



Friday, December 07, 2018

Attn: Matthew Cichetti
Earth Construction Services
PO Box 195
Germantown, NY 12526

Project ID: 2401 3RD AVE 2
Sample ID#s: CC04408

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

A handwritten signature in black ink that reads "Phyllis Shiller". The signature is written in a cursive style.

Phyllis/Shiller
Laboratory Director

NELAC - #NY11301
CT Lab Registration #PH-0618
MA Lab Registration #M-CT007
ME Lab Registration #CT-007
NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003
NY Lab Registration #11301
PA Lab Registration #68-03530
RI Lab Registration #63
UT Lab Registration #CT00007
VT Lab Registration #VT11301



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823

Analysis Report
 December 07, 2018

FOR: Attn: Matthew Cichetti
 Earth Construction Services
 PO Box 195
 Germantown, NY 12526

Sample Information

Matrix: GW DISCHARGE
 Location Code: EARTHCON
 Rush Request: Standard
 P.O.#:

Custody Information

Collected by: EP
 Received by: CP
 Analyzed by: see "By" below

Date

11/28/18
 11/28/18

Time

8:45
 15:10

Laboratory Data

SDG ID: GCC04408
 Phoenix ID: CC04408

Project ID: 2401 3RD AVE 2
 Client ID: MW

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Silver	< 0.001	0.001		mg/L	1	11/30/18	TH	E200.7
Arsenic	< 0.002	0.002		mg/L	1	11/30/18	TH	E200.7
Beryllium	< 0.001	0.001		mg/L	1	11/30/18	TH	E200.7
Cadmium	< 0.001	0.001		mg/L	1	11/30/18	CPP	E200.7
Chromium	< 0.001	0.001		mg/L	1	11/30/18	TH	E200.7
Copper	0.007	0.003		mg/L	1	11/30/18	TH	E200.7
Silver (Dissolved)	< 0.001	0.001		mg/L	1	12/04/18	EK	E200.7
Arsenic (Dissolved)	< 0.004	0.004		mg/L	1	12/04/18	EK	E200.7
Beryllium (Dissolved)	< 0.001	0.001		mg/L	1	12/04/18	EK	E200.7
Cadmium (Dissolved)	< 0.001	0.001		mg/L	1	12/04/18	EK	E200.7
Chromium (Dissolved)	< 0.001	0.001		mg/L	1	12/04/18	EK	E200.7
Copper (Dissolved)	< 0.005	0.005		mg/L	1	12/04/18	EK	E200.7
Mercury (Dissolved)	< 0.0002	0.0002		mg/L	1	12/05/18	RS	E245.1
Nickel (Dissolved)	< 0.001	0.001		mg/L	1	12/04/18	EK	E200.7
Lead (Dissolved)	< 0.002	0.002		mg/L	1	12/04/18	EK	E200.7
Antimony (Dissolved)	< 0.005	0.005		mg/L	1	12/04/18	TH	E200.7
Selenium (Dissolved)	< 0.011	0.011		mg/L	1	12/04/18	EK	E200.7
Thallium (Dissolved)	< 0.002	0.002		mg/L	1	12/04/18	RS	SM3113B
Zinc (Dissolved)	< 0.002	0.002		mg/L	1	12/04/18	EK	E200.7
Mercury	< 0.0002	0.0002		mg/L	1	11/29/18	RS	E245.1
Nickel	0.002	0.001		mg/L	1	11/30/18	TH	E200.7
Lead	0.003	0.001		mg/L	1	11/30/18	TH	E200.7
Antimony	< 0.003	0.003		mg/L	1	11/30/18	TH	E200.7
Selenium	< 0.005	0.005		mg/L	1	11/30/18	TH	E200.7
Thallium	< 0.001	0.001		mg/L	1	12/04/18	RS	SM3113B
Zinc	0.011	0.002		mg/L	1	11/30/18	TH	E200.7
Carbonaceous BOD	< 4.0	4.0		mg/L	2	11/28/18 15:10	RVM/RM	SM5210B-11
Flash Point	>200	200		Degree F	1	11/29/18	Y	SW1010A

