FINAL DATA GAPS REPORT CONTINUED

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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July 22, 2013

Mike Staton
SLR International Corp.
22118 20th Ave. SE., G-202
Bothell, WA 98021

Dear Mr. Staton:

Included are the results from the testing of material submitted on June 7, 2013 from the Crowley Seattle 101.00205.00019, F&BI 306117 project. There are 46 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michele Costales Poquiz

Michele Costales Poquiz
Chemist

Enclosures
SLR0722R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 7, 2013 by Friedman & Bruya, Inc. from the SLR International Corp. Crowley Seattle 101.00205.00019, F&BI 306117 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SLR International Corp.
306117-01	DP2CB5-060613
306117-02	DP3CB1-060613
306117-03	DP10CB1-060613
306117-04	DP6CB1-060613
306117-05	DP3CB3-060613

Total Petroleum Hydrocarbons as Gasoline by Method NWTPH-Gx

All quality control requirements were acceptable.

Total Petroleum Hydrocarbons as Diesel and Motor Oil by Method NWTPH-Dx with Silica Gel

All quality control requirements were acceptable.

Volatile Organic Compounds by EPA Method 8260C

Analysis of the samples by direct sparge resulted in failing internal standards, indicating that the direct sparge extraction technique is not appropriate for the sample matrix. The samples were re-extracted using the methanolic technique. The results from the methanolic analysis are enclosed.

The calibration result for bromomethane fell outside of acceptance criteria. The values reported are estimates.

The presence of chloroform in the samples is likely due to laboratory contamination. The results have been flagged accordingly.

The chlorobenzene result in the laboratory control sample was out of control limits. The values reported are estimates.

The percent recovery for dichlorodifluoromethane and bromomethane in the matrix spike (MS) and/or matrix spike duplicate (MSD) exceeded acceptance criteria. The results have been flagged accordingly.

Semivolatile Organic Compounds by EPA Method 8270D

The samples were diluted due to matrix interferences. The reporting limits have been raised accordingly.

The percent recovery for 2,4-dinitrophenol in the MS exceeded acceptance criteria. In addition, the relative percent difference (RPD) for the MS and MSD exceeded acceptance criteria for several compounds. The results have been flagged accordingly.

The RPD for the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) exceeded acceptance criteria for 4-chloroaniline. The result has been flagged accordingly.

Polynuclear Aromatic Hydrocarbons by EPA Method 8270D SIM
The samples were diluted due to matrix interferences. The reporting limits have been raised accordingly.

Polychlorinated Biphenyls by Method 8082A
The samples were diluted due to matrix interferences. The reporting limits have been raised accordingly.

Total Metals by EPA Method 200.8
The samples DP3CB1-060613, DP10CB1-060613, DP6CB1-060613, and DP3CB3-060613 were diluted due to matrix interferences. The reporting limits have been raised accordingly.

Copper was identified at a low level in the method blank. The results have been flagged accordingly.

The percent recovery for antimony in the MS exceeded acceptance criteria. The result has been flagged accordingly.

Total Mercury by EPA Method 1631E
All quality control requirements were acceptable.

Total Organic Carbon by EPA Method 9060M
The samples were sent to Analytical Resources, Inc. for analysis. Review of the enclosed report indicates all quality control requirements were acceptable.

Grain Size by ASTM D-422
The samples were sent to Budinger & Associates for analysis. The report generated by B&A is enclosed.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/22/13
Date Received: 06/07/13
Project: Crowley Seattle 101.00205.00019, F&BI 306117
Date Extracted: 06/19/13
Date Analyzed: 06/19/13

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 58-139)
DP2CB5-060613 306117-01	1.1	79
DP3CB1-060613 306117-02	0.57	78
DP10CB1-060613 306117-03	0.55	78
DP6CB1-060613 306117-04	0.43	82
DP3CB3-060613 306117-05	0.65	75
Method Blank 03-1162 MB	<0.20	83

Date of Report: 07/22/13
Date Received: 06/07/13
Project: Crowley Seattle 101.00205.00019, F&BI 306117
Date Extracted: 06/10/13
Date Analyzed: 06/10/13 and 06/12/13

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
DP2CB5-060613 306117-01	180 x	1,900	101
DP3CB1-060613 306117-02 1/10	210 x	2,200	116
DP10CB1-060613 306117-03 1/10	240 x	2,300	108
DP6CB1-060613 306117-04	230 x	1,600	96
DP3CB3-060613 306117-05	220 x	2,600	96
Method Blank 03-1129 MB	<2.8 j	<4.5 j	114

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP2CB5-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-01
Date Analyzed:	06/18/13	Data File:	061822.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.020	1,3-Dichloropropane	<0.020
Chloromethane	<0.025	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.025
Bromomethane	<0.034 ca	1,2-Dibromoethane (EDB)	<0.029
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	<0.021	Ethylbenzene	<0.013
Acetone	<0.21	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.027	m,p-Xylene	<0.03
Methylene chloride	<0.054	o-Xylene	<0.020
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.021
trans-1,2-Dichloroethene	<0.023	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.035
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.021	Bromobenzene	<0.012
Chloroform	0.020 lc	1,3,5-Trimethylbenzene	<0.011
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.021	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.030	tert-Butylbenzene	<0.021
Benzene	<0.014	1,2,4-Trimethylbenzene	<0.016
Trichloroethene	<0.033	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.020
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.023	1,2-Dibromo-3-chloropropane	<0.080
Toluene	0.46	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.041
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.095	1,2,3-Trichlorobenzene	<0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP3CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-02
Date Analyzed:	06/18/13	Data File:	061823.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	95	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.020	1,3-Dichloropropane	<0.020
Chloromethane	<0.025	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.025
Bromomethane	<0.034 ca	1,2-Dibromoethane (EDB)	<0.029
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	<0.021	Ethylbenzene	<0.013
Acetone	<0.21	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.027	m,p-Xylene	<0.03
Methylene chloride	<0.054	o-Xylene	0.026
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.021
trans-1,2-Dichloroethene	<0.023	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.035
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.021	Bromobenzene	<0.012
Chloroform	<0.017	1,3,5-Trimethylbenzene	0.049
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.021	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.030	tert-Butylbenzene	<0.021
Benzene	<0.014	1,2,4-Trimethylbenzene	0.10
Trichloroethene	<0.033	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.020
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.023	1,2-Dibromo-3-chloropropane	<0.080
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.041
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.095	1,2,3-Trichlorobenzene	<0.019

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ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP10CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-03
Date Analyzed:	06/18/13	Data File:	061824.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.020	1,3-Dichloropropane	<0.020
Chloromethane	<0.025	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.025
Bromomethane	<0.034 ca	1,2-Dibromoethane (EDB)	<0.029
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	<0.021	Ethylbenzene	0.021
Acetone	<0.21	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.027	m,p-Xylene	0.088
Methylene chloride	<0.054	o-Xylene	0.065
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.021
trans-1,2-Dichloroethene	<0.023	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.035
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.021	Bromobenzene	<0.012
Chloroform	<0.017	1,3,5-Trimethylbenzene	0.060
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.021	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.030	tert-Butylbenzene	<0.021
Benzene	<0.014	1,2,4-Trimethylbenzene	0.13
Trichloroethene	<0.033	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.020
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.023	1,2-Dibromo-3-chloropropane	<0.080
Toluene	0.024	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.041
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.095	1,2,3-Trichlorobenzene	<0.019

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ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP6CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-04
Date Analyzed:	06/18/13	Data File:	061825.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.020	1,3-Dichloropropane	<0.020
Chloromethane	<0.025	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.025
Bromomethane	<0.034 ca	1,2-Dibromoethane (EDB)	<0.029
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	0.051	Ethylbenzene	<0.013
Acetone	<0.21	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.027	m,p-Xylene	<0.03
Methylene chloride	<0.054	o-Xylene	<0.020
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.021
trans-1,2-Dichloroethene	<0.023	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.035
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.021	Bromobenzene	<0.012
Chloroform	0.021 lc	1,3,5-Trimethylbenzene	0.020
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.021	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.030	tert-Butylbenzene	<0.021
Benzene	<0.014	1,2,4-Trimethylbenzene	0.028
Trichloroethene	<0.033	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.020
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.023	1,2-Dibromo-3-chloropropane	<0.080
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.041
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.095	1,2,3-Trichlorobenzene	<0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP3CB3-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-05
Date Analyzed:	06/18/13	Data File:	061826.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.020	1,3-Dichloropropane	<0.020
Chloromethane	<0.025	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.025
Bromomethane	<0.034 ca	1,2-Dibromoethane (EDB)	<0.029
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	<0.021	Ethylbenzene	<0.013
Acetone	<0.21	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.027	m,p-Xylene	<0.03
Methylene chloride	<0.054	o-Xylene	<0.020
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.021
trans-1,2-Dichloroethene	<0.023	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.035
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.021	Bromobenzene	<0.012
Chloroform	0.041 lc	1,3,5-Trimethylbenzene	<0.011
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.021	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.030	tert-Butylbenzene	<0.021
Benzene	<0.014	1,2,4-Trimethylbenzene	<0.016
Trichloroethene	<0.033	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.020
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.023	1,2-Dibromo-3-chloropropane	<0.080
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.041
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.095	1,2,3-Trichlorobenzene	<0.019

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	03-1113 mb
Date Analyzed:	06/18/13	Data File:	061810.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.020	1,3-Dichloropropane	<0.020
Chloromethane	<0.025	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.025
Bromomethane	<0.034 ca	1,2-Dibromoethane (EDB)	<0.029
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	<0.021	Ethylbenzene	<0.013
Acetone	<0.21	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.027	m,p-Xylene	<0.03
Methylene chloride	<0.054	o-Xylene	<0.020
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.021
trans-1,2-Dichloroethene	<0.023	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.035
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.021	Bromobenzene	<0.012
Chloroform	<0.017	1,3,5-Trimethylbenzene	<0.011
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.021	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.030	tert-Butylbenzene	<0.021
Benzene	<0.014	1,2,4-Trimethylbenzene	<0.016
Trichloroethene	<0.033	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.020
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.023	1,2-Dibromo-3-chloropropane	<0.080
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.041
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.095	1,2,3-Trichlorobenzene	<0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP2CB5-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-01 1/400
Date Analyzed:	06/24/13	Data File:	062418.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	18 ds	56	115
Phenol-d6	46 ds	54	113
Nitrobenzene-d5	40 ds	31	164
2-Fluorobiphenyl	68 ds	47	133
2,4,6-Tribromophenol	14 ds	35	141
Terphenyl-d14	88 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	<2	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	<1.6
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	7.6
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	6.2
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	<1.4
Hexachlorocyclopentadiene	<0.88		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP3CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-02 1/400
Date Analyzed:	06/24/13	Data File:	062419.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	26 ds	56	115
Phenol-d6	26 ds	54	113
Nitrobenzene-d5	80 ds	31	164
2-Fluorobiphenyl	60 ds	47	133
2,4,6-Tribromophenol	14 ds	35	141
Terphenyl-d14	100 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	<2	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	4.9
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	<2.3
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	7.7
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	<1.4
Hexachlorocyclopentadiene	<0.88		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP10CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-03 1/400
Date Analyzed:	06/24/13	Data File:	062420.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	26 ds	56	115
Phenol-d6	26 ds	54	113
Nitrobenzene-d5	40 ds	31	164
2-Fluorobiphenyl	80 ds	47	133
2,4,6-Tribromophenol	0 ds	35	141
Terphenyl-d14	60 ds J	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	<2	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	3.1
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	<2.3 J
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	7.7 J
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	<1.4 J
Hexachlorocyclopentadiene	<0.88		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP6CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-04 1/400
Date Analyzed:	06/24/13	Data File:	062417.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	40 ds	56	115
Phenol-d6	40 ds	54	113
Nitrobenzene-d5	20 ds	31	164
2-Fluorobiphenyl	60 ds	47	133
2,4,6-Tribromophenol	14 ds	35	141
Terphenyl-d14	80 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	<2	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	<1.6
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	<2.3
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	<5.4
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	<1.4
Hexachlorocyclopentadiene	<0.88		

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP3CB3-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-05 1/200
Date Analyzed:	06/24/13	Data File:	062416.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	27 ds	56	115
Phenol-d6	27 ds	54	113
Nitrobenzene-d5	60 ds	31	164
2-Fluorobiphenyl	60 ds	47	133
2,4,6-Tribromophenol	20 ds	35	141
Terphenyl-d14	70 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<1.1	2,4,6-Trichlorophenol	<1.6
Bis(2-chloroethyl) ether	<0.32	2,4,5-Trichlorophenol	<1.9
2-Chlorophenol	<1.2	2-Chloronaphthalene	<0.28
1,3-Dichlorobenzene	<0.52	2-Nitroaniline	<0.52
1,4-Dichlorobenzene	<0.48	Dimethyl phthalate	<0.24
1,2-Dichlorobenzene	<0.8	2,6-Dinitrotoluene	<0.36
Benzyl alcohol	<1	3-Nitroaniline	<3.5
Bis(2-chloroisopropyl) ether	<0.32	2,4-Dinitrophenol	<2.8
2-Methylphenol	<1.3	Dibenzofuran	<0.2
Hexachloroethane	<0.68	2,4-Dinitrotoluene	<0.32
N-Nitroso-di-n-propylamine	<0.6	4-Nitrophenol	<3.6
3-Methylphenol + 4-Methylphenol	<2.9	Diethyl phthalate	<0.8
Nitrobenzene	<0.52	4-Chlorophenyl phenyl ether	<0.32
Isophorone	<0.24	N-Nitrosodiphenylamine	<0.2
2-Nitrophenol	<1.6	4-Nitroaniline	<3.6
2,4-Dimethylphenol	<3.7	4,6-Dinitro-2-methylphenol	<2.1
Benzoic acid	<11	4-Bromophenyl phenyl ether	<0.32
Bis(2-chloroethoxy)methane	<0.28	Hexachlorobenzene	<0.2
2,4-Dichlorophenol	<1.2	Pentachlorophenol	<1.2
1,2,4-Trichlorobenzene	<0.68	Carbazole	<0.4
Hexachlorobutadiene	<0.4	Di-n-butyl phthalate	<4
4-Chloroaniline	<36	Benzyl butyl phthalate	<1.2
4-Chloro-3-methylphenol	<0.88	Bis(2-ethylhexyl) phthalate	<2.7
2-Methylnaphthalene	<0.2	Di-n-octyl phthalate	<0.68
Hexachlorocyclopentadiene	<0.44		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	03-1182 mb
Date Analyzed:	06/19/13	Data File:	061905.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	82	56	115
Phenol-d6	93	54	113
Nitrobenzene-d5	92	31	164
2-Fluorobiphenyl	91	47	133
2,4,6-Tribromophenol	97	35	141
Terphenyl-d14	97	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.0054	2,4,6-Trichlorophenol	<0.008
Bis(2-chloroethyl) ether	<0.0016	2,4,5-Trichlorophenol	<0.0096
2-Chlorophenol	<0.0062	2-Chloronaphthalene	<0.0014
1,3-Dichlorobenzene	<0.0026	2-Nitroaniline	<0.0026
1,4-Dichlorobenzene	<0.0024	Dimethyl phthalate	<0.0012
1,2-Dichlorobenzene	<0.004	2,6-Dinitrotoluene	<0.0018
Benzyl alcohol	<0.005	3-Nitroaniline	<0.017
Bis(2-chloroisopropyl) ether	<0.0016	2,4-Dinitrophenol	<0.014
2-Methylphenol	<0.0064	Dibenzofuran	<0.001
Hexachloroethane	<0.0034	2,4-Dinitrotoluene	<0.0016
N-Nitroso-di-n-propylamine	<0.003	4-Nitrophenol	<0.018
3-Methylphenol + 4-Methylphenol	<0.014	Diethyl phthalate	<0.004
Nitrobenzene	<0.0026	4-Chlorophenyl phenyl ether	<0.0016
Isophorone	<0.0012	N-Nitrosodiphenylamine	<0.001
2-Nitrophenol	<0.0082	4-Nitroaniline	<0.018
2,4-Dimethylphenol	<0.019	4,6-Dinitro-2-methylphenol	<0.011
Benzoic acid	<0.055	4-Bromophenyl phenyl ether	<0.0016
Bis(2-chloroethoxy)methane	<0.0014	Hexachlorobenzene	<0.001
2,4-Dichlorophenol	<0.0058	Pentachlorophenol	<0.0062
1,2,4-Trichlorobenzene	<0.0034	Carbazole	<0.002
Hexachlorobutadiene	<0.002	Di-n-butyl phthalate	<0.02
4-Chloroaniline	<0.18	Benzyl butyl phthalate	<0.0058
4-Chloro-3-methylphenol	<0.0044	Bis(2-ethylhexyl) phthalate	<0.013
2-Methylnaphthalene	<0.001	Di-n-octyl phthalate	<0.0034
Hexachlorocyclopentadiene	<0.0022		

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP2CB5-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-01 1/400
Date Analyzed:	06/23/13	Data File:	062239.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	650 ds	50	150
Benzo(a)anthracene-d12	194 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.088
Acenaphthylene	<0.036
Acenaphthene	<0.056
Fluorene	<0.06
Phenanthrene	0.47
Anthracene	0.063
Fluoranthene	0.74
Pyrene	0.69
Benz(a)anthracene	0.28
Chrysene	0.40
Benzo(a)pyrene	0.29
Benzo(b)fluoranthene	0.47
Benzo(k)fluoranthene	0.16
Indeno(1,2,3-cd)pyrene	0.26
Dibenz(a,h)anthracene	<0.14
Benzo(g,h,i)perylene	0.29

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP3CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-02 1/400
Date Analyzed:	06/23/13	Data File:	062240.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	1084 ds	50	150
Benzo(a)anthracene-d12	250 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.12
Acenaphthylene	<0.036
Acenaphthene	<0.056
Fluorene	<0.06
Phenanthrene	0.41
Anthracene	0.046
Fluoranthene	0.65
Pyrene	0.66
Benz(a)anthracene	0.18
Chrysene	0.42
Benzo(a)pyrene	0.12
Benzo(b)fluoranthene	0.33
Benzo(k)fluoranthene	<0.14
Indeno(1,2,3-cd)pyrene	<0.25
Dibenz(a,h)anthracene	<0.14
Benzo(g,h,i)perylene	<0.14

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP10CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-03 1/400
Date Analyzed:	06/24/13	Data File:	062407.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	1116 ds	50	150
Benzo(a)anthracene-d12	234 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	0.097
Acenaphthylene	<0.036
Acenaphthene	<0.056
Fluorene	<0.06
Phenanthrene	0.26
Anthracene	<0.035
Fluoranthene	0.50
Pyrene	0.52
Benz(a)anthracene	0.15
Chrysene	0.40
Benzo(a)pyrene	0.16
Benzo(b)fluoranthene	0.36
Benzo(k)fluoranthene	<0.14
Indeno(1,2,3-cd)pyrene	<0.25
Dibenz(a,h)anthracene	<0.14
Benzo(g,h,i)perylene	0.16

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP6CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-04 1/400
Date Analyzed:	06/23/13	Data File:	062237.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	354 ds	50	150
Benzo(a)anthracene-d12	210 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.088
Acenaphthylene	<0.036
Acenaphthene	<0.056
Fluorene	<0.06
Phenanthrene	0.54
Anthracene	0.34
Fluoranthene	0.63
Pyrene	0.52
Benz(a)anthracene	0.21
Chrysene	0.38
Benzo(a)pyrene	0.13
Benzo(b)fluoranthene	0.33
Benzo(k)fluoranthene	<0.14
Indeno(1,2,3-cd)pyrene	<0.25
Dibenz(a,h)anthracene	<0.14
Benzo(g,h,i)perylene	<0.14

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP3CB3-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306117-05 1/200
Date Analyzed:	06/23/13	Data File:	062238.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	308 ds	50	150
Benzo(a)anthracene-d12	119 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.044
Acenaphthylene	<0.018
Acenaphthene	<0.028
Fluorene	<0.03
Phenanthrene	0.24
Anthracene	0.021
Fluoranthene	0.37
Pyrene	0.35
Benz(a)anthracene	0.14
Chrysene	0.18
Benzo(a)pyrene	0.11
Benzo(b)fluoranthene	0.20
Benzo(k)fluoranthene	<0.072
Indeno(1,2,3-cd)pyrene	<0.12
Dibenz(a,h)anthracene	<0.068
Benzo(g,h,i)perylene	0.12

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/18/13	Lab ID:	03-1181 mb
Date Analyzed:	06/19/13	Data File:	061905.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	94	50	150
Benzo(a)anthracene-d12	110	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.00022
Acenaphthylene	<0.000091
Acenaphthene	<0.00014
Fluorene	<0.00015
Phenanthrene	<0.00032
Anthracene	<0.000088
Fluoranthene	<0.00028
Pyrene	<0.00026
Benz(a)anthracene	<0.00018
Chrysene	<0.00019
Benzo(a)pyrene	<0.00022
Benzo(b)fluoranthene	<0.00018
Benzo(k)fluoranthene	<0.00036
Indeno(1,2,3-cd)pyrene	<0.00062
Dibenz(a,h)anthracene	<0.00034
Benzo(g,h,i)perylene	<0.00034

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP2CB5-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/11/13	Lab ID:	306117-01 1/10
Date Analyzed:	06/18/13	Data File:	86.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	75 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.33
Aroclor 1232	<0.33
Aroclor 1016	<0.33
Aroclor 1242	<0.33
Aroclor 1248	<0.33
Aroclor 1254	<0.33
Aroclor 1260	<0.33

