	1100	1	S	C	NA	X	X	X	X	X	X	X	X	X	X	X	01
	#2 Neutral Liquids	12/19/22		2	LW	C		X	X	X	X	X	X	X	X	X	X	X	02
	#3 Oxidized Solids	12/19/22		1	S	C		X			X	X	X	X	X	X	X	X	03
	#4 Oxidized Liquids	12/19/22		2	LW	C		X			X	X	X	X	X	X	X	X	04
	#5 Cyanide Liquid neutral	12/19/22		2	LW	C		X			X	X	X	X	X	X	X	X	05
	#6 Cyanide Liquid basic	12/19/22		1	LW	C		X			X	X	X	X	X	X	X	X	06

Hazard Identification ☒ Hazardous ☐ Non-Hazardous ☐ Radioactive

Sample Disposition ☐ Dispose as appropriate ☐ Return ☐ Archive

Relinquished By (signature)

Date/Time

Received By (signature)

Date/Time

Relinquished By (signature)

Date/Time

Received By (signature)

Date/Time

Relinquished By (signature)

Date/Time

Received By (signature)

Date/Time

Number **168382**

Instructions on back

Lab Report Address

Client Name:

Address:

City, State, Zip:

Contact:

Telephone No.:

Invoice Address

Client Name:

Address:

City, State, Zip:

Contact:

Telephone No.:

Turnaround Time

- ☒ Routine (5 to 7 business days)
☐ RUSH* (notify lab)

(needed by)

Report Type

- ☒ Results Only ☐ Level 1 ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ EDD

TO BE COMPLETED BY MICROBAC

Temperature Upon Receipt (°C)

Therm ID

Holding Time

Samples Received on Ice? ☐ Yes ☐ No ☒ N/ACustody Seals Intact? ☐ Yes ☐ No ☒ N/A

Send Report via:

☐ Mail ☐ Fax ☒ e-mail (address)

Send Invoice via:

☒ Mail ☐ Fax ☒ e-mail (address)
Project: Specified PlatingLocation: Chicago IL

PO No.:

Compliance Monitoring? ☐ Yes ☐ No
☐ Agency/Program

Sampled by (PRINT):

Corey Aquaro

Sampler Signature:

Sampler Phone No.:

314 922 7037

* Matrix Types: Soil/Solid (S), Sludge, Oil, Wipe, Drinking Water (DW), Groundwater (GW), Surface Water (SW), Waste Water (WW), Other (specify)

** Preservative Types: (1) HNO3, (2) H2SO4, (3) HCl, (4) NaOH, (5) Zinc Acetate, (6) Methanol, (7) Sodium Bisulfate, (8) Sodium Thiosulfate, (9) Hexane, (U) Unpreserved

REQUESTED ANALYSIS

Lab ID	Client Sample ID	Date Collected	Time Collected	No. of Containers	Matrix	Grab / Comp	Preservative Types **	TECP PCAS metals	TECP Total Hg Chloride	REBS	Flash, ptl	Total CW Substrate	Amenable Cyanide	Additional Notes
	#7 Cyanide Solids	12/19/22	1100	1	S	C	NA	X	X	X	X	X	X	07
	#8 Alkaline Liquids	12/16		2	LW	C		X	X	X	X	X	X	-08
	#9 Alkaline Solids	NA		1	S	C		X	X	X	X	X	X	-09
	#10 Mixed acids			2	LW	C		X	X	X	X			-10
	#11 Chrome Liquids			2	LW	C		X	X	X	X	X	X	-11
	#12 Nitric Acid			2	LW	C		X	X	X	X			-12
	#13 acidic sludge			1	S	C		X	X	X	X			-13

Possible Hazard Identification

☒ Hazardous ☐ Non-Hazardous ☐ Radioactive

Sample Disposition

☒ Dispose as appropriate ☐ Return ☐ Archive

Comments

Relinquished By (signature)

Date/Time

12/19/22 1100

Received By (signature)

Date/Time

12-19-22

Relinquished By (signature)

Date/Time

12-19-22

Received By (signature)

Date/Time

12-19-22

Relinquished By (signature)

Date/Time

12-19-22

Received By (signature)

Date/Time

12-19-22