Client ID: MW

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Chromium, Hexavalent	< 0.02	0.02		mg/L	2	11/28/18 17:56	O	SM3500CRB-09
Ignitability	Passed	140		degree F	1	11/29/18	Y	SW846-Ignit 1
Nitrite-N	< 0.010	0.010		mg/L	1	11/28/18 21:45	TB	E353.2
Nitrate-N	0.86	0.02		mg/L	1	11/28/18 21:45	TB	E353.2
Oil and Grease by EPA 1664A	< 1.5	1.5		mg/L	1.1	12/06/18	MSF	E1664A
pH	7.70	1.00		pH Units	1	11/29/18 04:02	RR/EG	SM4500-H B-00 1
Nitrogen Tot Kjeldahl	0.95	0.20		mg/L	2	11/30/18	KDB	E351.1
Total Nitrogen	1.81	0.10		mg/L	1	11/30/18	KDB	SM4500NH3/E300.0-97 1
O&G, Non-polar Material	< 1.4	1.4		mg/L	1	11/30/18	MSF	E1664A 1
Total Suspended Solids	66	5.0		mg/L	1	11/29/18	MM/DA	SM2540D-11
Total Solids	4900	40		mg/L	4	11/29/18	MM/DA	SM2540B-11
Filtration	Completed					12/03/18	AG	0.45um Filter
Dissolved Mercury Digestion	Completed					12/05/18	EV/EV	E245.1
Mercury Digestion	Completed					11/29/18	Q/Q	E245.1
PCB Extraction (2 Liter)	Completed					11/28/18	U/N	E608
Semi-Volatile Extraction	Completed					11/28/18	P/R/R	E625
Dissolved Metals Preparation	Completed					12/03/18	AG	SW3005A
Total Metals Digestion	Completed					11/29/18	AG	

Polychlorinated Biphenyls

PCB-1016	ND	0.051	0.051	ug/L	1	11/30/18	AW	E608
PCB-1221	ND	0.051	0.051	ug/L	1	11/30/18	AW	E608
PCB-1232	ND	0.051	0.051	ug/L	1	11/30/18	AW	E608
PCB-1242	ND	0.051	0.051	ug/L	1	11/30/18	AW	E608
PCB-1248	ND	0.051	0.051	ug/L	1	11/30/18	AW	E608
PCB-1254	ND	0.051	0.051	ug/L	1	11/30/18	AW	E608
PCB-1260	ND	0.051	0.051	ug/L	1	11/30/18	AW	E608
PCB-1262	ND	0.051	0.051	ug/L	1	11/30/18	AW	E608 1
PCB-1268	ND	0.051	0.051	ug/L	1	11/30/18	AW	E608 1

QA/QC Surrogates

% DCBP (Surrogate Rec)	69			%	1	11/30/18	AW	30 - 150 %
% TCMX (Surrogate Rec)	67			%	1	11/30/18	AW	30 - 150 %

Volatiles

1,1,1-Trichloroethane	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
1,1,2,2-tetrachloroethane	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
1,1,2-Trichloroethane	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
1,1-Dichloroethane	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
1,1-Dichloroethene	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
1,2-Dichlorobenzene	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
1,2-Dichloroethane	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
1,2-Dichloropropane	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
1,3-Dichlorobenzene	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
1,4-Dichlorobenzene	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
Benzene	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
Bromodichloromethane	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
Bromoform	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
Bromomethane	ND	0.50	0.50	ug/L	1	11/29/18	MH	E624.1
Carbon tetrachloride	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
Chlorobenzene	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1