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP3CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/11/13	Lab ID:	306117-02 1/10
Date Analyzed:	06/18/13	Data File:	84.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	55 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.33
Aroclor 1232	<0.33
Aroclor 1016	<0.33
Aroclor 1242	<0.33
Aroclor 1248	<0.33
Aroclor 1254	<0.33
Aroclor 1260	<0.33

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP10CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/11/13	Lab ID:	306117-03 1/10
Date Analyzed:	06/18/13	Data File:	82.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	60 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.33
Aroclor 1232	<0.33
Aroclor 1016	<0.33
Aroclor 1242	<0.33
Aroclor 1248	<0.33
Aroclor 1254	<0.33
Aroclor 1260	<0.33

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP6CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/11/13	Lab ID:	306117-04 1/10
Date Analyzed:	06/18/13	Data File:	92.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.33
Aroclor 1232	<0.33
Aroclor 1016	<0.33
Aroclor 1242	<0.33
Aroclor 1248	<0.33
Aroclor 1254	<0.33
Aroclor 1260	<0.33

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP3CB3-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/11/13	Lab ID:	306117-05 1/10
Date Analyzed:	06/18/13	Data File:	90.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	55 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.33
Aroclor 1232	<0.33
Aroclor 1016	<0.33
Aroclor 1242	<0.33
Aroclor 1248	<0.33
Aroclor 1254	<0.33
Aroclor 1260	<0.33

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/11/13	Lab ID:	03-1140 mb
Date Analyzed:	06/13/13	Data File:	32.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	99	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.033
Aroclor 1232	<0.033
Aroclor 1016	<0.033
Aroclor 1242	<0.033
Aroclor 1248	<0.033
Aroclor 1254	<0.033
Aroclor 1260	<0.033

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP2CB5-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306117-01
Date Analyzed:	06/14/13	Data File:	306117-01.058
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	122	60	125
Indium	108	60	125
Holmium	113	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	0.133
Chromium	87.5
Nickel	21.6
Copper	62.4 fb
Zinc	429
Arsenic	5.57
Selenium	<0.912
Silver	0.127
Cadmium	0.910
Antimony	1.87
Barium	71.0
Thallium	0.0841
Lead	344

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ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP3CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306117-02 x10
Date Analyzed:	06/14/13	Data File:	306117-02 x10.072
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	119	60	125
Indium	102	60	125
Holmium	109	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.858
Chromium	161
Nickel	130
Copper	289 fb
Zinc	1,380
Arsenic	13.8
Selenium	<9.12
Silver	<0.784
Cadmium	8.84
Antimony	12.7
Barium	156
Thallium	<0.434
Lead	81.0

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP10CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306117-03 x10
Date Analyzed:	06/14/13	Data File:	306117-03 x10.073
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	121	60	125
Indium	105	60	125
Holmium	110	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.858
Chromium	154
Nickel	119
Copper	295 fb
Zinc	1,910
Arsenic	12.9
Selenium	<9.12
Silver	<0.784
Cadmium	<2.04
Antimony	7.10
Barium	167
Thallium	<0.434
Lead	87.2

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP6CB1-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306117-04 x10
Date Analyzed:	06/14/13	Data File:	306117-04 x10.074
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	112	60	125
Indium	106	60	125
Holmium	112	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.858
Chromium	45.9
Nickel	31.6
Copper	95.9 fb
Zinc	922
Arsenic	24.4
Selenium	<9.12
Silver	<0.784
Cadmium	<2.04
Antimony	3.93
Barium	73.7
Thallium	<0.434
Lead	95.6

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ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP3CB3-060613	Client:	SLR International Corp.
Date Received:	06/07/13	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306117-05 x10
Date Analyzed:	06/14/13	Data File:	306117-05 x10.076
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	111	60	125
Indium	106	60	125
Holmium	113	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.858
Chromium	22.7
Nickel	24.9
Copper	53.1 fb
Zinc	256
Arsenic	<4.22
Selenium	<9.12
Silver	<0.784
Cadmium	<2.04
Antimony	2.42
Barium	92.7
Thallium	0.667
Lead	42.4

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley Seattle 101.00205.00019
Date Extracted:	06/13/13	Lab ID:	I3-342 mb
Date Analyzed:	06/14/13	Data File:	I3-342 mb.037
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	100	60	125
Indium	98	60	125
Holmium	100	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.0858
Chromium	<0.471
Nickel	<0.206
Copper	0.110 j
Zinc	<0.969
Arsenic	<0.422
Selenium	<0.912
Silver	<0.0784
Cadmium	<0.204
Antimony	<0.106
Barium	<0.0524 j
Thallium	<0.0434 j
Lead	<0.0496 j

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ENVIRONMENTAL CHEMISTS

Date of Report: 07/22/13
Date Received: 06/07/13
Project: Crowley Seattle 101.00205.00019, F&BI 306117
Date Extracted: 06/13/13
Date Analyzed: 06/17/13

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Total Mercury
DP2CB5-060613 306117-01	0.060
DP3CB1-060613 306117-02	0.055
DP10CB1-060613 306117-03	0.44
DP6CB1-060613 306117-04	0.044
DP3CB3-060613 306117-05	0.091
Method Blank	<0.002

Date of Report: 07/22/13
Date Received: 06/07/13
Project: Crowley Seattle 101.00205.00019, F&BI 306117

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Gasoline	mg/kg (ppm)	10	90	90	61-153	0

Date of Report: 07/22/13
Date Received: 06/07/13
Project: Crowley Seattle 101.00205.00019, F&BI 306117

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 306117-04 (Matrix Spike) Silica Gel

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	500	800	99 b	129 b	64-133	26 b

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	500	129	58-147

Date of Report: 07/22/13
Date Received: 06/07/13
Project: Crowley Seattle 101.00205.00019, F&BI 306117

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 306117-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.020	8 vo	8 vo	10-56	0
Chloromethane	mg/kg (ppm)	2.5	<0.025	34	34	10-90	0
Vinyl chloride	mg/kg (ppm)	2.5	<0.016	31	31	10-91	0
Bromomethane	mg/kg (ppm)	2.5	<0.034	107	120 vo	10-110	11
Chloroethane	mg/kg (ppm)	2.5	<0.024	59	61	10-101	3
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.021	35	35	10-95	0
Acetone	mg/kg (ppm)	12.5	0.210	70	72	11-141	3
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.027	39	36	11-103	8
Methylene chloride	mg/kg (ppm)	2.5	<0.054	61	62	14-128	2
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.013	68	71	17-134	4
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.023	52	53	13-112	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.017	58	59	23-115	2
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.025	53	58	18-117	9
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.021	60	62	25-120	3
Chloroform	mg/kg (ppm)	2.5	<0.017	60	62	29-117	3
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.14	67	72	20-133	7
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.016	62	65	22-124	5
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.021	54	57	27-112	5
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.024	49	50	26-107	2
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.030	54	57	22-115	5
Benzene	mg/kg (ppm)	2.5	<0.014	57	58	26-114	2
Trichloroethene	mg/kg (ppm)	2.5	<0.033	55	56	30-112	2
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.034	60	64	31-119	6
Bromodichloromethane	mg/kg (ppm)	2.5	<0.025	65	68	31-131	5
Dibromomethane	mg/kg (ppm)	2.5	<0.022	64	67	27-124	5
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.14	74	79	16-147	7
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.023	63	68	28-137	8
Toluene	mg/kg (ppm)	2.5	<0.017	55	57	34-112	4
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.015	58	64	30-136	10
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.014	64	68	32-126	6
2-Hexanone	mg/kg (ppm)	12.5	<0.095	73	77	17-147	5
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.020	63	66	29-125	5
Tetrachloroethene	mg/kg (ppm)	2.5	<0.026	46	48	27-110	4
Dibromochloromethane	mg/kg (ppm)	2.5	<0.025	65	69	32-143	6
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.029	65	73	32-126	12
Chlorobenzene	mg/kg (ppm)	2.5	<0.014	57	60	37-113	5
Ethylbenzene	mg/kg (ppm)	2.5	<0.013	54	56	38-111	4
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.028	67	74	35-126	10
m,p-Xylene	mg/kg (ppm)	5	<0.03	54	56	38-112	4
o-Xylene	mg/kg (ppm)	2.5	<0.020	56	58	38-113	4
Styrene	mg/kg (ppm)	2.5	<0.021	58	61	38-118	5
Isopropylbenzene	mg/kg (ppm)	2.5	<0.019	52	56	37-114	7
Bromoform	mg/kg (ppm)	2.5	<0.035	64	71	18-155	10
n-Propylbenzene	mg/kg (ppm)	2.5	<0.017	48	52	36-114	8
Bromobenzene	mg/kg (ppm)	2.5	<0.012	54	57	40-115	5
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.011	48	52	35-116	8
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.036	65	70	33-128	7
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.022	62	65	33-123	5
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.016	51	54	39-110	6
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.019	52	55	39-111	6
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.021	49	52	36-116	6
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.016	48	52	35-116	8
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.015	46	49	33-118	6
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.012	45	48	32-119	6
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.020	50	53	38-111	6
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.032	50	54	39-109	8
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.016	53	56	40-111	6
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.080	58	66	34-134	13
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.036	39	43	31-117	10
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.041	32	34	25-122	6
Naphthalene	mg/kg (ppm)	2.5	<0.024	51	56	39-120	9
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.019	40	45	35-117	12

Date of Report: 07/22/13
Date Received: 06/07/13
Project: Crowley Seattle 101.00205.00019, F&BI 306117

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	45	10-76
Chloromethane	mg/kg (ppm)	2.5	63	34-98
Vinyl chloride	mg/kg (ppm)	2.5	69	42-107
Bromomethane	mg/kg (ppm)	2.5	86	46-113
Chloroethane	mg/kg (ppm)	2.5	82	47-115
Trichlorofluoromethane	mg/kg (ppm)	2.5	80	53-112
Acetone	mg/kg (ppm)	12.5	86	39-147
1,1-Dichloroethene	mg/kg (ppm)	2.5	78	65-110
Methylene chloride	mg/kg (ppm)	2.5	82	62-119
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	82	72-122
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	83	71-113
1,1-Dichloroethane	mg/kg (ppm)	2.5	84	76-109
2,2-Dichloropropane	mg/kg (ppm)	2.5	93	64-151
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	83	77-110
Chloroform	mg/kg (ppm)	2.5	83	78-108
2-Butanone (MEK)	mg/kg (ppm)	12.5	83	60-121
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	82	80-109
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	90	72-116
1,1-Dichloropropene	mg/kg (ppm)	2.5	82	77-108
Carbon tetrachloride	mg/kg (ppm)	2.5	103	67-123
Benzene	mg/kg (ppm)	2.5	81	75-107
Trichloroethene	mg/kg (ppm)	2.5	82	72-107
1,2-Dichloropropane	mg/kg (ppm)	2.5	85	78-111
Bromodichloromethane	mg/kg (ppm)	2.5	97	75-126
Dibromomethane	mg/kg (ppm)	2.5	87	80-111
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	91	80-128
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	97	71-138
Toluene	mg/kg (ppm)	2.5	81	79-112
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	89	77-135
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	85	84-115
2-Hexanone	mg/kg (ppm)	12.5	86	71-129
1,3-Dichloropropane	mg/kg (ppm)	2.5	83	82-113
Tetrachloroethene	mg/kg (ppm)	2.5	80	77-110
Dibromochloromethane	mg/kg (ppm)	2.5	98	64-152
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	102	83-116
Chlorobenzene	mg/kg (ppm)	2.5	81 vo	82-113
Ethylbenzene	mg/kg (ppm)	2.5	82	81-114
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	107	76-125
m,p-Xylene	mg/kg (ppm)	5	84	82-115
o-Xylene	mg/kg (ppm)	2.5	83	81-116
Styrene	mg/kg (ppm)	2.5	85	81-118
Isopropylbenzene	mg/kg (ppm)	2.5	84	81-117
Bromoform	mg/kg (ppm)	2.5	102	50-174
n-Propylbenzene	mg/kg (ppm)	2.5	85	82-116
Bromobenzene	mg/kg (ppm)	2.5	82	82-118
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	87	83-120
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	91	83-125
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	82	79-116
2-Chlorotoluene	mg/kg (ppm)	2.5	82	80-114
4-Chlorotoluene	mg/kg (ppm)	2.5	84	82-114
tert-Butylbenzene	mg/kg (ppm)	2.5	86	82-116
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	85	82-116
sec-Butylbenzene	mg/kg (ppm)	2.5	87	81-123
p-Isopropyltoluene	mg/kg (ppm)	2.5	87	82-124
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	83	80-118
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	82	79-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	82	80-118
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	100	71-131
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	83	75-122
Hexachlorobutadiene	mg/kg (ppm)	2.5	83	74-130
Naphthalene	mg/kg (ppm)	2.5	86	83-128
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	81	80-126

Date of Report: 07/22/13
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Project: Crowley Seattle 101.00205.00019, F&BI 306117

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

Laboratory Code: 306147-29 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Phenol	mg/kg (ppm)	1.7	<0.0054	78	85	50-150	9
Bis(2-chloroethyl) ether	mg/kg (ppm)	1.7	<0.0019	76	81	50-150	6
2-Chlorophenol	mg/kg (ppm)	1.7	<0.0058	79	86	50-150	8
1,3-Dichlorobenzene	mg/kg (ppm)	1.7	<0.0016	73	79	50-150	8
1,4-Dichlorobenzene	mg/kg (ppm)	1.7	<0.0013	76	80	50-150	5
1,2-Dichlorobenzene	mg/kg (ppm)	1.7	<0.0019	76	81	50-150	6
Benzyl alcohol	mg/kg (ppm)	1.7	0.016	87	100	50-150	14
Bis(2-chloroisopropyl) ether	mg/kg (ppm)	1.7	<0.0019	70	74	50-150	6
2-Methylphenol	mg/kg (ppm)	1.7	<0.0064	76	82	50-150	8
Hexachloroethane	mg/kg (ppm)	1.7	<0.0014	70	77	50-150	10
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	<0.0013	76	85	50-150	11
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	1.7	<0.012	76	82	50-150	8
Nitrobenzene	mg/kg (ppm)	1.7	<0.0022	79	87	50-150	10
Isophorone	mg/kg (ppm)	1.7	<0.00082	83	88	50-150	6
2-Nitrophenol	mg/kg (ppm)	1.7	<0.0058	84	97	50-150	14
2,4-Dimethylphenol	mg/kg (ppm)	1.7	<0.016	70	68	50-150	3
Benzoic acid	mg/kg (ppm)	2.5	<0.046	69	88	50-150	24 vo
Bis(2-chloroethoxy)methane	mg/kg (ppm)	1.7	<0.00094	82	86	50-150	5
2,4-Dichlorophenol	mg/kg (ppm)	1.7	<0.0052	85	93	50-150	9
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	<0.0013	82	89	50-150	8
Hexachlorobutadiene	mg/kg (ppm)	1.7	<0.0014	83	90	50-150	8
4-Chloroaniline	mg/kg (ppm)	3.3	<0.28	67	73	50-150	9
4-Chloro-3-methylphenol	mg/kg (ppm)	1.7	<0.0042	85	92	50-150	8
2-Methylnaphthalene	mg/kg (ppm)	1.7	<0.0014	79	86	50-150	8
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	<0.0022	53	75	50-150	34 vo
2,4,6-Trichlorophenol	mg/kg (ppm)	1.7	<0.0038	86	95	50-150	10
2,4,5-Trichlorophenol	mg/kg (ppm)	1.7	<0.0078	91	100	50-150	9
2-Chloronaphthalene	mg/kg (ppm)	1.7	<0.0015	86	93	50-150	8
2-Nitroaniline	mg/kg (ppm)	1.7	<0.0022	85	96	50-150	12
Dimethyl phthalate	mg/kg (ppm)	1.7	<0.0011	90	95	50-150	5
2,6-Dinitrotoluene	mg/kg (ppm)	1.7	<0.0011	94	103	50-150	9
3-Nitroaniline	mg/kg (ppm)	3.3	<0.004	72	80	50-150	11
2,4-Dinitrophenol	mg/kg (ppm)	1.7	<0.02	48 vo	102	50-150	72 vo
Dibenzofuran	mg/kg (ppm)	1.7	<0.0013	88	94	50-150	7
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	<0.00066	86	96	50-150	11
4-Nitrophenol	mg/kg (ppm)	1.7	<0.019	83	95	50-150	13
Diethyl phthalate	mg/kg (ppm)	1.7	0.0016	90	94	50-150	4
4-Chlorophenyl phenyl ether	mg/kg (ppm)	1.7	<0.0011	86	93	50-150	8
N-Nitrosodiphenylamine	mg/kg (ppm)	1.7	<0.0013	88	91	50-150	3
4-Nitroaniline	mg/kg (ppm)	3.3	<0.012	77	83	50-150	7
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	1.7	<0.016	61	104	50-150	52 vo
4-Bromophenyl phenyl ether	mg/kg (ppm)	1.7	<0.0014	89	95	50-150	7
Hexachlorobenzene	mg/kg (ppm)	1.7	<0.0012	89	94	50-150	5
Pentachlorophenol	mg/kg (ppm)	1.7	<0.011	88	99	50-150	12
Carbazole	mg/kg (ppm)	1.7	<0.0028	86	92	50-150	7
Di-n-butyl phthalate	mg/kg (ppm)	1.7	<0.002	92	97	50-150	5
Benzyl butyl phthalate	mg/kg (ppm)	1.7	<0.0012	101	101	50-150	0
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	1.7	<0.046	99	97	50-150	2
Di-n-octyl phthalate	mg/kg (ppm)	1.7	<0.0017	111	101	50-150	9

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QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Phenol	mg/kg (ppm)	1.7	87	91	51-119	4
Bis(2-chloroethyl) ether	mg/kg (ppm)	1.7	92	85	60-112	8
2-Chlorophenol	mg/kg (ppm)	1.7	90	93	59-114	3
1,3-Dichlorobenzene	mg/kg (ppm)	1.7	90	91	62-113	1
1,4-Dichlorobenzene	mg/kg (ppm)	1.7	91	90	61-114	1
1,2-Dichlorobenzene	mg/kg (ppm)	1.7	91	92	61-113	1
Benzyl alcohol	mg/kg (ppm)	1.7	92	96	50-119	4
Bis(2-chloroisopropyl) ether	mg/kg (ppm)	1.7	85	85	59-113	0
2-Methylphenol	mg/kg (ppm)	1.7	85	92	58-115	8
Hexachloroethane	mg/kg (ppm)	1.7	91	90	63-114	1
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	91	96	62-114	5
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	1.7	86	94	54-120	9
Nitrobenzene	mg/kg (ppm)	1.7	93	94	59-114	1
Isophorone	mg/kg (ppm)	1.7	94	97	61-113	3
2-Nitrophenol	mg/kg (ppm)	1.7	99	101	59-114	2
2,4-Dimethylphenol	mg/kg (ppm)	1.7	75	85	54-107	12
Benzoic acid	mg/kg (ppm)	2.5	109	116	43-150	6
Bis(2-chloroethoxy)methane	mg/kg (ppm)	1.7	92	95	60-114	3
2,4-Dichlorophenol	mg/kg (ppm)	1.7	91	95	57-118	4
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	93	95	56-112	2
Hexachlorobutadiene	mg/kg (ppm)	1.7	95	93	60-116	2
4-Chloroaniline	mg/kg (ppm)	3.3	56	44	10-126	24 vo
4-Chloro-3-methylphenol	mg/kg (ppm)	1.7	88	95	59-115	8
2-Methylnaphthalene	mg/kg (ppm)	1.7	88	91	60-115	3
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	97	95	41-107	2
2,4,6-Trichlorophenol	mg/kg (ppm)	1.7	92	96	47-119	4
2,4,5-Trichlorophenol	mg/kg (ppm)	1.7	93	99	61-121	6
2-Chloronaphthalene	mg/kg (ppm)	1.7	94	96	58-114	2
2-Nitroaniline	mg/kg (ppm)	1.7	92	97	55-119	5
Dimethyl phthalate	mg/kg (ppm)	1.7	96	98	58-116	2
2,6-Dinitrotoluene	mg/kg (ppm)	1.7	100	104	57-119	4
3-Nitroaniline	mg/kg (ppm)	3.3	85	92	10-143	8
2,4-Dinitrophenol	mg/kg (ppm)	1.7	73	79	40-122	8
Dibenzofuran	mg/kg (ppm)	1.7	94	99	56-115	5
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	89	94	53-126	5
4-Nitrophenol	mg/kg (ppm)	1.7	94	102	40-124	8
Diethyl phthalate	mg/kg (ppm)	1.7	99	97	57-116	2
4-Chlorophenyl phenyl ether	mg/kg (ppm)	1.7	93	94	54-119	1
N-Nitrosodiphenylamine	mg/kg (ppm)	1.7	92	95	54-113	3
4-Nitroaniline	mg/kg (ppm)	3.3	93	97	47-109	4
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	1.7	83	90	57-108	8
4-Bromophenyl phenyl ether	mg/kg (ppm)	1.7	97	98	56-116	1
Hexachlorobenzene	mg/kg (ppm)	1.7	95	98	57-115	3
Pentachlorophenol	mg/kg (ppm)	1.7	92	94	45-123	2
Carbazole	mg/kg (ppm)	1.7	95	98	57-116	3
Di-n-butyl phthalate	mg/kg (ppm)	1.7	100	102	56-118	2
Benzyl butyl phthalate	mg/kg (ppm)	1.7	102	101	56-122	1
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	1.7	93	99	56-125	6
Di-n-octyl phthalate	mg/kg (ppm)	1.7	97	104	58-120	7