Client ID: MW

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
Chloroethane	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
Chloroform	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
Chloromethane	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
cis-1,2-Dichloroethene	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
cis-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	11/29/18	MH	E624.1
Dibromochloromethane	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
Ethylbenzene	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
m&p-Xylene	ND	0.50	0.42	ug/L	1	11/29/18	MH	E624.1
Methyl tert-butyl ether (MTBE)	ND	1.0	0.50	ug/L	1	11/29/18	MH	E624.1
Methylene chloride	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
o-Xylene	ND	0.50	0.45	ug/L	1	11/29/18	MH	E624.1
Tetrachloroethene	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
Toluene	0.25	J 0.50	0.25	ug/L	1	11/29/18	MH	E624.1
trans-1,2-Dichloroethene	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
trans-1,3-Dichloropropene	ND	0.40	0.25	ug/L	1	11/29/18	MH	E624.1
Trichloroethene	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
Trichlorofluoromethane	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
Vinyl chloride	ND	0.50	0.25	ug/L	1	11/29/18	MH	E624.1
<u>QA/QC Surrogates</u>								
% 1,2-dichlorobenzene-d4	109			%	1	11/29/18	MH	70 - 130 %
% Bromofluorobenzene	87			%	1	11/29/18	MH	70 - 130 %
% Dibromofluoromethane	107			%	1	11/29/18	MH	70 - 130 %
% Toluene-d8	100			%	1	11/29/18	MH	70 - 130 %
<u>Semivolatiles</u>								
1,2,4-Trichlorobenzene	ND	5.1	1.5	ug/L	1	11/30/18	WB	E625.1
Naphthalene	ND	5.1	1.5	ug/L	1	11/30/18	WB	E625.1
Phenol	ND	5.1	1.6	ug/L	1	11/30/18	WB	E625.1
<u>QA/QC Surrogates</u>								
% 2-Fluorobiphenyl	66			%	1	11/30/18	WB	30 - 130 %
% 2-Fluorophenol	48			%	1	11/30/18	WB	10 - 130 %
% Nitrobenzene-d5	58			%	1	11/30/18	WB	15 - 130 %
% Phenol-d5	57			%	1	11/30/18	WB	10 - 130 %
<u>Base Neutrals & Acid Compounds</u>								
1,2,4-Trichlorobenzene	ND	5.1	1.5	ug/L	1	11/30/18	KCA	E625.1
1,2-Dichlorobenzene	ND	5.1	1.4	ug/L	1	11/30/18	KCA	E625.1 1
1,2-Diphenylhydrazine	ND	5.1	5.1	ug/L	1	11/30/18	KCA	E625.1 1
1,3-Dichlorobenzene	ND	5.1	1.5	ug/L	1	11/30/18	KCA	E625.1 1
1,4-Dichlorobenzene	ND	5.1	1.5	ug/L	1	11/30/18	KCA	E625.1 1
2,4,6-Trichlorophenol	ND	5.1	1.6	ug/L	1	11/30/18	KCA	E625.1
2,4-Dichlorophenol	ND	5.1	1.8	ug/L	1	11/30/18	KCA	E625.1
2,4-Dimethylphenol	ND	5.1	1.3	ug/L	1	11/30/18	KCA	E625.1
2,4-Dinitrophenol	ND	5.1	3.6	ug/L	1	11/30/18	KCA	E625.1
2,4-Dinitrotoluene	ND	5.1	2.0	ug/L	1	11/30/18	KCA	E625.1
2,6-Dinitrotoluene	ND	5.1	1.6	ug/L	1	11/30/18	KCA	E625.1
2-Chloronaphthalene	ND	5.1	1.4	ug/L	1	11/30/18	KCA	E625.1
2-Chlorophenol	ND	5.1	1.4	ug/L	1	11/30/18	KCA	E625.1
2-Methylnaphthalene	ND	5.1	1.5	ug/L	1	11/30/18	KCA	E625.1 1
2-Nitrophenol	ND	5.1	3.2	ug/L	1	11/30/18	KCA	E625.1

Client ID: MW

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
3,3-Dichlorobenzidine	ND	20	20	ug/L	1	11/30/18	KCA	E625.1
4,6-Dinitro-2-methylphenol	ND	5.1	5.5	ug/L	1	11/30/18	KCA	E625.1
4-Bromophenyl phenyl ether	ND	5.1	1.5	ug/L	1	11/30/18	KCA	E625.1
4-Chloro-3-methylphenol	ND	5.1	1.8	ug/L	1	11/30/18	KCA	E625.1
4-Chlorophenyl phenyl ether	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
4-Nitrophenol	ND	5.1	2.3	ug/L	1	11/30/18	KCA	E625.1
Acenaphthene	ND	5.1	1.6	ug/L	1	11/30/18	KCA	E625.1
Acenaphthylene	ND	5.1	1.4	ug/L	1	11/30/18	KCA	E625.1
Anthracene	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
Benz(a)anthracene	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
Benzidine	ND	20	3.0	ug/L	1	11/30/18	KCA	E625.1
Benzo(a)pyrene	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
Benzo(b)fluoranthene	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
Benzo(ghi)perylene	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
Benzo(k)fluoranthene	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
Benzyl butyl phthalate	ND	5.1	1.3	ug/L	1	11/30/18	KCA	E625.1
Bis(2-chloroethoxy)methane	ND	5.1	1.4	ug/L	1	11/30/18	KCA	E625.1
Bis(2-chloroethyl)ether	ND	5.1	1.4	ug/L	1	11/30/18	KCA	E625.1
Bis(2-chloroisopropyl)ether	ND	5.1	1.4	ug/L	1	11/30/18	KCA	E625.1
Bis(2-ethylhexyl)phthalate	ND	5.1	1.5	ug/L	1	11/30/18	KCA	E625.1
Chrysene	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
Dibenz(a,h)anthracene	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
Diethyl phthalate	ND	5.1	1.6	ug/L	1	11/30/18	KCA	E625.1
Dimethylphthalate	ND	5.1	1.6	ug/L	1	11/30/18	KCA	E625.1
Di-n-butylphthalate	ND	5.1	1.4	ug/L	1	11/30/18	KCA	E625.1
Di-n-octylphthalate	ND	5.1	1.3	ug/L	1	11/30/18	KCA	E625.1
Fluoranthene	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
Fluorene	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
Hexachlorobenzene	ND	5.1	1.5	ug/L	1	11/30/18	KCA	E625.1
Hexachlorobutadiene	ND	5.1	1.8	ug/L	1	11/30/18	KCA	E625.1
Hexachlorocyclopentadiene	ND	5.1	1.6	ug/L	1	11/30/18	KCA	E625.1
Hexachloroethane	ND	5.1	1.5	ug/L	1	11/30/18	KCA	E625.1
Indeno(1,2,3-cd)pyrene	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
Isophorone	ND	5.1	1.4	ug/L	1	11/30/18	KCA	E625.1
Naphthalene	ND	5.1	1.5	ug/L	1	11/30/18	KCA	E625.1
Nitrobenzene	ND	5.1	1.8	ug/L	1	11/30/18	KCA	E625.1
N-Nitrosodimethylamine	ND	5.1	1.4	ug/L	1	11/30/18	KCA	E625.1
N-Nitrosodi-n-propylamine	ND	5.1	1.7	ug/L	1	11/30/18	KCA	E625.1
N-Nitrosodiphenylamine	ND	5.1	2.0	ug/L	1	11/30/18	KCA	E625.1
Pentachlorophenol	ND	5.1	1.9	ug/L	1	11/30/18	KCA	E625.1
Phenanthrene	ND	5.1	1.5	ug/L	1	11/30/18	KCA	E625.1
Phenol	ND	5.1	1.6	ug/L	1	11/30/18	KCA	E625.1
Pyrene	ND	5.1	1.8	ug/L	1	11/30/18	KCA	E625.1
QA/QC Surrogates								
% 2,4,6-Tribromophenol	103			%	1	11/30/18	KCA	15 - 130 %
% 2-Fluorobiphenyl	66			%	1	11/30/18	KCA	30 - 130 %
% 2-Fluorophenol	48			%	1	11/30/18	KCA	10 - 130 %
% Nitrobenzene-d5	58			%	1	11/30/18	KCA	15 - 130 %
% Phenol-d5	57			%	1	11/30/18	KCA	10 - 130 %

Parameter	Result	RL/ PQL	LOD/ MDL	Units	Dilution	Date/Time	By	Reference
% Terphenyl-d14	62			%	1	11/30/18	KCA	30 - 130 %

1 = This parameter is not certified by the primary accrediting authority (NY NELAC) for this matrix. NY NELAC does not offer certification for all parameters at this time.

RL/PQL=Reporting/Practical Quantitation Level (Equivalent to NELAC LOQ, Limit of Quantitation) ND=Not Detected at RL/PQL
 BRL=Below Reporting Level L=Biased Low J=Estimated Below RL LOD=Limit of Detection MDL=Method Detection Limit
 QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

Per 1.4.6 of EPA method 8270D, 1,2-Diphenylhydrazine is unstable and readily converts to Azobenzene. Azobenzene is used for the calibration of 1,2-Diphenylhydrazine.

Ignitability is based solely on the results of the closed cup flashpoint analysis performed above. Passed is >140 degree F.

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time.

Oil and Grease:

This sample was received with a pH>=2; pH was adjusted to <2 (EPA requires preservation at time of sampling to a pH of <2.) A sample bias can not be ruled out.

If there are any questions regarding this data, please call Phoenix Client Services.
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Phyllis Shiller, Laboratory Director

December 07, 2018

Reviewed and Released by: Rashmi Makol, Project Manager



Environmental Laboratories, Inc.
 587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06045
 Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