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QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM

Laboratory Code: 306147-25 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	<0.00022	43 vo	49	44-129	13
Acenaphthylene	mg/kg (ppm)	0.17	<0.000091	62	67	52-121	8
Acenaphthene	mg/kg (ppm)	0.17	<0.00014	61	66	51-123	8
Fluorene	mg/kg (ppm)	0.17	<0.00015	70	75	37-137	7
Phenanthrene	mg/kg (ppm)	0.17	0.00061	73	77	45-124	5
Anthracene	mg/kg (ppm)	0.17	<0.000088	66	72	32-124	9
Fluoranthene	mg/kg (ppm)	0.17	<0.00028	75	81	50-125	8
Pyrene	mg/kg (ppm)	0.17	0.00032	76	82	41-135	8
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.00018	70	77	23-144	10
Chrysene	mg/kg (ppm)	0.17	<0.00019	71	80	45-122	12
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	0.00018	74	82	31-144	10
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.00036	75	84	45-130	11
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.00022	65	74	39-128	13
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.00062	68	77	28-146	12
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.00034	65	74	46-129	13
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	<0.00034	68	77	37-133	12

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	81	86	58-121	6
Acenaphthylene	mg/kg (ppm)	0.17	89	91	54-121	2
Acenaphthene	mg/kg (ppm)	0.17	86	89	54-123	3
Fluorene	mg/kg (ppm)	0.17	91	91	56-127	0
Phenanthrene	mg/kg (ppm)	0.17	89	91	55-122	2
Anthracene	mg/kg (ppm)	0.17	85	87	50-120	2
Fluoranthene	mg/kg (ppm)	0.17	93	94	54-129	1
Pyrene	mg/kg (ppm)	0.17	93	97	53-127	4
Benz(a)anthracene	mg/kg (ppm)	0.17	92	94	51-115	2
Chrysene	mg/kg (ppm)	0.17	94	95	55-129	1
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	97	101	56-123	4
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	94	96	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	88	90	51-118	2
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	98	99	49-148	1
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	92	93	50-141	1
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	92	94	52-131	2

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QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 306147-09 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Control Limits
Aroclor 1016	mg/kg (ppm)	0.8	<0.033	79	50-150
Aroclor 1260	mg/kg (ppm)	0.8	<0.033	93	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	81	89	70-130	9
Aroclor 1260	mg/kg (ppm)	0.8	90	90	70-130	0

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Project: Crowley Seattle 101.00205.00019, F&BI 306117

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 306147-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Beryllium	mg/kg (ppm)	5	0.138	117	118	67-138	1
Chromium	mg/kg (ppm)	50	11.7	89 b	87 b	57-128	2 b
Nickel	mg/kg (ppm)	25	18.9	87 b	83 b	69-112	5 b
Copper	mg/kg (ppm)	50	15.7	78 b	74 b	57-120	5 b
Zinc	mg/kg (ppm)	50	22.1	117 b	87 b	55-129	29 b
Arsenic	mg/kg (ppm)	10	3.75	161 b	96 b	70-118	51 b
Selenium	mg/kg (ppm)	5	<0.912	99	96	64-117	3
Silver	mg/kg (ppm)	10	<0.0784	103	100	73-122	3
Cadmium	mg/kg (ppm)	10	<0.204	106	104	83-116	2
Antimony	mg/kg (ppm)	20	0.702	118 vo	97	54-116	20
Barium	mg/kg (ppm)	50	38.0	90 b	86 b	60-141	5 b
Thallium	mg/kg (ppm)	5	0.071	100	97	68-121	3
Lead	mg/kg (ppm)	50	2.61	115	100	59-148	14

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Beryllium	mg/kg (ppm)	5	128	69-146
Chromium	mg/kg (ppm)	50	106	78-121
Nickel	mg/kg (ppm)	25	105	82-122
Copper	mg/kg (ppm)	50	100	82-119
Zinc	mg/kg (ppm)	50	106	81-120
Arsenic	mg/kg (ppm)	10	103	83-113
Selenium	mg/kg (ppm)	5	110	84-115
Silver	mg/kg (ppm)	10	103	81-116
Cadmium	mg/kg (ppm)	10	104	54-114
Antimony	mg/kg (ppm)	20	102	69-114
Barium	mg/kg (ppm)	50	102	85-116
Thallium	mg/kg (ppm)	5	102	77-123
Lead	mg/kg (ppm)	50	106	80-120

Date of Report: 07/22/13
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Project: Crowley Seattle 101.00205.00019, F&BI 306117

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Laboratory Code: 306147-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	0.020	93	91	62-140	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	79	63-131

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

RECEIVED
JUL 05 2013

July 3, 2013

Michele Costales Poquiz
Friedman & Bruya
3012 16th Ave W
Seattle, WA 98119

RE: Project: 306117
ARI Job No.: WT61

Dear Michele:

Please find enclosed the Chain-of-Custody record (COC), sample receipt documentation, and the final data for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted five solid samples on June 11, 2013, under ARI job WT61. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for TOC, as requested on the COC.

There were no anomalies associated with the analysis of these samples.

An electronic copy of this report and all associated raw data will be kept on file at ARI. Should you have any questions or concerns, please feel free to call me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com
www.arilabs.com

cc: eFile WT61

Enclosures

SAMPLE CHAIN OF CUSTODY

Send Report To Michele Costales Poquiz

Company Friedman & Bruya, Inc.

Address 3012 16th Ave. W.

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

Email Address mpoquiz@friedmanandbruya.com

SUBCONTRACTOR
Analytical Resources, Inc. (ARI)

PROJECT NAME/NO.: 306117

PO #: C-417

REMARKS

Please e-mail results

ELECTRONIC DATA REQUESTED (EIM)

Page # 1 of 1

TURNAROUND TIME
☒ Standard Turnaround
☐ RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
☒ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

Samples Received at ____ °C

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	Hexavalent Cr by 7196A	Total Organic Carbon by 9060				Notes
DP2CB5-060613		6/6/13	1002	solids	1							X				
DP3CB1-060613		↓	1425	↓	↓							↓				
DP10CB1-060613		↓	1525	↓	↓							↓				
~~DB~~ DP6CB1-060613		↓	1645	↓	↓							↓				
DP3CB3-060613		↓	1735	↓	↓							↓				

ANALYSES REQUESTED

MP 110113

WTGL : TGLM

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Michele Costales Poquiz	Michele Costales Poquiz	F&B1	6/11/13	11:05 AM
Received by:	Taylor Strickler	ARI	6-11-13	1355
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC SLRC.DOC

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Fredman & Bruya

Project Name: 306117

COC No(s): _____ NA

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: WJ61

Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 5.2

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90877952

Cooler Accepted by: TS Date: 6-11-13 Time: 1355

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used?	Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____		
Was sufficient ice used (if appropriate)?	NA	YES	NO
Were all bottles sealed in individual plastic bags?		YES	NO
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA	_____	

Was Sample Split by ARI : NA YES Date/Time: _____ Equipment: _____ Split by: _____

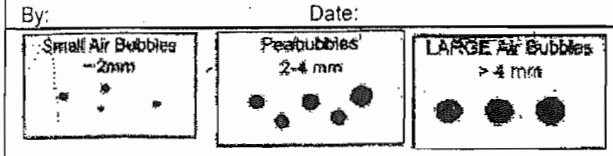
Samples Logged by: TS Date: 6-11-13 Time: 1415

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"	
Peabubbles → "pb"	
Large → "lg"	
Headspace → "hs"	

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: WT61
Client: Friedman & Bruya
Project Event: 306117
Project Name: N/A

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	DP2CB5-060613	WT61A	13-12497	Solid	06/06/13 10:02	06/11/13 13:55
2.	DP3CB1-060613	WT61B	13-12498	Solid	06/06/13 14:25	06/11/13 13:55
3.	DP10CB1-060613	WT61C	13-12499	Solid	06/06/13 15:25	06/11/13 13:55
4.	DP6CB1-060613	WT61D	13-12500	Solid	06/06/13 16:45	06/11/13 13:55
5.	DP3CB3-060613	WT61E	13-12501	Solid	06/06/13 17:35	06/11/13 13:55

SAMPLE RESULTS-CONVENTIONALS
WT61-Friedman & Bruya

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: MB
Reported: 07/03/13

Project: NA
Event: 306117
Date Sampled: 06/06/13
Date Received: 06/11/13

Client ID: DP2CB5-060613
ARI ID: 13-12497 WT61A

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	58.87
Total Organic Carbon	07/02/13 070213#1	EPA 9060M	Percent	0.176	7.90

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WT61-Friedman & Bruya

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: NB
Reported: 07/03/13

Project: NA
Event: 306117
Date Sampled: 06/06/13
Date Received: 06/11/13

Client ID: DP3CB1-060613
ARI ID: 13-12498 WT61B

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	80.00
Total Organic Carbon	07/02/13 070213#1	EPA 9060M	Percent	0.156	5.54

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WT61-Friedman & Bruya

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized
Reported: 07/03/13

Project: NA
Event: 306117
Date Sampled: 06/06/13
Date Received: 06/11/13

Client ID: DP10CB1-060613
ARI ID: 13-12499 WT61C

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	77.38
Total Organic Carbon	07/02/13 070213#1	EPA 9060M	Percent	0.200	4.76

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WT61-Friedman & Bruya

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized:
Reported: 07/03/13

Project: NA
Event: 306117
Date Sampled: 06/06/13
Date Received: 06/11/13

Client ID: DP6CB1-060613
ARI ID: 13-12500 WT61D

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	69.25
Total Organic Carbon	07/02/13 070213#1	EPA 9060M	Percent	0.240	6.68

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WT61-Friedman & Bruya

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: MB
Reported: 07/03/13

Project: NA
Event: 306117
Date Sampled: 06/06/13
Date Received: 06/11/13

Client ID: DP3CB3-060613
ARI ID: 13-12501 WT61E

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	29.16
Total Organic Carbon	07/02/13 070213#1	EPA 9060M	Percent	0.174	33.8

RL Analytical reporting limit
U Undetected at reported detection limit

LAB CONTROL RESULTS-CONVENTIONALS
WT61-Friedman & Bruya

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: MB
Reported: 07/03/13

Project: NA
Event: 306117
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Organic Carbon EPA 9060M	ICVL	07/02/13	Percent	0.098	0.100	98.0%

METHOD BLANK RESULTS-CONVENTIONALS
WT61-Friedman & Bruya

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized:
Reported: 07/03/13

Project: NA
Event: 306117
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank	QC ID
Total Solids	06/17/13	Percent	< 0.01 U	ICB
Total Organic Carbon	07/02/13	Percent	< 0.020 U	ICB

STANDARD REFERENCE RESULTS-CONVENTIONALS
WT61-Friedman & Bruya

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: MB
Reported: 07/03/13

Project: NA
Event: 306117
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST 1941B	07/02/13	Percent	2.48	2.99	82.9%

RECEIVED
JUN 27 2013

Budinger & Associates

Geotechnical Engineering
Environmental Engineering
Construction Materials Testing
Subsurface Exploration
Special Inspection

Proudly serving the Inland Northwest for over 30 years

Michele Costales Poquiz
Friedman & Bruya
3012 16th Avenue West
Seattle, WA 98119

June 24, 2013

Project Number L13283

PROJECT: 306117 Soils
Seattle, WA

SUBJECT: Results of Laboratory Testing
Report # 1

At your request, we provided laboratory testing services for the subject project. Services were limited to the performance of specific laboratory tests, selected at your discretion.

For this period our involvement was limited to laboratory testing of five samples delivered to us on June 12, 2013. Laboratory tests were performed in general accordance with methods listed on the attached *Laboratory Summary* and *Particle Size Distribution* sheets.

If you have any questions, please call.

Respectfully Submitted,
BUDINGER & ASSOCIATES, INC.

Kyle L. Sanford
Mgr. Construction Services

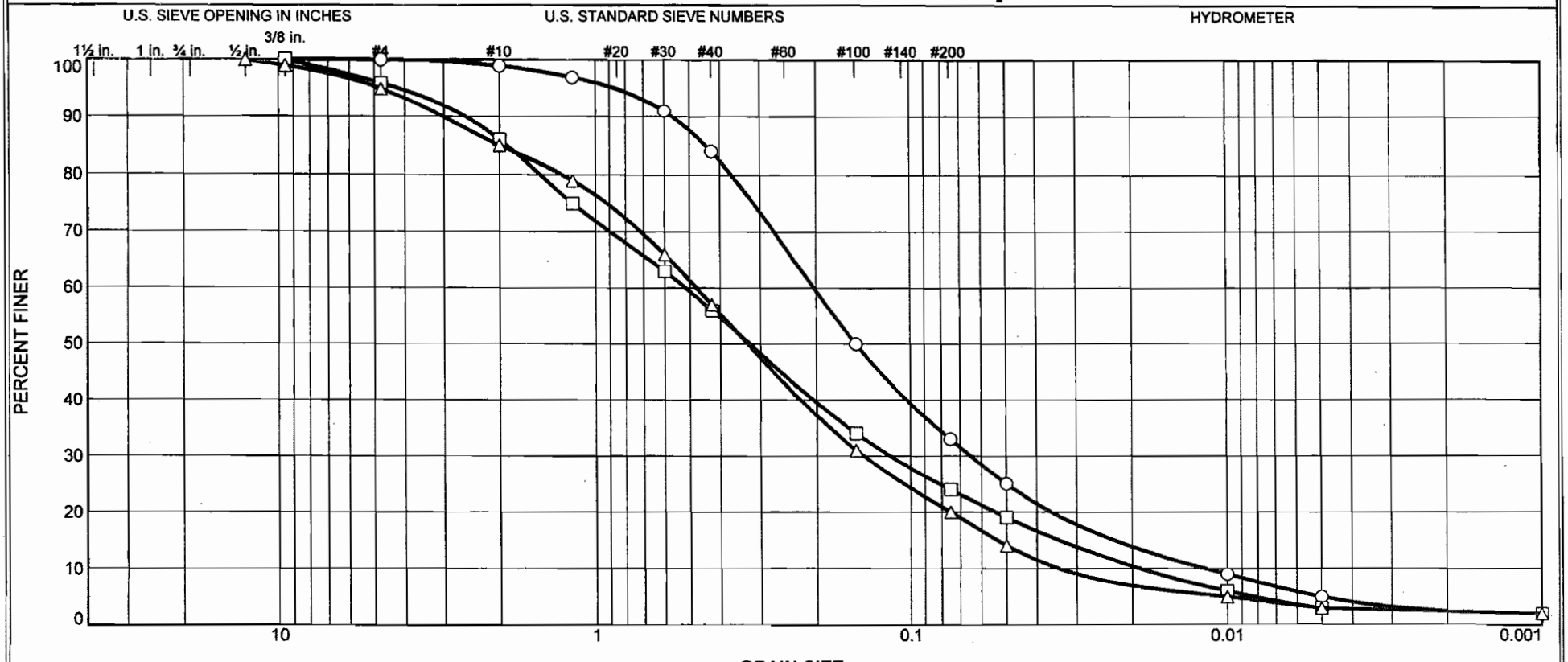
KLS/kh
Addressee – 2
Attachments:
- Soils - Laboratory Summary (1 page)
- Particle Size Distribution (2 pages)

1101 North Fancher Road
Spokane Valley, WA 99212
Tel: 509-535-8841
Fax:509-535-9589

SOILS
LABORATORY SUMMARY

		Units	Test Method					
LABORATORY NUMBER				13-0408	13-0409	13-0410	13-0411	13-0412
SAMPLE NUMBER				1	2	3	4	5
SAMPLED BY				Client	Client	Client	Client	Client
SAMPLE TYPE				Bulk	Bulk	Bulk	Bulk	Bulk
DATE RECEIVED				6/12/13	6/12/13	6/12/13	6/12/13	6/12/13
SAMPLE LOCATION				DP2CB5-060613	DP3CB1-060613	DP10CB1-060613	DP6CB1-060613	DP3CB3-060613
SIEVE ANALYSIS			ASTM D-422					
	3/4"						100	
S	1/2"	%				100	97	
I	3/8"			100	100	99	76	100
E	#4	P		100-	96	95	40	97
V	#10	A		99	86	85	25	92
E	#16	S		97	75	79	22	90
	#30	S		91	63	66	19	86
S	#40	I		84	56	57	12	82
I	#100	N		50	34	31	11	58
Z	#200	G		33	24	20	8.9	40
E	.05mm			25	19	14	7	30
	.01mm			9	6	5	2	10
	.005mm			5	3	3	2	8
	.001mm			2	2	2	1	5

Particle Size Distribution Report



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	1	15	51	28	5
□	0	4	10	30	32	21	3
△	0	5	10	28	37	17	3

	Identification		Date Sampled	Date Received	Date Tested
○	Source of Sample: on site	Sample Number: 1 (13-0408)		6/12/13	6/17/13
□	Source of Sample: on site	Sample Number: 2 (13-0409)		6/12/13	6/17/13
△	Source of Sample: on site	Sample Number: 3 (13-0410)		6/12/13	6/17/13

Client Friedman & Bruya

Project 306117 Soils

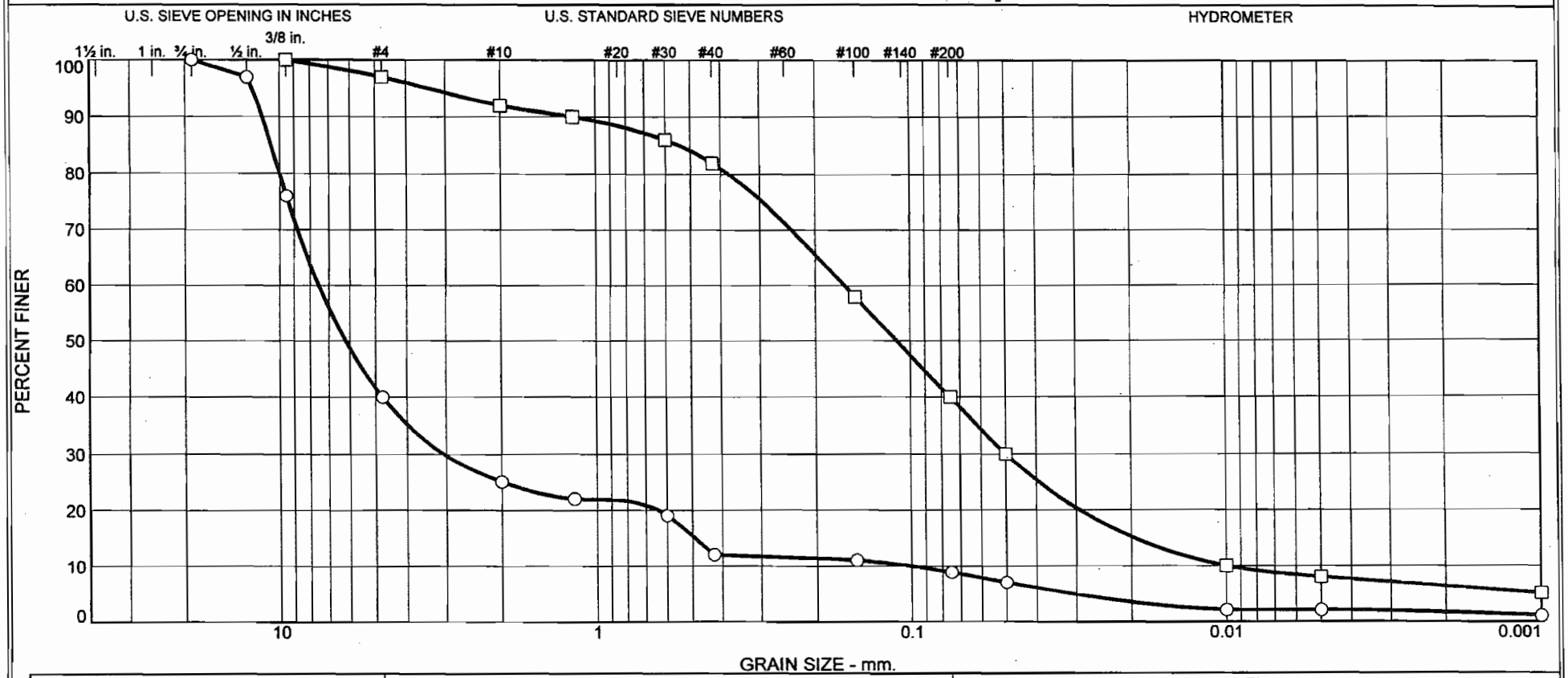
Project No. L13283 Date 6/21/13

BUDINGER & ASSOCIATES, INC.

○ Sampled by Client #DP2CB5-060613
□ Sampled by Client #DP3CB1-060613
△ Sampled by Client #DP10CB1-060613

Tested By: KC **Checked By:** TB

Particle Size Distribution Report



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	60	15	13	3	7	2
□	0	3	5	10	42	32	8

	Identification		Date Sampled	Date Received	Date Tested
○	Source of Sample: on site	Sample Number: 4 (13-0411)		6/12/13	6/17/13
□	Source of Sample: on site	Sample Number: 5 (13-0412)		6/12/13	6/17/13

Client Friedman & Bruya

Project 306117 Soils

Project No. L13283 Date 6/21/13

BUDINGER & ASSOCIATES, INC.