December 07, 2018

QA/QC Data

SDG I.D.: GCC04408

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 457768 (mg/L), QC Sample No: CC03244 (CC04408)													
Thallium (Dissolved)	BRL	0.002	<0.0005	<0.002	NC	104			99.9			75 - 125	20
QA/QC Batch 458210 (mg/L), QC Sample No: CC06128 (CC04408)													
Thallium - Water	BRL	0.001	<0.001	<0.001	NC	102			107			75 - 125	20
QA/QC Batch 457781 (mg/L), QC Sample No: CC04090 (CC04408)													
Mercury - Water	BRL	0.0002	<0.0002	<0.0002	NC	80.2			82.3			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 458423 (mg/L), QC Sample No: CC06811 (CC04408)													
Mercury (Dissolved)	BRL	0.0002	<0.0002	<0.0003	NC	84.3			75.0			80 - 120	20
Comment:													
Additional Mercury criteria: LCS acceptance range for waters is 80-120% and for soils is 70-130%. MS acceptance range is 75-125%.													
QA/QC Batch 457873 (mg/L), QC Sample No: CC03885 (CC04408)													
<u>ICP Metals - Aqueous</u>													
Antimony	BRL	0.0025	<0.003	<0.0025	NC	103			107			75 - 125	20
Arsenic	BRL	0.0020	0.024	0.027	11.8	98.2			113			75 - 125	20
Beryllium	BRL	0.0005	<0.001	<0.0005	NC	103			91.7			75 - 125	20
Cadmium	BRL	0.0005	<0.003	<0.003	NC	103			92.3			75 - 125	20
Chromium	BRL	0.0005	0.025	0.027	7.70	102			94.9			75 - 125	20
Copper	BRL	0.0025	0.024	0.027	11.8	96.2			108			75 - 125	20
Lead	BRL	0.0010	<0.005	<0.005	NC	96.6			84.8			75 - 125	20
Nickel	BRL	0.0005	<0.003	<0.003	NC	100			88.8			75 - 125	20
Selenium	BRL	0.0050	<0.025	<0.025	NC	92.3			126			75 - 125	20
Silver	BRL	0.0005	<0.003	<0.003	NC	95.0			117			75 - 125	20
Zinc	BRL	0.0020	0.493	0.536	8.40	98.8			104			75 - 125	20
QA/QC Batch 458216 (mg/L), QC Sample No: CC04408 (CC04408)													
<u>ICP Metals - Dissolved</u>													
Antimony	BRL	0.005	<0.005	<0.005	NC	97.2			104			75 - 125	20
Arsenic	BRL	0.004	<0.004	<0.004	NC	93.6			106			75 - 125	20
Beryllium	BRL	0.001	<0.001	<0.001	NC	95.4			92.0			75 - 125	20
Cadmium	BRL	0.001	<0.001	<0.001	NC	91.4			86.0			75 - 125	20
Chromium	BRL	0.001	<0.001	<0.001	NC	91.5			91.0			75 - 125	20
Copper	BRL	0.005	<0.005	<0.005	NC	93.7			105			75 - 125	20
Lead	BRL	0.002	<0.002	<0.002	NC	93.7			87.9			75 - 125	20
Nickel	BRL	0.001	<0.001	<0.001	NC	92.4			84.8			75 - 125	20
Selenium	BRL	0.011	<0.011	<0.011	NC	90.9			99.7			75 - 125	20
Silver	BRL	0.001	<0.001	0.001	NC	90.7			109			75 - 125	20
Zinc	BRL	0.002	<0.002	<0.002	NC	90.0			95.9			75 - 125	20

m = This parameter is outside laboratory MS/MSD specified recovery limits.



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QA/QC Report

December 07, 2018

QA/QC Data

SDG I.D.: GCC04408

Parameter	Blank	Blk RL	Sample Result	Dup Result	Dup RPD	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 457891 (mg/L), QC Sample No: CC03246 (CC04408)													
Total Solids	BRL	10	15000	15000	0	97.0						85 - 115	20
QA/QC Batch 457847 (Degree F), QC Sample No: CC03941 (CC04408)													
Flash Point			>200	>200	NC	101						75 - 125	30
Comment: Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 457810 (pH), QC Sample No: CC04113 (CC04408)													
pH			7.74	7.82	1.00	97.4						85 - 115	20
QA/QC Batch 457793 (mg/L), QC Sample No: CC04270 (CC04408)													
Total Suspended Solids	BRL	5.0	18	20	NC	100						85 - 115	20
QA/QC Batch 457726 (mg/L), QC Sample No: CC04508 (CC04408)													
B.O.D./5 day	BRL	2.0	7.3	7.1	NC	98.8			105			70 - 130	20
QA/QC Batch 457945 (mg/L), QC Sample No: CC04613 (CC04408)													
O&G, Non-polar Material	BRL	1.4	<1.4	<1.4	NC	89.0			85.0			85 - 115	20
Comment: Additional criteria matrix spike acceptance range is 75-125%.													
QA/QC Batch 458701 (mg/L), QC Sample No: CC06137 (CC04408)													
Oil and Grease by EPA 1664A	BRL	1.4				96.0			97.0			85 - 115	20
Comment: A Blank spike was performed instead of a matrix spike Additional: MS acceptance range 75-125%.													
QA/QC Batch 457728 (mg/L), QC Sample No: CC04407 (CC04408)													
Chromium, Hexavalent	BRL	0.01	<0.01	<0.01	NC	101			109			90 - 110	20
Comment: Additional Hexavalent Chromium criteria: LCS acceptance range for waters is 90-110% and MS acceptance range is 85-115%.													
QA/QC Batch 457769 (mg/L), QC Sample No: CC04500 (CC04408)													
Nitrate-N	BRL	0.02	<0.02	<0.02	NC	105			106			90 - 110	20
Nitrite-N	BRL	0.01	<0.010	<0.01	NC	106			106			90 - 110	20
QA/QC Batch 457884 (mg/L), QC Sample No: CC03419 (CC04408)													
Nitrogen Tot Kjeldahl	BRL	0.10	4.43	4.43	0	108			73.4			85 - 115	20 m
Comment: Low TKN samples matrix spike recovery due to sample matrix interference. However, the TKN blank spike, and LCS, had acceptable recoveries., TKN is reported as Organic Nitrogen in the Blank, LCS, DUP and MS.													