○ Sampled by Client #DP6CB1-060613
□ Sampled by Client #DP3CB3-060613

Tested By: KC **Checked By:** TB

306 117

SAMPLE CHAIN OF CUSTODY ~~KJ~~ ~~MK~~ 06-07-13

BI4 / VS3

Page # 1 of 1

Send Report To NIKE STATON

Company SLR CONSULTING

Address 22118 20TH AVE SE, STE 6202

City, State, ZIP BOTHELL, WA 98021

Phone # 425-402-8800 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. CROWLEY SEATTLE 101.00205.00019

PO#

REMARKS

TURNAROUND TIME
- ☑ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☐ Will call with instructions

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260C	SVOCs by 8270D	HFS	Metals (Pb only + Ba) 6020	Hg 1631E	PAHs 8270D SIM	PCBs 8082A	TOC 9060	Grain size ASTM D-422	Lab ID	Notes
DP2CB5-060613	1	6/6/13	1000	SOLIDS	~~14~~ 15	X	X		X	X		X	X	X	X	X	X	01 A-N	
DP3CB1-060613	2		1425		14	X	X		X	X		X	X	X	X	X	X	02	
DP10CB1-060613	3		1525		14	X	X		X	X		X	X	X	X	X	X	03	
DP6CB1-060613	4		1645		14	X	X		X	X		X	X	X	X	X	X	04	
DP3CB3-060613	5		1735		14	X	X		X	X		X	X	X	X	X	X	05	

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	GREG LISH	SLR	6/7/13	11:25
Received by:	VINH	FBI	6/7/13	1:30 PM
Relinquished by:				
Received by:		Samples received at 4		

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

July 22, 2013

Mike Staton
SLR International Corp.
22118 20th Ave. SE., G-202
Bothell, WA 98021

Dear Mr. Staton:

Included are the results from the testing of material submitted on June 12, 2013 from the Crowley/101.00205.00019, F&BI 306182 project. There are 65 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michele Costales Poquiz

Michele Costales Poquiz
Chemist

Enclosures
SLR0722R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 12, 2013 by Friedman & Bruya, Inc. from the SLR International Corp. Crowley/101.00205.00019, F&BI 306182 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SLR International Corp.
306182-01	DP4CB4-061013
306182-02	DP6CB4-061013
306182-03	DP1CB3-061013
306182-04	TRIP BLANK-061013B
306182-05	DP1CB2-061013
306182-06	DP2CB2-061013
306182-07	DP4CB2-061013
306182-08	DP5CB1-061013
306182-09	DP5CB4-061013

Total Petroluem Hydrocarbons as Gasoline by Method NWTPH-Gx

All quality control requirements were acceptable.

Total Petroluem Hydrocarbons as Diesel and Motor Oil by Method NWTPH-Dx with Silica Gel

All quality control requirements were acceptable.

Volatile Compounds by EPA Method 8260C

Analysis of the samples by direct sparge resulted in failing internal standards, indicating that the direct sparge extraction technique is not appropriate for the sample matrix. The samples were re-extracted using the methanolic technique. The results from the methanolic analysis are enclosed.

The presence of acetone, chloroform and methylene chloride in the samples is likely due to laboratory contamination. The results have been flagged accordingly.

The chlorobenzene result in the laboratory control sample was out of control limits. The values reported are estimates.

The trip blank sample was received with incorrect preservation for the 8260 analysis of vinyl chloride. The result should be considered an estimate.

The percent recovery for several compounds in the matrix spike (MS), matrix spike duplicate (MSD), laboratory control sample (LCS) and/or laboratory control sample duplicate (LCSD) exceeded acceptance criteria. The results have been flagged accordingly.

CASE NARRATIVE (continued)

Semivolatile Organic Compounds by EPA Method 8270D
The samples were diluted due to matrix interferences. The reporting limits have been raised accordingly.

The percent recovery for several compounds in the MS, MSD and/or LCS exceeded acceptance criteria. In addition, the relative percent difference (RPD) for the MS and MSD exceeded acceptance criteria for several compounds. The results have been flagged accordingly.

Semivolatile Organic Compounds by EPA Method 8270D SIM
The samples were diluted due to matrix interferences. The reporting limits have been raised accordingly.

Polychlorinated Biphenyls as Aroclor 1016/1260 by EPA Method 8082A
The samples were diluted due to matrix interferences. The reporting limits have been raised accordingly.

Total Metals by EPA Method 200.8
The samples DP4CB2-061013 and DP5CB1-061013 were diluted due to matrix interferences. The reporting limits have been raised accordingly.

Copper was identified at a low level in the method blank. The results have been flagged accordingly.

Total Mercury by EPA Method 1631E
All quality control requirements were acceptable.

Total Organic Carbon by EPA Method 9060M
The samples were sent to Analytical Resources, Inc. for analysis. Review of the enclosed report indicates all quality control requirements were acceptable.

Grain Size by ASTM D-422
The samples were sent to Budinger & Associates for analysis. The report generated by B&A is enclosed.

Date of Report: 07/22/13
Date Received: 06/12/13
Project: Crowley/101.00205.00019, F&BI 306182
Date Extracted: 06/19/13
Date Analyzed: 06/19/13

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 58-139)
DP4CB4-061013 306182-01	0.87	83
DP6CB4-061013 306182-02	9.6	81
DP1CB3-061013 306182-03	0.73	83
DP1CB2-061013 306182-05	2.7	79
DP2CB2-061013 306182-06	1.0	83
DP4CB2-061013 306182-07	0.83	83
DP5CB1-061013 306182-08	0.82	82
DP5CB4-061013 306182-09	0.77	80
Method Blank 03-1162 MB	<0.20	83

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 07/22/13
Date Received: 06/12/13
Project: Crowley/101.00205.00019, F&BI 306182
Date Extracted: 06/13/13
Date Analyzed: 06/17/13 and 06/18/13

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
DP4CB4-061013 306182-01 1/10	6,000 x	21,000	92
DP6CB4-061013 306182-02 1/10	3,100 x	7,500	120
DP1CB3-061013 306182-03 1/10	88 x	1,400	107
DP1CB2-061013 306182-05 1/10	300 x	2,600	126
DP2CB2-061013 306182-06 1/10	720 x	7,900	111
DP4CB2-061013 306182-07 1/10	750 x	7,800	102
DP5CB1-061013 306182-08 1/10	2,200 x	19,000	105
DP5CB4-061013 306182-09 1/10	1,900 x	15,000	99
Method Blank 03-1149 MB	<2.8 j	<4.5 j	113

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP4CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-01
Date Analyzed:	06/18/13	Data File:	061827.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	97	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.02	1,3-Dichloropropane	<0.02
Chloromethane	<0.026	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.026
Bromomethane	<0.034	1,2-Dibromoethane (EDB)	<0.03
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	<0.02	Ethylbenzene	<0.013
Acetone	<0.2	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.026	m,p-Xylene	<0.03
Methylene chloride	<0.054	o-Xylene	<0.034
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.022
trans-1,2-Dichloroethene	<0.024	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.034
2,2-Dichloropropane	<0.026	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.022	Bromobenzene	<0.012
Chloroform	0.068 lc	1,3,5-Trimethylbenzene	<0.011
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.022	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.03	tert-Butylbenzene	<0.022
Benzene	<0.014	1,2,4-Trimethylbenzene	<0.016
Trichloroethene	<0.034	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.024	1,3-Dichlorobenzene	<0.02
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.022	1,2-Dibromo-3-chloropropane	<0.08
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.04
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.096	1,2,3-Trichlorobenzene	<0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP6CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-02
Date Analyzed:	06/18/13	Data File:	061828.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	95	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.02	1,3-Dichloropropane	<0.02
Chloromethane	<0.026	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.026
Bromomethane	<0.034	1,2-Dibromoethane (EDB)	<0.03
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	<0.02	Ethylbenzene	<0.013
Acetone	<0.2	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.026	m,p-Xylene	<0.03
Methylene chloride	<0.054	o-Xylene	<0.034
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.022
trans-1,2-Dichloroethene	<0.024	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.034
2,2-Dichloropropane	<0.026	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.022	Bromobenzene	<0.012
Chloroform	0.043 lc	1,3,5-Trimethylbenzene	<0.011
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.022	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.03	tert-Butylbenzene	<0.022
Benzene	<0.014	1,2,4-Trimethylbenzene	<0.016
Trichloroethene	<0.034	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.024	1,3-Dichlorobenzene	<0.02
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.022	1,2-Dibromo-3-chloropropane	<0.08
Toluene	4.2	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.04
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.096	1,2,3-Trichlorobenzene	<0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP1CB3-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-03
Date Analyzed:	06/18/13	Data File:	061829.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	94	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.02	1,3-Dichloropropane	<0.02
Chloromethane	<0.026	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.026
Bromomethane	<0.034	1,2-Dibromoethane (EDB)	<0.03
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	0.021	Ethylbenzene	<0.013
Acetone	<0.2	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.026	m,p-Xylene	<0.03
Methylene chloride	<0.054	o-Xylene	<0.034
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.022
trans-1,2-Dichloroethene	<0.024	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.034
2,2-Dichloropropane	<0.026	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.022	Bromobenzene	<0.012
Chloroform	0.027 lc	1,3,5-Trimethylbenzene	<0.011
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.022	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.03	tert-Butylbenzene	<0.022
Benzene	<0.014	1,2,4-Trimethylbenzene	0.025
Trichloroethene	<0.034	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.024	1,3-Dichlorobenzene	<0.02
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.022	1,2-Dibromo-3-chloropropane	<0.08
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.04
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.096	1,2,3-Trichlorobenzene	<0.019

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP1CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-05
Date Analyzed:	06/18/13	Data File:	061830.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.02	1,3-Dichloropropane	<0.02
Chloromethane	<0.026	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.026
Bromomethane	<0.034	1,2-Dibromoethane (EDB)	<0.03
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	0.074	Ethylbenzene	<0.013
Acetone	<0.2	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.026	m,p-Xylene	<0.03
Methylene chloride	0.081 lc	o-Xylene	<0.034
Methyl t-butyl ether (MTBE)	<0.013	Styrene	0.046
trans-1,2-Dichloroethene	<0.024	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.034
2,2-Dichloropropane	<0.026	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.022	Bromobenzene	<0.012
Chloroform	<0.017	1,3,5-Trimethylbenzene	0.023
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.022	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.03	tert-Butylbenzene	<0.022
Benzene	<0.014	1,2,4-Trimethylbenzene	0.051
Trichloroethene	<0.034	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	0.018
Bromodichloromethane	<0.024	1,3-Dichlorobenzene	<0.02
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.022	1,2-Dibromo-3-chloropropane	<0.08
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.04
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.096	1,2,3-Trichlorobenzene	<0.019

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP2CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-06
Date Analyzed:	06/18/13	Data File:	061831.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	59	116
Toluene-d8	93	51	121
4-Bromofluorobenzene	121	32	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.02	1,3-Dichloropropane	<0.02
Chloromethane	<0.026	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.026
Bromomethane	<0.034	1,2-Dibromoethane (EDB)	<0.03
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	<0.02	Ethylbenzene	<0.013
Acetone	0.29 lc	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.026	m,p-Xylene	<0.03
Methylene chloride	0.31 lc	o-Xylene	<0.034
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.022
trans-1,2-Dichloroethene	<0.024	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.034
2,2-Dichloropropane	<0.026	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.022	Bromobenzene	<0.012
Chloroform	<0.017	1,3,5-Trimethylbenzene	0.038
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.022	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.03	tert-Butylbenzene	<0.022
Benzene	<0.014	1,2,4-Trimethylbenzene	0.083
Trichloroethene	<0.034	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.024	1,3-Dichlorobenzene	<0.02
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.022	1,2-Dibromo-3-chloropropane	<0.08
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.04
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.096	1,2,3-Trichlorobenzene	<0.019

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP4CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-07
Date Analyzed:	06/18/13	Data File:	061832.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	95	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.02	1,3-Dichloropropane	<0.02
Chloromethane	<0.026	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.026
Bromomethane	<0.034	1,2-Dibromoethane (EDB)	<0.03
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	0.057	Ethylbenzene	<0.013
Acetone	0.24 lc	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.026	m,p-Xylene	<0.03
Methylene chloride	<0.054	o-Xylene	<0.034
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.022
trans-1,2-Dichloroethene	<0.024	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.034
2,2-Dichloropropane	<0.026	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.022	Bromobenzene	<0.012
Chloroform	<0.017	1,3,5-Trimethylbenzene	<0.011
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.022	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.03	tert-Butylbenzene	<0.022
Benzene	<0.014	1,2,4-Trimethylbenzene	<0.016
Trichloroethene	<0.034	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.024	1,3-Dichlorobenzene	<0.02
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.022	1,2-Dibromo-3-chloropropane	<0.08
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.04
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.096	1,2,3-Trichlorobenzene	<0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP5CB1-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-08
Date Analyzed:	06/18/13	Data File:	061833.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	59	116
Toluene-d8	92	51	121
4-Bromofluorobenzene	120	32	146

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.02	1,3-Dichloropropane	<0.02
Chloromethane	<0.026	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.026
Bromomethane	<0.034	1,2-Dibromoethane (EDB)	<0.03
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	<0.02	Ethylbenzene	<0.013
Acetone	0.41 lc	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.026	m,p-Xylene	<0.03
Methylene chloride	0.31 lc	o-Xylene	<0.034
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.022
trans-1,2-Dichloroethene	<0.024	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.034
2,2-Dichloropropane	<0.026	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.022	Bromobenzene	<0.012
Chloroform	<0.017	1,3,5-Trimethylbenzene	<0.011
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.022	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.03	tert-Butylbenzene	<0.022
Benzene	<0.014	1,2,4-Trimethylbenzene	<0.016
Trichloroethene	<0.034	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.024	1,3-Dichlorobenzene	<0.02
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.022	1,2-Dibromo-3-chloropropane	<0.08
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.04
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.096	1,2,3-Trichlorobenzene	<0.019

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	DP5CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-09
Date Analyzed:	06/18/13	Data File:	061834.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	97	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.02	1,3-Dichloropropane	<0.02
Chloromethane	<0.026	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.026
Bromomethane	<0.034	1,2-Dibromoethane (EDB)	<0.03
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	0.046	Ethylbenzene	<0.013
Acetone	0.37 lc	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.026	m,p-Xylene	<0.03
Methylene chloride	<0.054	o-Xylene	<0.034
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.022
trans-1,2-Dichloroethene	<0.024	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.034
2,2-Dichloropropane	<0.026	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.022	Bromobenzene	<0.012
Chloroform	<0.017	1,3,5-Trimethylbenzene	<0.011
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.022	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.03	tert-Butylbenzene	<0.022
Benzene	<0.014	1,2,4-Trimethylbenzene	<0.016
Trichloroethene	<0.034	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.024	1,3-Dichlorobenzene	<0.02
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.022	1,2-Dibromo-3-chloropropane	<0.08
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.04
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.096	1,2,3-Trichlorobenzene	<0.019

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	03-1113 mb
Date Analyzed:	06/18/13	Data File:	061810.D
Matrix:	Soil/Solid	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Dichlorodifluoromethane	<0.020	1,3-Dichloropropane	<0.020
Chloromethane	<0.025	Tetrachloroethene	<0.026
Vinyl chloride	<0.016	Dibromochloromethane	<0.025
Bromomethane	<0.034	1,2-Dibromoethane (EDB)	<0.029
Chloroethane	<0.024	Chlorobenzene	<0.014 jl
Trichlorofluoromethane	<0.021	Ethylbenzene	<0.013
Acetone	<0.21	1,1,1,2-Tetrachloroethane	<0.028
1,1-Dichloroethene	<0.027	m,p-Xylene	<0.03
Methylene chloride	<0.054	o-Xylene	<0.020
Methyl t-butyl ether (MTBE)	<0.013	Styrene	<0.021
trans-1,2-Dichloroethene	<0.023	Isopropylbenzene	<0.019
1,1-Dichloroethane	<0.017	Bromoform	<0.035
2,2-Dichloropropane	<0.025	n-Propylbenzene	<0.017
cis-1,2-Dichloroethene	<0.021	Bromobenzene	<0.012
Chloroform	<0.017	1,3,5-Trimethylbenzene	<0.011
2-Butanone (MEK)	<0.14	1,1,2,2-Tetrachloroethane	<0.036
1,2-Dichloroethane (EDC)	<0.016	1,2,3-Trichloropropane	<0.022
1,1,1-Trichloroethane	<0.021	2-Chlorotoluene	<0.016
1,1-Dichloropropene	<0.024	4-Chlorotoluene	<0.019
Carbon tetrachloride	<0.030	tert-Butylbenzene	<0.021
Benzene	<0.014	1,2,4-Trimethylbenzene	<0.016
Trichloroethene	<0.033	sec-Butylbenzene	<0.015
1,2-Dichloropropane	<0.034	p-Isopropyltoluene	<0.012
Bromodichloromethane	<0.025	1,3-Dichlorobenzene	<0.020
Dibromomethane	<0.022	1,4-Dichlorobenzene	<0.032
4-Methyl-2-pentanone	<0.14	1,2-Dichlorobenzene	<0.016
cis-1,3-Dichloropropene	<0.023	1,2-Dibromo-3-chloropropane	<0.080
Toluene	<0.017	1,2,4-Trichlorobenzene	<0.036
trans-1,3-Dichloropropene	<0.015	Hexachlorobutadiene	<0.041
1,1,2-Trichloroethane	<0.014	Naphthalene	<0.024
2-Hexanone	<0.095	1,2,3-Trichlorobenzene	<0.019

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	TRIP BLANK-061013B	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-04
Date Analyzed:	06/18/13	Data File:	061812.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	95	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<0.16	1,3-Dichloropropane	<0.2
Chloromethane	<0.22	Tetrachloroethene	<0.28
Vinyl chloride	<0.13 pr	Dibromochloromethane	<0.24
Bromomethane	<0.2	1,2-Dibromoethane (EDB)	<0.24
Chloroethane	<0.18	Chlorobenzene	<0.1
Trichlorofluoromethane	<0.17	Ethylbenzene	<0.16
Acetone	<2.6	1,1,1,2-Tetrachloroethane	<0.32
1,1-Dichloroethene	<0.19	m,p-Xylene	<0.5
Methylene chloride	<3	o-Xylene	<0.22
Methyl t-butyl ether (MTBE)	<0.13	Styrene	<0.22
trans-1,2-Dichloroethene	<0.24	Isopropylbenzene	<0.15
1,1-Dichloroethane	<0.18	Bromoform	<0.22
2,2-Dichloropropane	<0.3	n-Propylbenzene	<0.14
cis-1,2-Dichloroethene	<0.24	Bromobenzene	<0.18
Chloroform	<0.24	1,3,5-Trimethylbenzene	<0.18
2-Butanone (MEK)	<0.94	1,1,2,2-Tetrachloroethane	<0.24
1,2-Dichloroethane (EDC)	<0.11	1,2,3-Trichloropropane	<0.28
1,1,1-Trichloroethane	<0.2	2-Chlorotoluene	<0.13
1,1-Dichloropropene	<0.26	4-Chlorotoluene	<0.16
Carbon tetrachloride	<0.24	tert-Butylbenzene	<0.15
Benzene	<0.13	1,2,4-Trimethylbenzene	<0.11
Trichloroethene	<0.17	sec-Butylbenzene	<0.12
1,2-Dichloropropane	<0.32	p-Isopropyltoluene	<0.15
Bromodichloromethane	<0.38	1,3-Dichlorobenzene	<0.15
Dibromomethane	<0.28	1,4-Dichlorobenzene	<0.094
4-Methyl-2-pentanone	<1.3	1,2-Dichlorobenzene	<0.13
cis-1,3-Dichloropropene	<0.2	1,2-Dibromo-3-chloropropane	<0.44
Toluene	<0.13	1,2,4-Trichlorobenzene	<0.34
trans-1,3-Dichloropropene	<0.34	Hexachlorobutadiene	<0.46
1,1,2-Trichloroethane	<0.28	Naphthalene	<0.28
2-Hexanone	<1	1,2,3-Trichlorobenzene	<0.38

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	03-1114 mb
Date Analyzed:	06/18/13	Data File:	061809.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<0.16	1,3-Dichloropropane	<0.2
Chloromethane	<0.22	Tetrachloroethene	<0.28
Vinyl chloride	<0.13	Dibromochloromethane	<0.24
Bromomethane	<0.2	1,2-Dibromoethane (EDB)	<0.24
Chloroethane	<0.18	Chlorobenzene	<0.1
Trichlorofluoromethane	<0.17	Ethylbenzene	<0.16
Acetone	<2.6	1,1,1,2-Tetrachloroethane	<0.32
1,1-Dichloroethene	<0.19	m,p-Xylene	<0.5
Methylene chloride	<3	o-Xylene	<0.22
Methyl t-butyl ether (MTBE)	<0.13	Styrene	<0.22
trans-1,2-Dichloroethene	<0.24	Isopropylbenzene	<0.15
1,1-Dichloroethane	<0.18	Bromoform	<0.22
2,2-Dichloropropane	<0.3	n-Propylbenzene	<0.14
cis-1,2-Dichloroethene	<0.24	Bromobenzene	<0.18
Chloroform	<0.24	1,3,5-Trimethylbenzene	<0.18
2-Butanone (MEK)	<0.94	1,1,2,2-Tetrachloroethane	<0.24
1,2-Dichloroethane (EDC)	<0.11	1,2,3-Trichloropropane	<0.28
1,1,1-Trichloroethane	<0.2	2-Chlorotoluene	<0.13
1,1-Dichloropropene	<0.26	4-Chlorotoluene	<0.16
Carbon tetrachloride	<0.24	tert-Butylbenzene	<0.15
Benzene	<0.13	1,2,4-Trimethylbenzene	<0.11
Trichloroethene	<0.17	sec-Butylbenzene	<0.12
1,2-Dichloropropane	<0.32	p-Isopropyltoluene	<0.15
Bromodichloromethane	<0.38	1,3-Dichlorobenzene	<0.15
Dibromomethane	<0.28	1,4-Dichlorobenzene	<0.094
4-Methyl-2-pentanone	<1.3	1,2-Dichlorobenzene	<0.13
cis-1,3-Dichloropropene	<0.2	1,2-Dibromo-3-chloropropane	<0.44
Toluene	<0.13	1,2,4-Trichlorobenzene	<0.34
trans-1,3-Dichloropropene	<0.34	Hexachlorobutadiene	<0.46
1,1,2-Trichloroethane	<0.28	Naphthalene	<0.28
2-Hexanone	<1	1,2,3-Trichlorobenzene	<0.38