m = This parameter is outside laboratory MS/MSD specified recovery limits.



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QA/QC Report

December 07, 2018

QA/QC Data

SDG I.D.: GCC04408

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
QA/QC Batch 457722 (ug/L), QC Sample No: CC04407 (CC04408)										
<u>Polychlorinated Biphenyls</u>										
PCB-1016	ND	0.050	80	77	3.8				40 - 140	20
PCB-1221	ND	0.050							40 - 140	20
PCB-1232	ND	0.050							40 - 140	20
PCB-1242	ND	0.050							40 - 140	20
PCB-1248	ND	0.050							40 - 140	20
PCB-1254	ND	0.050							40 - 140	20
PCB-1260	ND	0.050	94	93	1.1				40 - 140	20
PCB-1262	ND	0.050							40 - 140	20
PCB-1268	ND	0.050							40 - 140	20
% DCBP (Surrogate Rec)	68	%	85	89	4.6				30 - 150	20
% TCMX (Surrogate Rec)	68	%	77	71	8.1				30 - 150	20

Comment:

A LCS and LCS Duplicate were performed instead of a matrix spike and matrix spike duplicate.

QA/QC Batch 457710 (ug/L), QC Sample No: CC04088 (CC04408)

Semivolatiles

1,2,4-Trichlorobenzene	ND	3.5	73	65	11.6				57 - 130	50
1,2-Dichlorobenzene	ND	1.0	68	54	23.0				30 - 130	20
1,2-Diphenylhydrazine	ND	1.6	74	92	21.7				10 - 130	20
1,3-Dichlorobenzene	ND	1.0	69	54	24.4				46 - 154	20
1,4-Dichlorobenzene	ND	1.0	68	55	21.1				30 - 130	20
2,4,6-Trichlorophenol	ND	1.0	78	86	9.8				52 - 129	58
2,4-Dichlorophenol	ND	1.0	73	72	1.4				53 - 122	50
2,4-Dimethylphenol	ND	1.0	71	74	4.1				42 - 120	58
2,4-Dinitrophenol	ND	1.0	77	96	22.0				10 - 173	132
2,4-Dinitrotoluene	ND	3.5	85	99	15.2				48 - 127	42
2,6-Dinitrotoluene	ND	3.5	83	97	15.6				68 - 137	48
2-Chloronaphthalene	ND	3.5	79	82	3.7				65 - 120	24
2-Chlorophenol	ND	1.0	64	52	20.7				36 - 120	61
2-Methylnaphthalene	ND	3.5	71	71	0.0				10 - 130	20
2-Nitrophenol	ND	1.0	65	60	8.0				45 - 167	55
3,3'-Dichlorobenzidine	ND	5.0	77	79	2.6				8 - 213	108
4,6-Dinitro-2-methylphenol	ND	1.0	86	103	18.0				10 - 130	20
4-Bromophenyl phenyl ether	ND	3.5	85	98	14.2				65 - 120	43
4-Chloro-3-methylphenol	ND	1.0	78	87	10.9				41 - 128	73
4-Chlorophenyl phenyl ether	ND	1.0	83	93	11.4				38 - 145	61
4-Nitrophenol	ND	1.0	74	83	11.5				13 - 129	131
Acenaphthene	ND	1.5	86	87	1.2				60 - 132	48
Acenaphthylene	ND	3.5	72	77	6.7				54 - 126	74
Anthracene	ND	1.5	78	90	14.3				43 - 120	66
Benz(a)anthracene	ND	1.5	78	89	13.2				42 - 133	53

QA/QC Data

SDG I.D.: GCC04408

Parameter	Blk		LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
	Blank	RL								
Benzidine	ND	4.5	92	97	5.3				10 - 130	20
Benzo(a)pyrene	ND	1.5	71	82	14.4				32 - 148	72
Benzo(b)fluoranthene	ND	1.5	82	92	11.5				42 - 140	71
Benzo(ghi)perylene	ND	1.5	73	82	11.6				10 - 195	97
Benzo(k)fluoranthene	ND	1.5	79	91	14.1				25 - 146	63
Benzyl butyl phthalate	ND	1.5	81	94	14.9				10 - 140	60
Bis(2-chloroethoxy)methane	ND	3.5	75	73	2.7				49 - 165	54
Bis(2-chloroethyl)ether	ND	1.0	68	56	19.4				43 - 126	108
Bis(2-chloroisopropyl)ether	ND	1.0	55	45	20.0				63 - 139	76
Bis(2-ethylhexyl)phthalate	ND	1.5	81	94	14.9				29 - 137	82
Chrysene	ND	1.5	82	94	13.6				44 - 140	87
Dibenz(a,h)anthracene	ND	1.5	79	89	11.9				10 - 200	126
Diethyl phthalate	ND	1.5	83	93	11.4				10 - 120	100
Dimethylphthalate	ND	1.5	84	95	12.3				10 - 120	183
Di-n-butylphthalate	ND	1.5	85	98	14.2				8 - 120	47
Di-n-octylphthalate	ND	1.5	81	97	18.0				19 - 132	69
Fluoranthene	ND	1.5	83	94	12.4				43 - 121	66
Fluorene	ND	1.5	81	88	8.3				70 - 120	38
Hexachlorobenzene	ND	3.5	80	91	12.9				8 - 142	55
Hexachlorobutadiene	ND	3.5	74	65	12.9				38 - 120	62
Hexachlorocyclopentadiene	ND	3.5	36	35	2.8				10 - 130	20
Hexachloroethane	ND	3.5	67	53	23.3				55 - 120	52
Indeno(1,2,3-cd)pyrene	ND	3.5	73	84	14.0				10 - 151	99
Isophorone	ND	3.5	69	72	4.3				47 - 180	93
Naphthalene	ND	1.5	72	66	8.7				36 - 120	65
Nitrobenzene	ND	3.5	70	61	13.7				54 - 158	62
N-Nitrosodimethylamine	ND	1.0	67	54	21.5				10 - 130	20
N-Nitrosodi-n-propylamine	ND	3.5	74	69	7.0				14 - 198	87
N-Nitrosodiphenylamine	ND	3.5	76	85	11.2				10 - 130	20
Pentachlorophenol	ND	3.5	91	110	18.9				38 - 152	86
Phenanthrene	ND	1.5	80	90	11.8				65 - 120	39
Phenol	ND	1.0	60	49	20.2				17 - 120	64
Pyrene	ND	1.5	82	94	13.6				70 - 120	49
% 2,4,6-Tribromophenol	63	%	75	85	12.5				15 - 130	20
% 2-Fluorobiphenyl	66	%	66	68	3.0				30 - 130	20
% 2-Fluorophenol	41	%	53	40	28.0				10 - 130	20
% Nitrobenzene-d5	48	%	57	50	13.1				15 - 130	20
% Phenol-d5	49	%	58	47	21.0				10 - 130	20
% Terphenyl-d14	69	%	67	77	13.9				30 - 130	20

QA/QC Batch 457988 (ug/L), QC Sample No: CC04113 (CC04408)

Volatiles

1,1,1-Trichloroethane	ND	1.0	88	88	0.0	88	90	2.2	75 - 125	20
1,1,2,2-Tetrachloroethane	ND	0.50	99	99	0.0	104	106	1.9	60 - 140	20
1,1,2-Trichloroethane	ND	1.0	92	92	0.0	96	96	0.0	71 - 129	20
1,1-Dichloroethane	ND	1.0	91	92	1.1	93	95	2.1	72 - 128	20
1,1-Dichloroethene	ND	1.0	90	90	0.0	94	94	0.0	50 - 150	20
1,2-Dichlorobenzene	ND	1.0	95	95	0.0	97	98	1.0	63 - 137	20
1,2-Dichloroethane	ND	1.0	87	88	1.1	90	90	0.0	68 - 132	20
1,2-Dichloropropane	ND	1.0	94	93	1.1	96	95	1.0	40 - 160	20
1,3-Dichlorobenzene	ND	1.0	99	97	2.0	99	100	1.0	73 - 127	20
1,4-Dichlorobenzene	ND	1.0	100	97	3.0	98	99	1.0	63 - 137	20
Benzene	ND	0.70	93	94	1.1	97	96	1.0	64 - 136	20