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP4CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-01 1/400
Date Analyzed:	06/24/13	Data File:	062409.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	86 ds	56	115
Phenol-d6	70 ds	54	113
Nitrobenzene-d5	64 ds	31	164
2-Fluorobiphenyl	90 ds	47	133
2,4,6-Tribromophenol	22 ds	35	141
Terphenyl-d14	156 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	<2	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	<1.6
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	3.2
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	<5.4
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	2.2
Hexachlorocyclopentadiene	<0.88		

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP6CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-02 1/400
Date Analyzed:	06/24/13	Data File:	062410.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	90 ds	56	115
Phenol-d6	44 ds	54	113
Nitrobenzene-d5	100 ds	31	164
2-Fluorobiphenyl	88 ds	47	133
2,4,6-Tribromophenol	64 ds	35	141
Terphenyl-d14	114 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	<2	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	<1.6
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	<2.3
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	40
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	2.8
Hexachlorocyclopentadiene	<0.88		

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP1CB3-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-03 1/400
Date Analyzed:	06/24/13	Data File:	062411.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	76 ds	56	115
Phenol-d6	54 ds	54	113
Nitrobenzene-d5	60 ds	31	164
2-Fluorobiphenyl	80 ds	47	133
2,4,6-Tribromophenol	66 ds	35	141
Terphenyl-d14	100 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	<2	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	<1.6
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	<2.3
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	<5.4
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	<1.4
Hexachlorocyclopentadiene	<0.88		

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP1CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-05 1/400
Date Analyzed:	06/24/13	Data File:	062412.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	14 ds	56	115
Phenol-d6	18 ds	54	113
Nitrobenzene-d5	50 ds	31	164
2-Fluorobiphenyl	72 ds	47	133
2,4,6-Tribromophenol	56 ds	35	141
Terphenyl-d14	126 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	2.0	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	<1.6
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	<2.3
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	9.1
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	<1.4 J
Hexachlorocyclopentadiene	<0.88		

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP2CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-06 1/400
Date Analyzed:	06/24/13	Data File:	062413.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	12 ds	56	115
Phenol-d6	40 ds	54	113
Nitrobenzene-d5	82 ds	31	164
2-Fluorobiphenyl	68 ds	47	133
2,4,6-Tribromophenol	54 ds	35	141
Terphenyl-d14	100 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	<2	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	<1.6
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	<2.3
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	6.6
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	<1.4
Hexachlorocyclopentadiene	<0.88		

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP4CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-07 1/400
Date Analyzed:	06/24/13	Data File:	062414.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	26 ds	56	115
Phenol-d6	40 ds	54	113
Nitrobenzene-d5	80 ds	31	164
2-Fluorobiphenyl	80 ds	47	133
2,4,6-Tribromophenol	26 ds	35	141
Terphenyl-d14	100 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	<2	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	<1.6
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	<2.3
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	55
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	<1.4
Hexachlorocyclopentadiene	<0.88		

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP5CB1-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-08 1/400
Date Analyzed:	06/24/13	Data File:	062415.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	14 ds	56	115
Phenol-d6	40 ds	54	113
Nitrobenzene-d5	60 ds	31	164
2-Fluorobiphenyl	80 ds	47	133
2,4,6-Tribromophenol	54 ds	35	141
Terphenyl-d14	120 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	<2	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	9.7
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	<2.3
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	20
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	<1.4
Hexachlorocyclopentadiene	<0.88		

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	DP5CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-09 1/400
Date Analyzed:	06/24/13	Data File:	062408.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	48 ds	56	115
Phenol-d6	46 ds	54	113
Nitrobenzene-d5	60 ds	31	164
2-Fluorobiphenyl	72 ds	47	133
2,4,6-Tribromophenol	74 ds	35	141
Terphenyl-d14	234 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<2.2	2,4,6-Trichlorophenol	<3.2
Bis(2-chloroethyl) ether	<0.64	2,4,5-Trichlorophenol	<3.8
2-Chlorophenol	<2.5	2-Chloronaphthalene	<0.56
1,3-Dichlorobenzene	<1	2-Nitroaniline	<1
1,4-Dichlorobenzene	<0.96	Dimethyl phthalate	<0.48
1,2-Dichlorobenzene	<1.6	2,6-Dinitrotoluene	<0.72
Benzyl alcohol	<2	3-Nitroaniline	<7
Bis(2-chloroisopropyl) ether	<0.64	2,4-Dinitrophenol	<5.5
2-Methylphenol	<2.6	Dibenzofuran	<0.4
Hexachloroethane	<1.4	2,4-Dinitrotoluene	<0.64
N-Nitroso-di-n-propylamine	<1.2	4-Nitrophenol	<7.1
3-Methylphenol + 4-Methylphenol	<5.8	Diethyl phthalate	<1.6
Nitrobenzene	<1	4-Chlorophenyl phenyl ether	<0.64
Isophorone	<0.48	N-Nitrosodiphenylamine	<0.4
2-Nitrophenol	<3.3	4-Nitroaniline	<7.3
2,4-Dimethylphenol	<7.4	4,6-Dinitro-2-methylphenol	<4.2
Benzoic acid	<22	4-Bromophenyl phenyl ether	<0.64
Bis(2-chloroethoxy)methane	<0.56	Hexachlorobenzene	<0.4
2,4-Dichlorophenol	<2.3	Pentachlorophenol	<2.5
1,2,4-Trichlorobenzene	<1.4	Carbazole	<0.8
Hexachlorobutadiene	<0.8	Di-n-butyl phthalate	<8
4-Chloroaniline	<71	Benzyl butyl phthalate	<2.3
4-Chloro-3-methylphenol	<1.8	Bis(2-ethylhexyl) phthalate	24
2-Methylnaphthalene	<0.4	Di-n-octyl phthalate	<1.4
Hexachlorocyclopentadiene	<0.88		

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	03-1189 mb
Date Analyzed:	06/21/13	Data File:	062105.D
Matrix:	Soil/Solid	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	84	56	115
Phenol-d6	94	54	113
Nitrobenzene-d5	95	31	164
2-Fluorobiphenyl	92	47	133
2,4,6-Tribromophenol	101	35	141
Terphenyl-d14	98	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.0054	2,4,6-Trichlorophenol	<0.0038
Bis(2-chloroethyl) ether	<0.0019	2,4,5-Trichlorophenol	<0.0078
2-Chlorophenol	<0.0058	2-Chloronaphthalene	<0.0015
1,3-Dichlorobenzene	<0.0016	2-Nitroaniline	<0.0022
1,4-Dichlorobenzene	<0.0013	Dimethyl phthalate	<0.0011
1,2-Dichlorobenzene	<0.0019	2,6-Dinitrotoluene	<0.0011
Benzyl alcohol	<0.002	3-Nitroaniline	<0.004
Bis(2-chloroisopropyl) ether	<0.0019	2,4-Dinitrophenol	<0.02
2-Methylphenol	<0.0064	Dibenzofuran	<0.0013
Hexachloroethane	<0.0014	2,4-Dinitrotoluene	<0.00066
N-Nitroso-di-n-propylamine	<0.0013	4-Nitrophenol	<0.019
3-Methylphenol + 4-Methylphenol	<0.012	Diethyl phthalate	<0.0014
Nitrobenzene	<0.0022	4-Chlorophenyl phenyl ether	<0.0011
Isophorone	<0.00082	N-Nitrosodiphenylamine	<0.0013
2-Nitrophenol	<0.0058	4-Nitroaniline	<0.012
2,4-Dimethylphenol	<0.016	4,6-Dinitro-2-methylphenol	<0.016
Benzoic acid	<0.046	4-Bromophenyl phenyl ether	<0.0014
Bis(2-chloroethoxy)methane	<0.00094	Hexachlorobenzene	<0.0012
2,4-Dichlorophenol	<0.0052	Pentachlorophenol	<0.011
1,2,4-Trichlorobenzene	0.0017	Carbazole	<0.0028
Hexachlorobutadiene	<0.0014	Di-n-butyl phthalate	<0.002
4-Chloroaniline	<0.28	Benzyl butyl phthalate	<0.0012
4-Chloro-3-methylphenol	<0.0042	Bis(2-ethylhexyl) phthalate	<0.046
2-Methylnaphthalene	<0.0014	Di-n-octyl phthalate	<0.0017
Hexachlorocyclopentadiene	<0.0022		

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP4CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-01 1/400
Date Analyzed:	06/22/13	Data File:	062221.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	738 ds	50	150
Benzo(a)anthracene-d12	198 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.088
Acenaphthylene	<0.036
Acenaphthene	0.087
Fluorene	<0.06
Phenanthrene	0.81
Anthracene	0.33
Fluoranthene	1.4
Pyrene	1.3
Benz(a)anthracene	0.42
Chrysene	0.79
Benzo(a)pyrene	0.40
Benzo(b)fluoranthene	0.71
Benzo(k)fluoranthene	0.20
Indeno(1,2,3-cd)pyrene	0.44
Dibenz(a,h)anthracene	0.17
Benzo(g,h,i)perylene	0.57

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP6CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-02 1/400
Date Analyzed:	06/22/13	Data File:	062222.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	616 ds	50	150
Benzo(a)anthracene-d12	224 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.088
Acenaphthylene	<0.036
Acenaphthene	<0.056
Fluorene	<0.06
Phenanthrene	0.44
Anthracene	<0.035
Fluoranthene	0.69
Pyrene	0.73
Benz(a)anthracene	0.24
Chrysene	0.38
Benzo(a)pyrene	0.20
Benzo(b)fluoranthene	0.34
Benzo(k)fluoranthene	<0.14
Indeno(1,2,3-cd)pyrene	<0.25
Dibenz(a,h)anthracene	<0.14
Benzo(g,h,i)perylene	0.28

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP1CB3-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-03 1/400
Date Analyzed:	06/22/13	Data File:	062223.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	912 ds	50	150
Benzo(a)anthracene-d12	130 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.088
Acenaphthylene	<0.036
Acenaphthene	<0.056
Fluorene	<0.06
Phenanthrene	<0.13
Anthracene	<0.035
Fluoranthene	0.12
Pyrene	0.11
Benz(a)anthracene	0.10
Chrysene	0.098
Benzo(a)pyrene	<0.088
Benzo(b)fluoranthene	0.094
Benzo(k)fluoranthene	<0.14
Indeno(1,2,3-cd)pyrene	<0.25
Dibenz(a,h)anthracene	<0.14
Benzo(g,h,i)perylene	<0.14

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP1CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-05 1/400
Date Analyzed:	06/22/13	Data File:	062224.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	624 ds	50	150
Benzo(a)anthracene-d12	192 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.088
Acenaphthylene	<0.036
Acenaphthene	<0.056
Fluorene	<0.06
Phenanthrene	<0.13
Anthracene	<0.035
Fluoranthene	0.24
Pyrene	0.22
Benz(a)anthracene	0.11
Chrysene	0.23
Benzo(a)pyrene	<0.088
Benzo(b)fluoranthene	0.18
Benzo(k)fluoranthene	<0.14
Indeno(1,2,3-cd)pyrene	<0.25
Dibenz(a,h)anthracene	<0.14
Benzo(g,h,i)perylene	<0.14

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP2CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-06 1/400
Date Analyzed:	06/22/13	Data File:	062225.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	548 ds	50	150
Benzo(a)anthracene-d12	134 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.088
Acenaphthylene	<0.036
Acenaphthene	<0.056
Fluorene	<0.06
Phenanthrene	0.29
Anthracene	<0.035
Fluoranthene	0.60
Pyrene	0.57
Benz(a)anthracene	0.25
Chrysene	0.44
Benzo(a)pyrene	0.21
Benzo(b)fluoranthene	0.46
Benzo(k)fluoranthene	<0.14
Indeno(1,2,3-cd)pyrene	<0.25
Dibenz(a,h)anthracene	<0.14
Benzo(g,h,i)perylene	0.24

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP4CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-07 1/400
Date Analyzed:	06/22/13	Data File:	062226.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	562 ds	50	150
Benzo(a)anthracene-d12	190 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.088
Acenaphthylene	<0.036
Acenaphthene	<0.056
Fluorene	<0.06
Phenanthrene	0.66
Anthracene	0.047
Fluoranthene	1.0
Pyrene	0.79
Benz(a)anthracene	0.30
Chrysene	0.48
Benzo(a)pyrene	0.21
Benzo(b)fluoranthene	0.44
Benzo(k)fluoranthene	<0.14
Indeno(1,2,3-cd)pyrene	<0.25
Dibenz(a,h)anthracene	<0.14
Benzo(g,h,i)perylene	0.20

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP5CB1-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-08 1/400
Date Analyzed:	06/23/13	Data File:	062227.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	658 ds	50	150
Benzo(a)anthracene-d12	308 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.088
Acenaphthylene	<0.036
Acenaphthene	<0.056
Fluorene	<0.06
Phenanthrene	0.38
Anthracene	0.084
Fluoranthene	0.73
Pyrene	0.79
Benz(a)anthracene	0.27
Chrysene	0.56
Benzo(a)pyrene	0.14
Benzo(b)fluoranthene	0.40
Benzo(k)fluoranthene	<0.14
Indeno(1,2,3-cd)pyrene	<0.25
Dibenz(a,h)anthracene	<0.14
Benzo(g,h,i)perylene	0.17

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	DP5CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	306182-09 1/400
Date Analyzed:	06/23/13	Data File:	062228.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	876 ds	50	150
Benzo(a)anthracene-d12	258 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.088
Acenaphthylene	<0.036
Acenaphthene	<0.056
Fluorene	<0.06
Phenanthrene	0.27
Anthracene	0.17
Fluoranthene	0.92
Pyrene	1.1
Benz(a)anthracene	0.50
Chrysene	1.1
Benzo(a)pyrene	0.31
Benzo(b)fluoranthene	0.88
Benzo(k)fluoranthene	0.28
Indeno(1,2,3-cd)pyrene	0.25
Dibenz(a,h)anthracene	<0.14
Benzo(g,h,i)perylene	0.24

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley/101.00205.00019
Date Extracted:	06/20/13	Lab ID:	03-1188 mb
Date Analyzed:	06/21/13	Data File:	062119.D
Matrix:	Soil/Solid	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	101	50	150
Benzo(a)anthracene-d12	121	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.00022
Acenaphthylene	<0.000091
Acenaphthene	<0.00014
Fluorene	<0.00015
Phenanthrene	<0.00032
Anthracene	<0.000088
Fluoranthene	<0.00028
Pyrene	<0.00026
Benz(a)anthracene	<0.00018
Chrysene	<0.00019
Benzo(a)pyrene	<0.00022
Benzo(b)fluoranthene	<0.00018
Benzo(k)fluoranthene	<0.00036
Indeno(1,2,3-cd)pyrene	<0.00062
Dibenz(a,h)anthracene	<0.00034
Benzo(g,h,i)perylene	<0.00034

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP4CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306182-01 1/20
Date Analyzed:	07/12/13	Data File:	24.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.66
Aroclor 1232	<0.66
Aroclor 1016	<0.66
Aroclor 1242	<0.66
Aroclor 1248	<0.66
Aroclor 1254	<0.66
Aroclor 1260	<0.66

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP6CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306182-02 1/20
Date Analyzed:	07/12/13	Data File:	26.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	100 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.66
Aroclor 1232	<0.66
Aroclor 1016	<0.66
Aroclor 1242	<0.66
Aroclor 1248	<0.66
Aroclor 1254	<0.66
Aroclor 1260	<0.66

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP1CB3-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306182-03 1/10
Date Analyzed:	06/25/13	Data File:	16.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	80 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.33
Aroclor 1232	<0.33
Aroclor 1016	<0.33
Aroclor 1242	<0.33
Aroclor 1248	<0.33
Aroclor 1254	<0.33
Aroclor 1260	<0.33

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP1CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306182-05 1/10
Date Analyzed:	06/25/13	Data File:	18.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.33
Aroclor 1232	<0.33
Aroclor 1016	<0.33
Aroclor 1242	<0.33
Aroclor 1248	<0.33
Aroclor 1254	<0.33
Aroclor 1260	<0.33

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP2CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306182-06 1/20
Date Analyzed:	07/12/13	Data File:	30.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	120 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.66
Aroclor 1232	<0.66
Aroclor 1016	<0.66
Aroclor 1242	<0.66
Aroclor 1248	<0.66
Aroclor 1254	<0.66
Aroclor 1260	<0.66

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP4CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306182-07 1/20
Date Analyzed:	07/12/13	Data File:	32.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	110 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.66
Aroclor 1232	<0.66
Aroclor 1016	<0.66
Aroclor 1242	<0.66
Aroclor 1248	<0.66
Aroclor 1254	<0.66
Aroclor 1260	<0.66

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP5CB1-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306182-08 1/20
Date Analyzed:	07/12/13	Data File:	34.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.66
Aroclor 1232	<0.66
Aroclor 1016	<0.66
Aroclor 1242	<0.66
Aroclor 1248	<0.66
Aroclor 1254	<0.66
Aroclor 1260	<0.66

Analysis For PCBs By EPA Method 8082

Client Sample ID:	DP5CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/13/13	Lab ID:	306182-09 1/20
Date Analyzed:	07/12/13	Data File:	36.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	110 ds	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.66
Aroclor 1232	<0.66
Aroclor 1016	<0.66
Aroclor 1242	<0.66
Aroclor 1248	<0.66
Aroclor 1254	<0.66
Aroclor 1260	<0.66

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley/101.00205.00019
Date Extracted:	06/13/13	Lab ID:	03-1150 mb 1/0.2
Date Analyzed:	06/18/13	Data File:	10.D\ECD1A.CH
Matrix:	Soil/Solid	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	92	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.033
Aroclor 1232	<0.033
Aroclor 1016	<0.033
Aroclor 1242	<0.033
Aroclor 1248	<0.033
Aroclor 1254	<0.033
Aroclor 1260	<0.033

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP4CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-01
Date Analyzed:	06/19/13	Data File:	306182-01.039
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	105	60	125
Indium	88	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	0.196
Chromium	114
Nickel	39.6
Copper	202 fb
Zinc	1,230
Arsenic	14.3
Selenium	<0.912
Silver	0.481
Cadmium	3.89
Antimony	5.19
Barium	209
Thallium	0.404
Lead	526

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP6CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-02
Date Analyzed:	06/19/13	Data File:	306182-02.040
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	97	60	125
Indium	91	60	125
Holmium	99	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	0.163
Chromium	87.8
Nickel	35.4
Copper	163 fb
Zinc	878
Arsenic	8.61
Selenium	<0.912
Silver	0.378
Cadmium	2.01
Antimony	4.17
Barium	102
Thallium	0.234
Lead	327

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP1CB3-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-03
Date Analyzed:	06/19/13	Data File:	306182-03.041
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	92	60	125
Indium	87	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	0.170
Chromium	19.1
Nickel	20.8
Copper	53.4 fb
Zinc	285
Arsenic	3.87
Selenium	<0.912
Silver	0.145
Cadmium	0.866
Antimony	0.681
Barium	122
Thallium	<0.0434
Lead	52.6

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP1CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-05
Date Analyzed:	06/19/13	Data File:	306182-05.042
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	110	60	125
Indium	90	60	125
Holmium	101	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	0.116
Chromium	30.9
Nickel	20.5
Copper	77.7 fb
Zinc	543
Arsenic	9.19
Selenium	<0.912
Silver	0.134
Cadmium	1.50
Antimony	0.845
Barium	173
Thallium	0.0459
Lead	84.3

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP2CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-06
Date Analyzed:	06/19/13	Data File:	306182-06.043
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	121	60	125
Indium	92	60	125
Holmium	102	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	0.129
Chromium	51.3
Nickel	41.9
Copper	187 fb
Zinc	882
Arsenic	8.05
Selenium	<0.912
Silver	0.339
Cadmium	1.68
Antimony	2.61
Barium	158
Thallium	<0.0434
Lead	78.7

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP4CB2-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-07 x10
Date Analyzed:	06/19/13	Data File:	306182-07 x10.048
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	97	60	125
Indium	90	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.858
Chromium	105
Nickel	56.6
Copper	149 fb
Zinc	2,300
Arsenic	25.1
Selenium	<9.12
Silver	<0.784
Cadmium	<2.04
Antimony	2.83
Barium	215
Thallium	0.596
Lead	206

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP5CB1-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-08 x10
Date Analyzed:	06/19/13	Data File:	306182-08 x10.049
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	95	60	125
Indium	90	60	125
Holmium	98	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.858
Chromium	124
Nickel	132
Copper	447 fb
Zinc	983
Arsenic	16.5
Selenium	<9.12
Silver	<0.784
Cadmium	<2.04
Antimony	4.23
Barium	152
Thallium	0.452
Lead	87.7

Analysis For Total Metals By EPA Method 200.8

Client ID:	DP5CB4-061013	Client:	SLR International Corp.
Date Received:	06/12/13	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	306182-09
Date Analyzed:	06/19/13	Data File:	306182-09.047
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	114	60	125
Indium	90	60	125
Holmium	97	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	0.197
Chromium	56.9
Nickel	32.7
Copper	119 fb
Zinc	983
Arsenic	18.6
Selenium	<0.912
Silver	0.308
Cadmium	2.22
Antimony	4.66
Barium	127
Thallium	0.136
Lead	181

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley/101.00205.00019
Date Extracted:	06/18/13	Lab ID:	I3-354 mb
Date Analyzed:	06/19/13	Data File:	I3-354 mb.021
Matrix:	Soil/Solid	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	86	60	125
Indium	87	60	125
Holmium	94	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.0858
Chromium	<0.471
Nickel	<0.206
Copper	0.0790 j
Zinc	<0.969
Arsenic	<0.422
Selenium	<0.912
Silver	<0.0784
Cadmium	<0.204
Antimony	<0.106
Barium	<0.0524
Thallium	<0.0434 j
Lead	<0.0496

Date of Report: 07/22/13
Date Received: 06/12/13
Project: Crowley/101.00205.00019, F&BI 306182
Date Extracted: 06/18/13
Date Analyzed: 06/19/13

RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Total Mercury
DP4CB4-061013 306182-01	0.086
DP6CB4-061013 306182-02	0.10
DP1CB3-061013 306182-03	0.097
DP1CB2-061013 306182-05	0.27
DP2CB2-061013 306182-06	0.10
DP4CB2-061013 306182-07	0.086
DP5CB1-061013 306182-08	0.099
DP5CB4-061013 306182-09	0.14
Method Blank	<0.002

Date of Report: 07/22/13
Date Received: 06/12/13
Project: Crowley/101.00205.00019, F&BI 306182

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Gasoline	mg/kg (ppm)	10	90	90	61-153	0

Date of Report: 07/22/13
Date Received: 06/12/13
Project: Crowley/101.00205.00019, F&BI 306182

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 306183-03 (Matrix Spike) Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	500	88	102	64-133	15

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	500	107	58-147

Date of Report: 07/22/13
Date Received: 06/12/13
Project: Crowley/101.00205.00019, F&BI 306182

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 306117-05 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	mg/kg (ppm)	2.5	<0.5	8 vo	8 vo	10-56	0
Chloromethane	mg/kg (ppm)	2.5	<0.5	34	34	10-90	0
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	31	31	10-91	0
Bromomethane	mg/kg (ppm)	2.5	<0.5	107	120 vo	10-110	11
Chloroethane	mg/kg (ppm)	2.5	<0.5	59	61	10-101	3
Trichlorofluoromethane	mg/kg (ppm)	2.5	<0.5	35	35	10-95	0
Acetone	mg/kg (ppm)	12.5	<0.5	70	72	11-141	3
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	39	36	11-103	8
Methylene chloride	mg/kg (ppm)	2.5	<0.5	61	62	14-128	2
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	<0.05	68	71	17-134	4
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	52	53	13-112	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	58	59	23-115	2
2,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	53	58	18-117	9
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	60	62	25-120	3
Chloroform	mg/kg (ppm)	2.5	<0.05	60	62	29-117	3
2-Butanone (MEK)	mg/kg (ppm)	12.5	<0.5	67	72	20-133	7
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	62	65	22-124	5
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	54	57	27-112	5
1,1-Dichloropropene	mg/kg (ppm)	2.5	<0.05	49	50	26-107	2
Carbon tetrachloride	mg/kg (ppm)	2.5	<0.05	54	57	22-115	5
Benzene	mg/kg (ppm)	2.5	<0.03	57	58	26-114	2
Trichloroethene	mg/kg (ppm)	2.5	<0.03	55	56	30-112	2
1,2-Dichloropropane	mg/kg (ppm)	2.5	<0.05	60	64	31-119	6
Bromodichloromethane	mg/kg (ppm)	2.5	<0.05	65	68	31-131	5
Dibromomethane	mg/kg (ppm)	2.5	<0.05	64	67	27-124	5
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	<0.5	74	79	16-147	7
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	63	68	28-137	8
Toluene	mg/kg (ppm)	2.5	<0.05	55	57	34-112	4
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	<0.05	58	64	30-136	10
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	<0.05	64	68	32-126	6
2-Hexanone	mg/kg (ppm)	12.5	<0.5	73	77	17-147	5
1,3-Dichloropropane	mg/kg (ppm)	2.5	<0.05	63	66	29-125	5
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	46	48	27-110	4
Dibromochloromethane	mg/kg (ppm)	2.5	<0.05	65	69	32-143	6
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	<0.05	65	73	32-126	12
Chlorobenzene	mg/kg (ppm)	2.5	<0.05	57	60	37-113	5
Ethylbenzene	mg/kg (ppm)	2.5	<0.05	54	56	38-111	4
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	67	74	35-126	10
m,p-Xylene	mg/kg (ppm)	5	<0.1	54	56	38-112	4
o-Xylene	mg/kg (ppm)	2.5	<0.05	56	58	38-113	4
Styrene	mg/kg (ppm)	2.5	<0.05	58	61	38-118	5
Isopropylbenzene	mg/kg (ppm)	2.5	<0.05	52	56	37-114	7
Bromoform	mg/kg (ppm)	2.5	<0.05	64	71	18-155	10
n-Propylbenzene	mg/kg (ppm)	2.5	<0.05	48	52	36-114	8
Bromobenzene	mg/kg (ppm)	2.5	<0.05	54	57	40-115	5
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	48	52	35-116	8
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	<0.05	65	70	33-128	7
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	<0.05	62	65	33-123	5
2-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	51	54	39-110	6
4-Chlorotoluene	mg/kg (ppm)	2.5	<0.05	52	55	39-111	6
tert-Butylbenzene	mg/kg (ppm)	2.5	<0.05	49	52	36-116	6
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	<0.05	48	52	35-116	8
sec-Butylbenzene	mg/kg (ppm)	2.5	<0.05	46	49	33-118	6
p-Isopropyltoluene	mg/kg (ppm)	2.5	<0.05	45	48	32-119	6
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	50	53	38-111	6
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	50	54	39-109	8
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	<0.05	53	56	40-111	6
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	<0.5	58	66	34-134	13
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	39	43	31-117	10
Hexachlorobutadiene	mg/kg (ppm)	2.5	<0.25	32	34	25-122	6
Naphthalene	mg/kg (ppm)	2.5	<0.05	51	56	39-120	9
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	<0.25	40	45	35-117	12

Date of Report: 07/22/13
Date Received: 06/12/13
Project: Crowley/101.00205.00019, F&BI 306182

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Dichlorodifluoromethane	mg/kg (ppm)	2.5	45	10-76
Chloromethane	mg/kg (ppm)	2.5	63	34-98
Vinyl chloride	mg/kg (ppm)	2.5	69	42-107
Bromomethane	mg/kg (ppm)	2.5	86	46-113
Chloroethane	mg/kg (ppm)	2.5	82	47-115
Trichlorofluoromethane	mg/kg (ppm)	2.5	80	53-112
Acetone	mg/kg (ppm)	12.5	86	39-147
1,1-Dichloroethene	mg/kg (ppm)	2.5	78	65-110
Methylene chloride	mg/kg (ppm)	2.5	82	62-119
Methyl t-butyl ether (MTBE)	mg/kg (ppm)	2.5	82	72-122
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	83	71-113
1,1-Dichloroethane	mg/kg (ppm)	2.5	84	76-109
2,2-Dichloropropane	mg/kg (ppm)	2.5	93	64-151
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	83	77-110
Chloroform	mg/kg (ppm)	2.5	83	78-108
2-Butanone (MEK)	mg/kg (ppm)	12.5	83	60-121
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	82	80-109
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	90	72-116
1,1-Dichloropropene	mg/kg (ppm)	2.5	82	77-108
Carbon tetrachloride	mg/kg (ppm)	2.5	103	67-123
Benzene	mg/kg (ppm)	2.5	81	75-107
Trichloroethene	mg/kg (ppm)	2.5	82	72-107
1,2-Dichloropropane	mg/kg (ppm)	2.5	85	78-111
Bromodichloromethane	mg/kg (ppm)	2.5	97	75-126
Dibromomethane	mg/kg (ppm)	2.5	87	80-111
4-Methyl-2-pentanone	mg/kg (ppm)	12.5	91	80-128
cis-1,3-Dichloropropene	mg/kg (ppm)	2.5	97	71-138
Toluene	mg/kg (ppm)	2.5	81	79-112
trans-1,3-Dichloropropene	mg/kg (ppm)	2.5	89	77-135
1,1,2-Trichloroethane	mg/kg (ppm)	2.5	85	84-115
2-Hexanone	mg/kg (ppm)	12.5	86	71-129
1,3-Dichloropropane	mg/kg (ppm)	2.5	83	82-113
Tetrachloroethene	mg/kg (ppm)	2.5	80	77-110
Dibromochloromethane	mg/kg (ppm)	2.5	98	64-152
1,2-Dibromoethane (EDB)	mg/kg (ppm)	2.5	102	83-116
Chlorobenzene	mg/kg (ppm)	2.5	81 vo	82-113
Ethylbenzene	mg/kg (ppm)	2.5	82	81-114
1,1,1,2-Tetrachloroethane	mg/kg (ppm)	2.5	107	76-125
m,p-Xylene	mg/kg (ppm)	5	84	82-115
o-Xylene	mg/kg (ppm)	2.5	83	81-116
Styrene	mg/kg (ppm)	2.5	85	81-118
Isopropylbenzene	mg/kg (ppm)	2.5	84	81-117
Bromoform	mg/kg (ppm)	2.5	102	50-174
n-Propylbenzene	mg/kg (ppm)	2.5	85	82-116
Bromobenzene	mg/kg (ppm)	2.5	82	82-118
1,3,5-Trimethylbenzene	mg/kg (ppm)	2.5	87	83-120
1,1,2,2-Tetrachloroethane	mg/kg (ppm)	2.5	91	83-125
1,2,3-Trichloropropane	mg/kg (ppm)	2.5	82	79-116
2-Chlorotoluene	mg/kg (ppm)	2.5	82	80-114
4-Chlorotoluene	mg/kg (ppm)	2.5	84	82-114
tert-Butylbenzene	mg/kg (ppm)	2.5	86	82-116
1,2,4-Trimethylbenzene	mg/kg (ppm)	2.5	85	82-116
sec-Butylbenzene	mg/kg (ppm)	2.5	87	81-123
p-Isopropyltoluene	mg/kg (ppm)	2.5	87	82-124
1,3-Dichlorobenzene	mg/kg (ppm)	2.5	83	80-118
1,4-Dichlorobenzene	mg/kg (ppm)	2.5	82	79-117
1,2-Dichlorobenzene	mg/kg (ppm)	2.5	82	80-118
1,2-Dibromo-3-chloropropane	mg/kg (ppm)	2.5	100	71-131
1,2,4-Trichlorobenzene	mg/kg (ppm)	2.5	83	75-122
Hexachlorobutadiene	mg/kg (ppm)	2.5	83	74-130
Naphthalene	mg/kg (ppm)	2.5	86	83-128
1,2,3-Trichlorobenzene	mg/kg (ppm)	2.5	81	80-126

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QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 306247-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<0.16	105	55-144
Chloromethane	ug/L (ppb)	50	<0.22	104	67-131
Vinyl chloride	ug/L (ppb)	50	0.52	106	61-139
Bromomethane	ug/L (ppb)	50	<0.2	635 vo	66-129
Chloroethane	ug/L (ppb)	50	<0.18	191 vo	68-126
Trichlorofluoromethane	ug/L (ppb)	50	<0.17	136 vo	71-128
Acetone	ug/L (ppb)	250	<2.6	109	48-149
1,1-Dichloroethene	ug/L (ppb)	50	<0.19	105	71-123
Methylene chloride	ug/L (ppb)	50	<3	101	61-126
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<0.13	106	68-125
trans-1,2-Dichloroethene	ug/L (ppb)	50	<0.24	104	72-122
1,1-Dichloroethane	ug/L (ppb)	50	<0.18	103	79-113
2,2-Dichloropropane	ug/L (ppb)	50	<0.3	119	58-132
cis-1,2-Dichloroethene	ug/L (ppb)	50	3.6	102	73-119
Chloroform	ug/L (ppb)	50	<0.24	100	80-112
2-Butanone (MEK)	ug/L (ppb)	250	<0.94	105	69-123
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<0.11	100	78-113
1,1,1-Trichloroethane	ug/L (ppb)	50	<0.2	113	79-116
1,1-Dichloropropene	ug/L (ppb)	50	<0.26	99	67-121
Carbon tetrachloride	ug/L (ppb)	50	<0.24	128 vo	72-123
Benzene	ug/L (ppb)	50	<0.13	98	79-109
Trichloroethene	ug/L (ppb)	50	1.4	100	75-109
1,2-Dichloropropane	ug/L (ppb)	50	<0.32	101	80-111
Bromodichloromethane	ug/L (ppb)	50	<0.38	116	78-117
Dibromomethane	ug/L (ppb)	50	<0.28	106	80-112
4-Methyl-2-pentanone	ug/L (ppb)	250	<1.3	111	79-123
cis-1,3-Dichloropropene	ug/L (ppb)	50	<0.2	116	76-120
Toluene	ug/L (ppb)	50	<0.13	96	73-117
trans-1,3-Dichloropropene	ug/L (ppb)	50	<0.34	105	75-122
1,1,2-Trichloroethane	ug/L (ppb)	50	<0.28	102	81-111
2-Hexanone	ug/L (ppb)	250	<1	111	75-126
1,3-Dichloropropane	ug/L (ppb)	50	<0.2	100	81-111
Tetrachloroethene	ug/L (ppb)	50	<0.28	97	72-113
Dibromochloromethane	ug/L (ppb)	50	<0.24	113	69-129
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<0.24	124 vo	83-114
Chlorobenzene	ug/L (ppb)	50	<0.1	98	75-115
Ethylbenzene	ug/L (ppb)	50	<0.16	98	71-120
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<0.32	128 vo	78-122
m,p-Xylene	ug/L (ppb)	100	<0.5	100	63-128
o-Xylene	ug/L (ppb)	50	<0.22	100	64-129
Styrene	ug/L (ppb)	50	<0.22	101	70-122
Isopropylbenzene	ug/L (ppb)	50	<0.15	101	76-118
Bromoform	ug/L (ppb)	50	<0.22	117	49-138
n-Propylbenzene	ug/L (ppb)	50	<0.14	99	74-117
Bromobenzene	ug/L (ppb)	50	<0.18	98	70-121
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<0.18	102	81-112
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<0.24	109	79-120
1,2,3-Trichloropropane	ug/L (ppb)	50	<0.28	101	72-119
2-Chlorotoluene	ug/L (ppb)	50	<0.13	97	77-114
4-Chlorotoluene	ug/L (ppb)	50	<0.16	98	81-109
tert-Butylbenzene	ug/L (ppb)	50	<0.15	101	81-116
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<0.11	101	74-118
sec-Butylbenzene	ug/L (ppb)	50	<0.12	101	77-118
p-Isopropyltoluene	ug/L (ppb)	50	<0.15	101	64-132
1,3-Dichlorobenzene	ug/L (ppb)	50	<0.15	97	81-111
1,4-Dichlorobenzene	ug/L (ppb)	50	<0.094	97	78-110
1,2-Dichlorobenzene	ug/L (ppb)	50	<0.13	97	81-111
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<0.44	112	69-129
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<0.34	94	74-115
Hexachlorobutadiene	ug/L (ppb)	50	<0.46	89	67-120
Naphthalene	ug/L (ppb)	50	<0.28	102	63-136
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<0.38	90	79-115

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QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	100	104	54-149	4
Chloromethane	ug/L (ppb)	50	97	102	67-133	5
Vinyl chloride	ug/L (ppb)	50	98	103	73-132	5
Bromomethane	ug/L (ppb)	50	604 vo	614 vo	69-123	2
Chloroethane	ug/L (ppb)	50	175 vo	186 vo	68-126	6
Trichlorofluoromethane	ug/L (ppb)	50	123	132	70-132	7
Acetone	ug/L (ppb)	250	102	110	44-145	8
1,1-Dichloroethene	ug/L (ppb)	50	100	106	75-119	6
Methylene chloride	ug/L (ppb)	50	98	104	63-132	6
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	91	98	70-122	7
trans-1,2-Dichloroethene	ug/L (ppb)	50	98	104	76-118	6
1,1-Dichloroethane	ug/L (ppb)	50	96	102	80-116	6
2,2-Dichloropropane	ug/L (ppb)	50	111	125	62-141	12
cis-1,2-Dichloroethene	ug/L (ppb)	50	95	100	81-111	5
Chloroform	ug/L (ppb)	50	118 vo	124 vo	81-109	5
2-Butanone (MEK)	ug/L (ppb)	250	98	101	53-140	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	93	98	79-109	5
1,1,1-Trichloroethane	ug/L (ppb)	50	106	113	80-116	6
1,1-Dichloropropene	ug/L (ppb)	50	94	99	78-112	5
Carbon tetrachloride	ug/L (ppb)	50	128	136 vo	72-128	6
Benzene	ug/L (ppb)	50	93	96	81-108	3
Trichloroethene	ug/L (ppb)	50	94	99	77-108	5
1,2-Dichloropropane	ug/L (ppb)	50	96	101	82-109	5
Bromodichloromethane	ug/L (ppb)	50	116	121 vo	76-120	4
Dibromomethane	ug/L (ppb)	50	100	105	80-110	5
4-Methyl-2-pentanone	ug/L (ppb)	250	104	110	59-142	6
cis-1,3-Dichloropropene	ug/L (ppb)	50	113	120	76-128	6
Toluene	ug/L (ppb)	50	92	96	83-108	4
trans-1,3-Dichloropropene	ug/L (ppb)	50	104	108	76-128	4
1,1,2-Trichloroethane	ug/L (ppb)	50	97	101	82-110	4
2-Hexanone	ug/L (ppb)	250	99	105	53-145	6
1,3-Dichloropropane	ug/L (ppb)	50	94	99	83-110	5
Tetrachloroethene	ug/L (ppb)	50	91	94	78-109	3
Dibromochloromethane	ug/L (ppb)	50	118	123	63-140	4
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	118 vo	124 vo	85-113	5
Chlorobenzene	ug/L (ppb)	50	92	96	84-108	4
Ethylbenzene	ug/L (ppb)	50	93	97	84-110	4
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	128 vo	135 vo	76-125	5
m,p-Xylene	ug/L (ppb)	100	95	99	84-112	4
o-Xylene	ug/L (ppb)	50	94	100	82-113	6
Styrene	ug/L (ppb)	50	96	101	84-116	5
Isopropylbenzene	ug/L (ppb)	50	95	100	81-122	5
Bromoform	ug/L (ppb)	50	127	130	40-161	2
n-Propylbenzene	ug/L (ppb)	50	95	99	81-115	4
Bromobenzene	ug/L (ppb)	50	93	96	80-113	3
1,3,5-Trimethylbenzene	ug/L (ppb)	50	97	102	83-117	5
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	105	110	79-118	5
1,2,3-Trichloropropane	ug/L (ppb)	50	96	100	74-116	4
2-Chlorotoluene	ug/L (ppb)	50	94	97	79-112	3
4-Chlorotoluene	ug/L (ppb)	50	94	98	81-113	4
tert-Butylbenzene	ug/L (ppb)	50	97	101	81-119	4
1,2,4-Trimethylbenzene	ug/L (ppb)	50	96	100	83-116	4
sec-Butylbenzene	ug/L (ppb)	50	97	102	83-116	5
p-Isopropyltoluene	ug/L (ppb)	50	98	102	82-119	4
1,3-Dichlorobenzene	ug/L (ppb)	50	92	97	83-111	5
1,4-Dichlorobenzene	ug/L (ppb)	50	92	95	82-109	3
1,2-Dichlorobenzene	ug/L (ppb)	50	92	96	83-111	4
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	124	125	62-133	1
1,2,4-Trichlorobenzene	ug/L (ppb)	50	93	95	77-117	2
Hexachlorobutadiene	ug/L (ppb)	50	89	95	74-118	7
Naphthalene	ug/L (ppb)	50	98	102	75-131	4
1,2,3-Trichlorobenzene	ug/L (ppb)	50	91	94	82-115	3

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QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