QA/QC Data

SDG I.D.: GCC04408

Parameter	Blank	Blk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
Bromodichloromethane	ND	0.50	88	89	1.1	93	92	1.1	65 - 135	20
Bromoform	ND	1.0	96	96	0.0	97	98	1.0	71 - 129	20
Bromomethane	ND	1.0	101	98	3.0	99	98	1.0	40 - 160	20
Carbon tetrachloride	ND	1.0	82	83	1.2	96	82	15.7	73 - 127	20
Chlorobenzene	ND	1.0	92	93	1.1	95	96	1.0	66 - 134	20
Chloroethane	ND	1.0	99	102	3.0	99	103	4.0	40 - 160	20
Chloroform	ND	1.0	90	91	1.1	90	92	2.2	67 - 133	20
Chloromethane	ND	1.0	96	96	0.0	97	99	2.0	40 - 160	20
cis-1,2-Dichloroethene	ND	1.0	92	94	2.2	90	96	6.5	69 - 131	20
cis-1,3-Dichloropropene	ND	0.40	90	90	0.0	88	87	1.1	40 - 160	20
Dibromochloromethane	ND	0.50	99	97	2.0	100	101	1.0	67 - 133	20
Ethylbenzene	ND	1.0	94	94	0.0	97	94	3.1	59 - 141	20
m&p-Xylene	ND	1.0	100	100	0.0	102	103	1.0	70 - 130	30
Methyl t-butyl ether (MTBE)	ND	1.0	88	88	0.0	88	91	3.4	70 - 130	30
Methylene chloride	ND	1.0	93	93	0.0	93	97	4.2	60 - 140	20
o-Xylene	ND	1.0	100	99	1.0	100	101	1.0	70 - 130	30
Tetrachloroethene	ND	1.0	93	92	1.1	94	94	0.0	73 - 127	20
Toluene	ND	1.0	91	93	2.2	96	94	2.1	74 - 126	20
trans-1,2-Dichloroethene	ND	1.0	94	94	0.0	95	97	2.1	69 - 131	20
trans-1,3-Dichloropropene	ND	0.40	89	89	0.0	85	81	4.8	50 - 150	20
Trichloroethene	ND	1.0	90	91	1.1	92	92	0.0	66 - 134	20
Trichlorofluoromethane	ND	1.0	90	88	2.2	90	92	2.2	48 - 152	20
Vinyl chloride	ND	1.0	103	102	1.0	105	105	0.0	40 - 160	20
% 1,2-dichlorobenzene-d4	105	%	99	100	1.0	99	101	2.0	70 - 130	30
% Bromofluorobenzene	88	%	98	98	0.0	100	98	2.0	70 - 130	30
% Dibromofluoromethane	97	%	103	106	2.9	100	104	3.9	70 - 130	30
% Toluene-d8	99	%	100	103	3.0	104	102	1.9	70 - 130	30

Comment:


A blank MS/MSD was analyzed with this batch.

l = This parameter is outside laboratory LCS/LCSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

- RPD - Relative Percent Difference
- LCS - Laboratory Control Sample
- LCSD - Laboratory Control Sample Duplicate
- MS - Matrix Spike
- MS Dup - Matrix Spike Duplicate
- NC - No Criteria
- Intf - Interference


 Phyllis Shiller, Laboratory Director
 December 07, 2018

Friday, December 07, 2018

Criteria: NY: DEP EFF

State: NY

Sample Criteria Exceedances Report

GCC04408 - EARTHCON

SampNo	Acode	Phoenix Analyte	Criteria	Result	RL	Criteria	RL Criteria	Analysis Units
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*** No Data to Display ***

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.



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Analysis Comments

December 07, 2018

SDG I.D.: GCC04408

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.



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NY Temperature Narration

December 07, 2018

SDG I.D.: GCC04408

The samples in this delivery group were received at 1.0°C.
(Note acceptance criteria for relevant matrices is above freezing up to 6°C)

Lisa Arnold

From: Edgar Pichardo <edgarp@earthcs.com>
Sent: Monday, December 03, 2018 9:45 AM
To: Lisa Arnold
Subject: FW: sample chain of custody
Attachments: NYSDEC R2 Dewatering Project Sampling Information.pdf

Edgar Pichardo
ECS Rentals
[Edgarp@earthcs.com](mailto:edgarp@earthcs.com)
914-826-5360

From: Edgar Pichardo
Sent: Monday, December 3, 2018 9:44 AM
To: Linda Chapman
Subject: sample chain of custody

Linda

Could you help or forward this to the person who can. I need to update the chain of custody for SDG GCC04408 to meet DEC perimeters. Enclosed are the perimeters. Please contact me if you have any questions. Thanks

Edgar Pichardo
ECS Rentals
[Edgarp@earthcs.com](mailto:edgarp@earthcs.com)
914-826-5360