Laboratory Code: 306183-16 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20
Phenol	mg/kg (ppm)	1.7	<0.0054	82	80	50-150	2
Bis(2-chloroethyl) ether	mg/kg (ppm)	1.7	<0.0019	79	73	50-150	8
2-Chlorophenol	mg/kg (ppm)	1.7	<0.0058	87	84	50-150	4
1,3-Dichlorobenzene	mg/kg (ppm)	1.7	<0.0016	79	73	50-150	8
1,4-Dichlorobenzene	mg/kg (ppm)	1.7	<0.0013	79	74	50-150	7
1,2-Dichlorobenzene	mg/kg (ppm)	1.7	<0.0019	82	75	50-150	9
Benzyl alcohol	mg/kg (ppm)	1.7	0.0037	88	83	50-150	6
Bis(2-chloroisopropyl) ether	mg/kg (ppm)	1.7	<0.0019	74	69	50-150	7
2-Methylphenol	mg/kg (ppm)	1.7	<0.0064	87	85	50-150	2
Hexachloroethane	mg/kg (ppm)	1.7	<0.0014	75	68	50-150	10
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	<0.0013	86	82	50-150	5
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	1.7	<0.012	91	89	50-150	2
Nitrobenzene	mg/kg (ppm)	1.7	<0.0022	86	80	50-150	7
Isophorone	mg/kg (ppm)	1.7	<0.00082	83	86	50-150	4
2-Nitrophenol	mg/kg (ppm)	1.7	<0.0058	94	91	50-150	3
2,4-Dimethylphenol	mg/kg (ppm)	1.7	<0.016	88	87	50-150	1
Benzoic acid	mg/kg (ppm)	2.5	<0.046	122	124	50-150	2
Bis(2-chloroethoxy)methane	mg/kg (ppm)	1.7	<0.00094	85	84	50-150	1
2,4-Dichlorophenol	mg/kg (ppm)	1.7	<0.0052	97	97	50-150	0
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	<0.0013	87	86	50-150	1
Hexachlorobutadiene	mg/kg (ppm)	1.7	<0.0014	86	85	50-150	1
4-Chloroaniline	mg/kg (ppm)	3.3	<0.28	12 vo	14 vo	50-150	15
4-Chloro-3-methylphenol	mg/kg (ppm)	1.7	<0.0042	99	99	50-150	0
2-Methylnaphthalene	mg/kg (ppm)	1.7	<0.0014	87	88	50-150	1
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	<0.0022	53	39 vo	50-150	30 vo
2,4,6-Trichlorophenol	mg/kg (ppm)	1.7	<0.0038	99	97	50-150	2
2,4,5-Trichlorophenol	mg/kg (ppm)	1.7	<0.0078	95	104	50-150	9
2-Chloronaphthalene	mg/kg (ppm)	1.7	<0.0015	89	92	50-150	3
2-Nitroaniline	mg/kg (ppm)	1.7	<0.0022	93	98	50-150	5
Dimethyl phthalate	mg/kg (ppm)	1.7	<0.0011	93	95	50-150	2
2,6-Dinitrotoluene	mg/kg (ppm)	1.7	<0.0011	90	91	50-150	1
3-Nitroaniline	mg/kg (ppm)	3.3	<0.004	31 vo	33 vo	50-150	6
2,4-Dinitrophenol	mg/kg (ppm)	1.7	<0.02	50	8 vo	50-150	145 vo
Dibenzofuran	mg/kg (ppm)	1.7	<0.0013	91	94	50-150	3
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	<0.00066	80	79	50-150	1
4-Nitrophenol	mg/kg (ppm)	1.7	<0.019	93	101	50-150	8
Diethyl phthalate	mg/kg (ppm)	1.7	0.0015	84	93	50-150	10
4-Chlorophenyl phenyl ether	mg/kg (ppm)	1.7	<0.0011	91	94	50-150	3
N-Nitrosodiphenylamine	mg/kg (ppm)	1.7	<0.0013	94	93	50-150	1
4-Nitroaniline	mg/kg (ppm)	3.3	<0.012	31 vo	37 vo	50-150	18
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	1.7	<0.016	56	31 vo	50-150	57 vo
4-Bromophenyl phenyl ether	mg/kg (ppm)	1.7	<0.0014	97	101	50-150	4
Hexachlorobenzene	mg/kg (ppm)	1.7	<0.0012	97	97	50-150	0
Pentachlorophenol	mg/kg (ppm)	1.7	<0.011	106	109	50-150	3
Carbazole	mg/kg (ppm)	1.7	<0.0028	86	88	50-150	2
Di-n-butyl phthalate	mg/kg (ppm)	1.7	<0.002	89	90	50-150	1
Benzyl butyl phthalate	mg/kg (ppm)	1.7	<0.0012 J	15 vo	29 vo	50-150	64 vo
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	1.7	<0.046 J	21 vo	41 vo	50-150	65 vo
Di-n-octyl phthalate	mg/kg (ppm)	1.7	<0.0017	95	106	50-150	11

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QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Phenol	mg/kg (ppm)	1.7	88	95	51-119	8
Bis(2-chloroethyl) ether	mg/kg (ppm)	1.7	87	84	60-112	4
2-Chlorophenol	mg/kg (ppm)	1.7	91	95	59-114	4
1,3-Dichlorobenzene	mg/kg (ppm)	1.7	86	87	62-113	1
1,4-Dichlorobenzene	mg/kg (ppm)	1.7	87	89	61-114	2
1,2-Dichlorobenzene	mg/kg (ppm)	1.7	88	91	61-113	3
Benzyl alcohol	mg/kg (ppm)	1.7	94	98	50-119	4
Bis(2-chloroisopropyl) ether	mg/kg (ppm)	1.7	81	83	59-113	2
2-Methylphenol	mg/kg (ppm)	1.7	86	95	58-115	10
Hexachloroethane	mg/kg (ppm)	1.7	86	89	63-114	3
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	93	99	62-114	6
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	1.7	88	99	54-120	12
Nitrobenzene	mg/kg (ppm)	1.7	92	92	59-114	0
Isophorone	mg/kg (ppm)	1.7	95	94	61-113	1
2-Nitrophenol	mg/kg (ppm)	1.7	102	104	59-114	2
2,4-Dimethylphenol	mg/kg (ppm)	1.7	74	84	54-107	13
Benzoic acid	mg/kg (ppm)	2.5	125	129	43-150	3
Bis(2-chloroethoxy)methane	mg/kg (ppm)	1.7	90	93	60-114	3
2,4-Dichlorophenol	mg/kg (ppm)	1.7	99	104	57-118	5
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	91	92	56-112	1
Hexachlorobutadiene	mg/kg (ppm)	1.7	90	92	60-116	2
4-Chloroaniline	mg/kg (ppm)	3.3	61	62	10-126	2
4-Chloro-3-methylphenol	mg/kg (ppm)	1.7	99	105	59-115	6
2-Methylnaphthalene	mg/kg (ppm)	1.7	88	93	60-115	6
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	97	95	41-107	2
2,4,6-Trichlorophenol	mg/kg (ppm)	1.7	101	101	47-119	0
2,4,5-Trichlorophenol	mg/kg (ppm)	1.7	102	103	61-121	1
2-Chloronaphthalene	mg/kg (ppm)	1.7	95	96	58-114	1
2-Nitroaniline	mg/kg (ppm)	1.7	102	103	55-119	1
Dimethyl phthalate	mg/kg (ppm)	1.7	99	99	58-116	0
2,6-Dinitrotoluene	mg/kg (ppm)	1.7	108	109	57-119	1
3-Nitroaniline	mg/kg (ppm)	3.3	86	88	10-143	2
2,4-Dinitrophenol	mg/kg (ppm)	1.7	120	106	40-122	12
Dibenzofuran	mg/kg (ppm)	1.7	98	100	56-115	2
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	102	100	53-126	2
4-Nitrophenol	mg/kg (ppm)	1.7	105	102	40-124	3
Diethyl phthalate	mg/kg (ppm)	1.7	100	99	57-116	1
4-Chlorophenyl phenyl ether	mg/kg (ppm)	1.7	97	98	54-119	1
N-Nitrosodiphenylamine	mg/kg (ppm)	1.7	94	97	54-113	3
4-Nitroaniline	mg/kg (ppm)	3.3	96	97	47-109	1
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	1.7	117 vo	107	57-108	9
4-Bromophenyl phenyl ether	mg/kg (ppm)	1.7	99	100	56-116	1
Hexachlorobenzene	mg/kg (ppm)	1.7	100	101	57-115	1
Pentachlorophenol	mg/kg (ppm)	1.7	110	110	45-123	0
Carbazole	mg/kg (ppm)	1.7	97	100	57-116	3
Di-n-butyl phthalate	mg/kg (ppm)	1.7	101	104	56-118	3
Benzyl butyl phthalate	mg/kg (ppm)	1.7	107	109	56-122	2
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	1.7	103	110	56-125	7
Di-n-octyl phthalate	mg/kg (ppm)	1.7	109	111	58-120	2

Date of Report: 07/22/13
Date Received: 06/12/13
Project: Crowley/101.00205.00019, F&BI 306182

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM

Laboratory Code: 306183-10 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	<0.00022	65	66	44-129	2
Acenaphthylene	mg/kg (ppm)	0.17	<0.000091	75	80	52-121	6
Acenaphthene	mg/kg (ppm)	0.17	<0.00014	76	80	51-123	5
Fluorene	mg/kg (ppm)	0.17	<0.00015	98	108	37-137	10
Phenanthrene	mg/kg (ppm)	0.17	0.00075	79	87	45-124	10
Anthracene	mg/kg (ppm)	0.17	<0.000088	71	75	32-124	5
Fluoranthene	mg/kg (ppm)	0.17	<0.00028	89	101	50-125	13
Pyrene	mg/kg (ppm)	0.17	<0.00026	92	98	41-135	6
Benz(a)anthracene	mg/kg (ppm)	0.17	<0.00018	75	87	23-144	15
Chrysene	mg/kg (ppm)	0.17	<0.00019	74	79	45-122	7
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	<0.00018	73	80	31-144	9
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	<0.00036	72	72	45-130	0
Benzo(a)pyrene	mg/kg (ppm)	0.17	<0.00022	62	68	39-128	9
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	<0.00062	71	79	28-146	11
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	<0.00034	69	77	46-129	11
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	<0.00034	69	71	37-133	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	88	88	58-121	0
Acenaphthylene	mg/kg (ppm)	0.17	94	96	54-121	2
Acenaphthene	mg/kg (ppm)	0.17	93	95	54-123	2
Fluorene	mg/kg (ppm)	0.17	120	120	56-127	0
Phenanthrene	mg/kg (ppm)	0.17	96	97	55-122	1
Anthracene	mg/kg (ppm)	0.17	90	90	50-120	0
Fluoranthene	mg/kg (ppm)	0.17	111	108	54-129	3
Pyrene	mg/kg (ppm)	0.17	110	111	53-127	1
Benz(a)anthracene	mg/kg (ppm)	0.17	99	102	51-115	3
Chrysene	mg/kg (ppm)	0.17	91	93	55-129	2
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	96	97	56-123	1
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	84	86	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	80	78	51-118	3
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	97	97	49-148	0
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	93	93	50-141	0
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	87	87	52-131	0

Date of Report: 07/22/13
Date Received: 06/12/13
Project: Crowley/101.00205.00019, F&BI 306182

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 306183-08 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Control Limits	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	<0.033	83	83	50-150	0
Aroclor 1260	mg/kg (ppm)	0.8	<0.033	87	89	50-150	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	Acceptance Criteria
Aroclor 1016	mg/kg (ppm)	0.8	81	70-130
Aroclor 1260	mg/kg (ppm	0.8	89	70-130

Date of Report: 07/22/13
Date Received: 06/12/13
Project: Crowley/101.00205.00019, F&BI 306182

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 306183-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Beryllium	mg/kg (ppm)	5	0.141	101	103	67-138	2
Chromium	mg/kg (ppm)	50	12.4	84 b	86 b	57-128	2 b
Nickel	mg/kg (ppm)	25	24.0	77 b	81 b	69-112	5 b
Copper	mg/kg (ppm)	50	9.32	82	85	57-120	4
Zinc	mg/kg (ppm)	50	25.0	71 b	76 b	55-129	7 b
Arsenic	mg/kg (ppm)	10	1.97	90	97	70-118	7
Selenium	mg/kg (ppm)	5	<0.911	85	87	64-117	2
Silver	mg/kg (ppm)	10	<0.0785	96	98	73-122	2
Cadmium	mg/kg (ppm)	10	<0.203	99	100	83-116	1
Antimony	mg/kg (ppm)	20	0.200	94	96	54-116	2
Barium	mg/kg (ppm)	50	35.0	91 b	93 b	60-141	2 b
Thallium	mg/kg (ppm)	5	0.050	97	102	68-121	5
Lead	mg/kg (ppm)	50	3.20	99	101	59-148	2

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Beryllium	mg/kg (ppm)	5	110	69-146
Chromium	mg/kg (ppm)	50	98	78-121
Nickel	mg/kg (ppm)	25	98	82-122
Copper	mg/kg (ppm)	50	97	82-119
Zinc	mg/kg (ppm)	50	96	81-120
Arsenic	mg/kg (ppm)	10	94	83-113
Selenium	mg/kg (ppm)	5	94	84-115
Silver	mg/kg (ppm)	10	98	81-116
Cadmium	mg/kg (ppm)	10	99	54-114
Antimony	mg/kg (ppm)	20	97	69-114
Barium	mg/kg (ppm)	50	100	85-116
Thallium	mg/kg (ppm)	5	102	77-123
Lead	mg/kg (ppm)	50	102	80-120

Date of Report: 07/22/13
Date Received: 06/12/13
Project: Crowley/101.00205.00019, F&BI 306182

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SOLID SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Laboratory Code: 306183-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	0.012	93	97	62-140	4

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	90	63-131

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

July 3, 2013

Michele Costales Poquiz
Friedman & Bruya
3012 16th Ave W
Seattle, WA 98119

RE: Project: 306182
ARI Job No.: WT94

Dear Michele:

Please find enclosed the Chain-of-Custody record (COC), sample receipt documentation, and the final data for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted eight solid samples on June 13, 2013, under ARI job WT94. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for TOC, as requested on the COC.

There were no anomalies associated with the analysis of these samples.

An electronic copy of this report and all associated raw data will be kept on file at ARI. Should you have any questions or concerns, please feel free to call me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com
www.arilabs.com

cc: eFile WT94

Enclosures

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

SAMPLE CHAIN OF CUSTODY

Page # 1 of 1

Send Report To Michele Costales Poquiz

Company Friedman & Bruya, Inc.

Address 3012 16th Ave. W.

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

Email Address mpoquiz@friedmanandbruya.com

SUBCONTRACTOR
Analytical Resources, Inc. (ARI)

PROJECT NAME/NO.: 306182

PO #: C-423

REMARKS

Please e-mail results

ELECTRONIC DATA REQUESTED (EIM)

TURNAROUND TIME
- [x] Standard Turnaround
- [ ] RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
- [x] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Samples Received at ____ °C

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	Hexavalent Cr by 7196A	Total Organic Carbon by 9060				Notes
DP4CB4-061013		6/10/13	1430	Solids	1							X				
DP6CB4-061013		↓	1615	↓	↓							X				
DP1CB3-061013		↓	1725	↓	↓							X				
DP1CB2-061113		6/11/13	1030	↓	↓							X				
DP2CB2-061113		↓	1130	↓	↓							X				
DP4CB2-061113		↓	1330	↓	↓							X				
DP5CB1-061113		↓	1435	↓	↓							X				
DP5CB4-061113		↓	1535	↓	↓							X				

ANALYSES REQUESTED

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michele Costales Poquiz	Michele Costales Poquiz	F&B	6/12/13	4:22 PM
Received by:	[signature]	A. Volgardsen	ARI	6/13/13	1237
Relinquished by:					
Received by:					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC SLRC.DOC

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Friedman & Bruya
COC No(s): NA
Assigned ARI Job No: WTGH

Project Name:
Delivered by: Fed-Ex UPS Courier Hand Delivered Other Postal/Express
Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)	4.6	

If cooler temperature is out of compliance fill out form 00070F — Temp Gun ID#: 90877952

Cooler Accepted by: AV Date: 6/13/13 Time: 1237

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:			
Was sufficient ice used (if appropriate)?	NA	YES	NO
Were all bottles sealed in individual plastic bags?		YES	NO
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA		

Was Sample Split by ARI: NA YES Date/Time: Equipment: Split by:

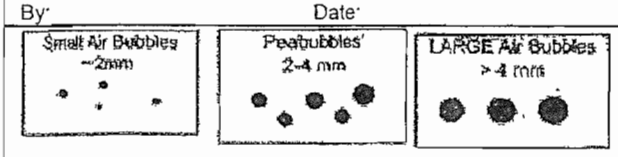
Samples Logged by: TB Date: 6-13-13 Time: 1350

** *Notify Project Manager of discrepancies or concerns* **

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

WTGH : 00003

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: WT94
Client: Friedman and Bruya, Inc
Project Event: 306182
Project Name: N/A

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	DP4CB4-061013	WT94A	13-12730	Solid	06/10/13 14:30	06/13/13 12:37
2.	DP6CB4-061013	WT94B	13-12731	Solid	06/10/13 16:15	06/13/13 12:37
3.	DP1CB3-061013	WT94C	13-12732	Solid	06/10/13 17:25	06/13/13 12:37
4.	DP1CB2-061113	WT94D	13-12733	Solid	06/11/13 10:30	06/13/13 12:37
5.	DP2CB2-061113	WT94E	13-12734	Solid	06/11/13 11:30	06/13/13 12:37
6.	DP4CB2-061113	WT94F	13-12735	Solid	06/11/13 13:30	06/13/13 12:37
7.	DP5CB1-061113	WT94G	13-12736	Solid	06/11/13 14:35	06/13/13 12:37
8.	DP5CB4-061113	WT94H	13-12737	Solid	06/11/13 15:35	06/13/13 12:37

WT94:0001

SAMPLE RESULTS-CONVENTIONALS
WT94-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: MB
Reported: 07/03/13

Project: NA
Event: 306182
Date Sampled: 06/10/13
Date Received: 06/13/13

Client ID: DP4CB4-061013
ARI ID: 13-12730 WT94A

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	29.25
Total Organic Carbon	07/03/13 070313#1	EPA 9060M	Percent	0.200	10.2

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WT94-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized:
Reported: 07/03/13

Project: NA
Event: 306182
Date Sampled: 06/10/13
Date Received: 06/13/13

Client ID: DP6CB4-061013
ARI ID: 13-12731 WT94B

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	43.09
Total Organic Carbon	07/03/13 070313#1	EPA 9060M	Percent	0.020	5.29

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WT94-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: NB
Reported: 07/03/13

Project: NA
Event: 306182
Date Sampled: 06/10/13
Date Received: 06/13/13

Client ID: DP1CB3-061013
ARI ID: 13-12732 WT94C

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	44.39
Total Organic Carbon	07/03/13 070313#1	EPA 9060M	Percent	0.200	19.1

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WT94-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized:
Reported: 07/03/13

Project: NA
Event: 306182
Date Sampled: 06/11/13
Date Received: 06/13/13

Client ID: DP1CB2-061113
ARI ID: 13-12733 WT94D

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	65.54
Total Organic Carbon	07/03/13 070313#1	EPA 9060M	Percent	0.198	19.9

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WT94-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: DB
Reported: 07/03/13

Project: NA
Event: 306182
Date Sampled: 06/11/13
Date Received: 06/13/13

Client ID: DP2CB2-061113
ARI ID: 13-12734 WT94E

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	61.87
Total Organic Carbon	07/03/13 070313#1	EPA 9060M	Percent	0.020	6.24

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WT94-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: NB
Reported: 07/03/13

Project: NA
Event: 306182
Date Sampled: 06/11/13
Date Received: 06/13/13

Client ID: DP4CB2-061113
ARI ID: 13-12735 WT94F

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	46.51
Total Organic Carbon	07/03/13 070313#1	EPA 9060M	Percent	0.020	12.0

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WT94-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: JB
Reported: 07/03/13

Project: NA
Event: 306182
Date Sampled: 06/11/13
Date Received: 06/13/13

Client ID: DP5CB1-061113
ARI ID: 13-12736 WT94G

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	50.38
Total Organic Carbon	07/03/13 070313#1	EPA 9060M	Percent	0.020	10.8

RL Analytical reporting limit
U Undetected at reported detection limit

WT94:00011

SAMPLE RESULTS-CONVENTIONALS
WT94-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: MB
Reported: 07/03/13

Project: NA
Event: 306182
Date Sampled: 06/11/13
Date Received: 06/13/13

Client ID: DP5CB4-061113
ARI ID: 13-12737 WT94H

Analyte	Date	Method	Units	RL	Sample
Total Solids	06/17/13 061713#1	SM2540B	Percent	0.01	60.92
Total Organic Carbon	07/03/13 070313#1	EPA 9060M	Percent	0.020	8.61

RL Analytical reporting limit
U Undetected at reported detection limit

LAB CONTROL RESULTS-CONVENTIONALS
WT94-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized: JB
Reported: 07/03/13

Project: NA
Event: 306182
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Organic Carbon EPA 9060M	ICVL	07/03/13	Percent	0.098	0.100	98.0%

METHOD BLANK RESULTS-CONVENTIONALS
WT94-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized:
Reported: 07/03/13

Project: NA
Event: 306182
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank	QC ID
Total Solids	06/17/13	Percent	< 0.01 U	ICB
Total Organic Carbon	07/03/13	Percent	< 0.020 U	ICB

STANDARD REFERENCE RESULTS-CONVENTIONALS
WT94-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Solid
Data Release Authorized:
Reported: 07/03/13

Project: NA
Event: 306182
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST 1941B	07/03/13	Percent	2.51	2.99	83.9%

Budinger
& Associates

Geotechnical Engineering
Environmental Engineering
Construction Materials Testing
Subsurface Exploration
Special Inspection

Proudly serving the Inland Northwest for over 30 years

Michele Costales Poquiz
Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119

July 1, 2013

Project Number L13300

PROJECT: 3061812 Soils
Seattle, WA

SUBJECT: Results of Laboratory Testing
Report # 1

At your request, we provided laboratory testing services for the subject project. Services were limited to the performance of specific laboratory tests, selected at your discretion.

For this period our involvement was limited to laboratory testing of eight samples delivered to us on June 17, 2013. Laboratory tests were performed in general accordance with methods listed on the attached *Laboratory Summary* and *Particle Size Distribution* sheets.

If you have any questions, please call.

Respectfully Submitted,
BUDINGER & ASSOCIATES, INC.

Kyle L. Sanford
Mgr. Construction Services

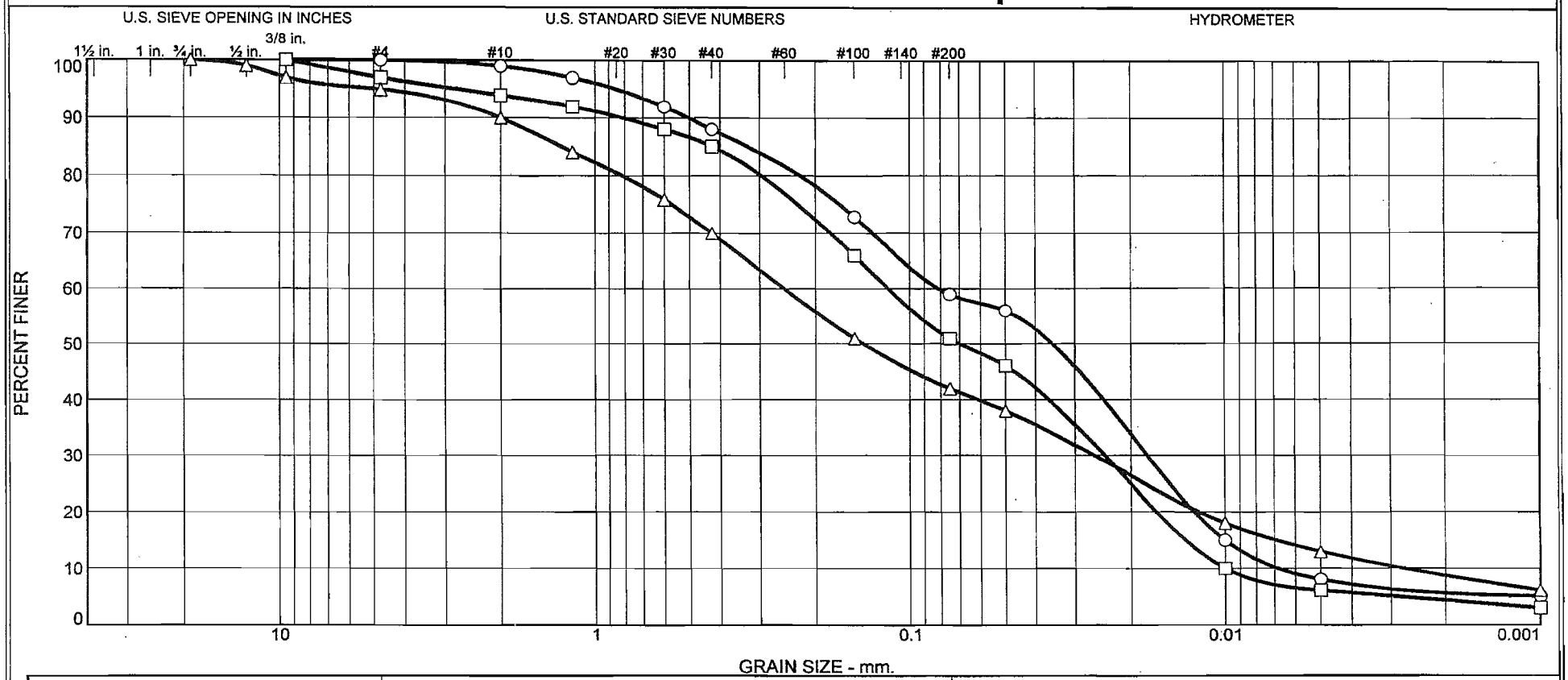
KLS/kh
Addressee – 2
Attachments:
- Soil - Laboratory Summary (1 page)
- Particle Size Distribution Report (3 pages)

1101 North Fancher Road
Spokane Valley, WA 99212
Tel: 509-535-8841
Fax:509-535-9589

SOILS
LABORATORY SUMMARY

LABORATORY NUMBER				13-0464	13-0465	13-0466	13-0467	13-0468	13-0469	13-0470	13-0471
SAMPLE NUMBER				1	2	3	4	5	6	7	8
SAMPLED BY				Client	Client	Client	Client	Client	Client	Client	Client
SAMPLE TYPE				Bulk	Bulk	Bulk	Bulk	Bulk	Bulk	Bulk	Bulk
DATE RECEIVED				6/17/13	6/17/13	6/17/13	6/17/13	6/17/13	6/17/13	6/17/13	6/17/13
SAMPLE LOCATION				DP4CB4 -061013	DP6CB4 -061013	DP1CB3 -061013	DP1CB2 -061113	DP2CB2 -061113	DP4CB2 -061113	DP5CB1 -061113	DP5CB4 -061113
		Units	Test Method								
SIEVE ANALYSIS			ASTM D-422								
	3/4"					100		100	100		
S	1/2"	%				99	100	99	97	100	
I	3/8"			100	100	97	99	97	96	93	100
E	#4	P		100-	97	95	94	88	92	76	94
V	#10	A		99	94	90	90	78	84	63	88
E	#16	S		97	92	84	81	71	75	55	82
	#30	S		92	88	76	69	62	67	48	73
S	#40	I		88	85	70	61	56	62	44	68
I	#100	N		73	66	51	39	36	46	30	52
Z	#200	G		59	51	42	31	24	37	25	43
E	.05mm			56	46	38	29	20	30	20	40
	.01mm			15	10	18	13	8	12	12	17
	.005mm			8	6	13	8	5	9	7	8
	.001mm			5	3	6	5	2	4	5	4

Particle Size Distribution Report



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	1	11	29	51	8
□	0	3	3	9	34	45	6
△	0	5	5	20	28	29	13

	Identification	Date Sampled	Date Received	Date Tested
○	Sample Number: 1 (13-0464)	6/10/13	6/17/13	6/24/13
□	Sample Number: 2 (13-0465)	6/10/13	6/17/13	6/24/13
△	Sample Number: 3 (13-0466)	6/10/13	6/17/13	6/24/13

Client Friedman & Bruya, Inc.

Project 306182 Soils

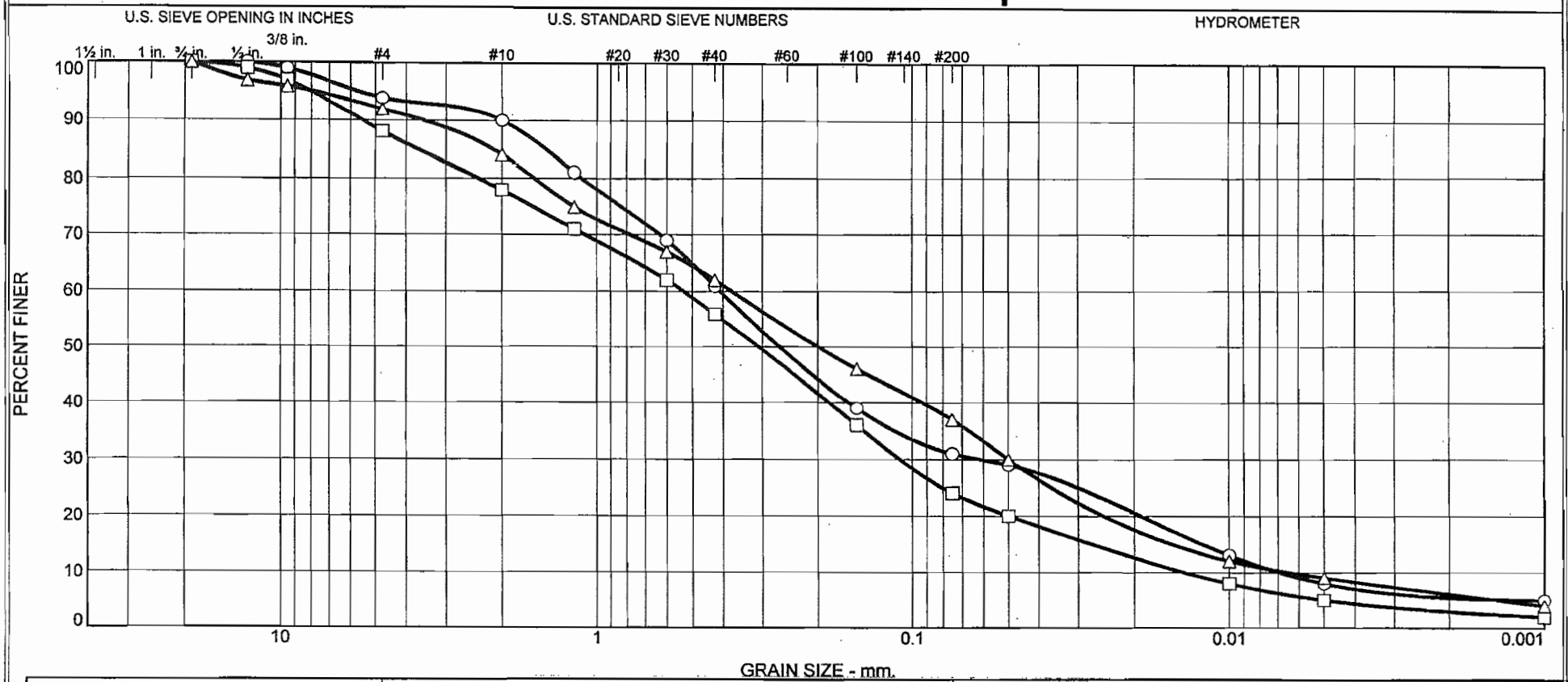
Project No. L13300 Date 6/29/13

BUDINGER & ASSOCIATES, INC.

○ Sampled by Client from DP4CB4
□ Sampled by Client from DP6CB4
△ Sampled by Client from DP1CB3

Tested By: JS **Checked By:** TB

Particle Size Distribution Report



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	6	4	29	30	23	8
□	0	12	10	22	32	19	5
△	0	8	8	22	25	28	9

	Identification	Date Sampled	Date Received	Date Tested
○	Sample Number: 4 (13-0467)	6/11/13	6/17/13	6/24/13
□	Sample Number: 5 (13-0468)	6/11/13	6/17/13	6/26/13
△	Sample Number: 6 (13-0469)	6/11/13	6/17/13	6/26/13

Client Friedman & Bruya, Inc.

Project 306182 Soils

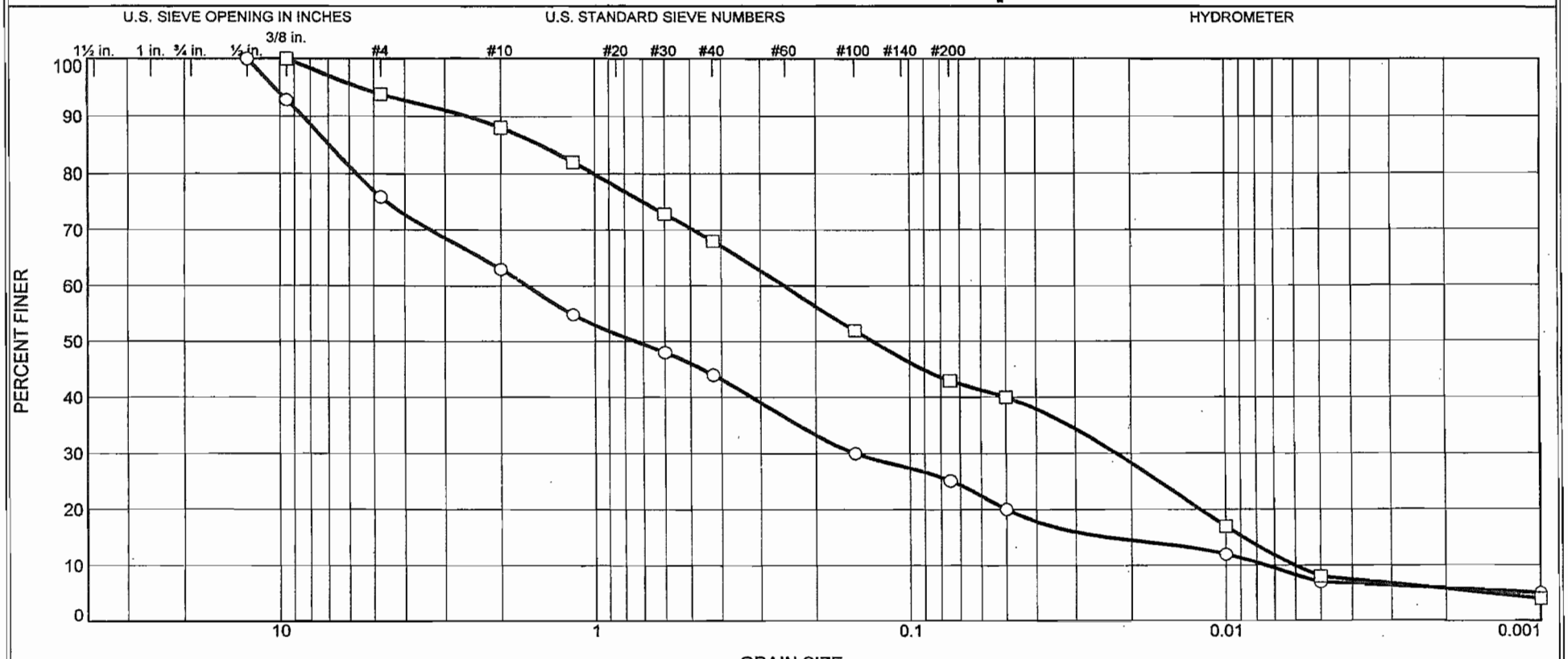
Project No. L13300 Date 6/29/13

BUDINGER & ASSOCIATES, INC.

○ Sampled by Client from DP1CB2
□ Sampled by Client from DP2 CB2
△ Sampled by Client from DP4CB2

Tested By: JS **Checked By:** TB

Particle Size Distribution Report



	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	24	13	19	19	18	7
□	0	6	6	20	25	35	8

	Identification	Date Sampled	Date Received	Date Tested
○	Sample Number: 7 (13-0470)	6/11/13	6/17/13	6/26/13
□	Sample Number: 8 (13-0471)	6/11/13	6/17/13	6/26/13

Client Friedman & Bruya, Inc.

Project 306182 Soils

Project No. L13300 Date 6/29/13

BUDINGER & ASSOCIATES, INC.

○ Sampled by Client from DP5CB1
□ Sampled by Client from DP5CB4

Tested By: JS **Checked By:** TB

306182

SAMPLE CHAIN OF CUSTODY

KJ 06-12-13 BI4/V1/VS4

Page # 1 of 1

Send Report To MIKE STATON

Company SLR CONSULTING

Address 22118 20TH AVE SE, STE. G202

City, State, ZIP BOTHELL, WA 98021

Phone # 425-402 8800 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. EROWLEY/101 00205.00019

PO#

REMARKS
PO = HOLD

TURNAROUND TIME
☑ Standard (2 Weeks)
☐ RUSH
Rush charges authorized by

SAMPLE DISPOSAL
☐ Dispose after 30 days
☐ Return samples
☐ Will call with instructions

X indicated per Mike Staton on 6/11/13

ANALYSES REQUESTED

Lab ID	Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	HFS	Metals (Reactivity + Hg) 200.8	Hg 1631E	Cations	PCBs 8082A	TOC Plus	Grain Size ASTM D422	Notes
01 A-N	DP4CB4-061013	1	6/10/13	1430	Soil	14	X	X		X	X		X	X	X	X	X	X	
02	DP6CB4-061013	2	↓	1615	↓	↓	X	X		X	X		X	X	X	X	X	X	
03	DP1CB3-061013	3	↓	1725	↓	↓	X	X		X	X		X	X	X	X	X	X	
04 A-B	TRIPBLANK-061013B	4	↓	1745	H2O	2				X H									
05 A-N	DP1CB2-061113	4	6/11/13	1030	Soils	14	X	X		X	X		X	X	X	X	X	X	
06 A-N	DP2CB2-061113	5		1130			X	X		X	X		X	X	X	X	X	X	
07	DP4CB2-061113	6		1330			X	X		X	X		X	X	X	X	X	X	
08	DP5CB1-061113	7		1435			X	X		X	X		X	X	X	X	X	X	
09	DP5CB4-061113	8		1535			X	X		X	X		X	X	X	X	X	X	
							X	X		X	X		X	X					

Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	GREG LISH	SLR	6/11/13	16:45
Received by:	Amanda Mengarini	SLR	6/11/13	1645
Relinquished by:	Amanda Mengarini	SLR	6/12/13	0925
Received by:	Eric Olson	F&B	6/12/13	925

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

SGS

ANALYTICAL PERSPECTIVES

17 July 2013

Mike Staton
SLR Consulting
22118 20th Ave SE
Suite G202
Bothell, WA 98021

Ph.: 425-402-8800
Email: mstaton@slrconsulting.com

Subject: Certificate of Results - Amended

Dear Mike;

Attached to this narrative are the analytical results you requested on the samples submitted for the determination of polychlorinated dibenzo-*p*-dioxins and dibenzofurans. The insert below summarizes the relevant information pertaining to your project. In particular, QC annotations bring to your attention specific analytical observations and assessments made during the sample handling and data interpretation phases. Results reported relate only to the items tested.

Project Information Summary	When applicable, see QC Annotations for details
Client Project No.	101.00205.00019 Crowley
AP Project #	**A5633**
Analytical Protocol	Method 8290
No. Samples Submitted	2
No. Samples Analyzed	2
No. Laboratory Method Blanks	1
No. OPRs / Batch CS3	1
No. Outstanding Samples	0
Date Received	18-Jun-2013
Condition Received	good
Temperature upon Receipt (C)	1
Extraction within Holding Time	yes
Analysis within Holding Time	yes
Data meet QA/QC Requirements	yes
Exceptions	none
Analytical Difficulties	none

ANALYTICAL PERSPECTIVES IS NOW PART OF SGS, THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

QC Annotations:

1. Please see Appendix A & B attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.
2. The project has been amended so that the results are reported in pg/kg rather than pg/g.

Analytical Perspectives Certification IDs:

SOUTH CAROLINA	99054
ARKANSAS	88-0628
NEW JERSEY-NELAP SECONDARY	NC005
FLORIDA-NELAP PRIMARY	E87608
LOUISIANA	4024
NORTH CAROLINA	37783
WASHINGTON	C2027
NEW YORK	11988
VIRGINIA	460180
MINNESOTA	037-999-448
OREGON	pending
TEXAS	T104704484-10-1
PENNSYLVANIA-NELAP SECONDARY	68-01849

SGS Analytical Perspectives remains committed to serving you in the most effective manner. Should you have any questions or need additional information and technical support, please do not hesitate to contact us.

The management and staff of SGS Analytical Perspectives welcomes customer feedback, both positive and negative, as we continually improve our services. Please visit our web site at www.ultratrace.com and click on the 'Leave Your Feedback Here!' link on the Home Page. Thank you for choosing SGS Analytical Perspectives.

Sincerely,

Heather Distel

Heather Distel, Ph.D.
Senior Project Scientist/Team Lead

APPENDIX A: DATA QUALIFIERS / DATA ATTRIBUTES	
>	Indicates high recoveries. Shown with the numeric value at the top of the range.[1]
B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve).
EMPC	Represents an Estimated Maximum Possible Concentration. EMPC's arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
ETH	Indicates the presence of a diphenyl ether that appears to interfere with the quantitation of a furan. The reported concentration is the maximum.
H/h	If the standard recovery is below the method or SOP specified value "H" is assigned. If the obtained value is less than half the specified value "h" is assigned.[1]
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve).
ND	Indicates a non-detect.
NR	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes "Single Ion Mode" and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.[1]
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.
X	Indicates results reported from reinjection, refractionation, or repeat analyses.
APPENDIX B: LAB ID IDENTIFIERS	
AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.

[1]Denotes data qualifiers/attributes whose use will be phased out over time

Sample ID: Method Blank A5633 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	SLR International Corporation	Matrix:	Solids	Lab Project ID:	A5633	Date Received:	n/a
Project ID:	101.00205.00019 Crowley	Weight/Volume:	0.0100 Kg	Lab Sample ID	MB1_11062_DF_SDS-RJ2	Date Extracted:	21-Jun-2013
Date Collected:	n/a	% Solids:	100.0 %	QC Batch No:	11062	Date Analyzed:	09-Jul-2013
		Split:	-	Dilution:	-	Time Analyzed:	17:40:35

Analyte	Conc. (pg/Kg)	DL (pg/Kg)	EMPC (pg/Kg)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	60.4			ES 2378-TCDD	98.5	
12378-PeCDD	ND	69.6			ES 12378-PeCDD	90.7	
123478-HxCDD	ND	63.9			ES 123478-HxCDD	98.5	
123678-HxCDD	ND	72.9			ES 123678-HxCDD	98.9	
123789-HxCDD	ND	69.1			ES 123789-HxCDD	101	
1234678-HpCDD	ND	81.5			ES 1234678-HpCDD	91.7	
OCDD	316			J	ES OCDD	80.1	
2378-TCDF	ND	46.2			ES 2378-TCDF	95.7	
12378-PeCDF	ND	49.8			ES 12378-PeCDF	74	
23478-PeCDF	ND	44			ES 23478-PeCDF	74.5	
123478-HxCDF	ND	41.4			ES 123478-HxCDF	90.2	
123678-HxCDF	ND	43.5			ES 123678-HxCDF	83.8	
234678-HxCDF	ND	39.2			ES 234678-HxCDF	94.5	
123789-HxCDF	ND	55.4			ES 123789-HxCDF	99.8	
1234678-HpCDF	ND	47.5			ES 1234678-HpCDF	90.6	
1234789-HpCDF	ND	71			ES 1234789-HpCDF	89.5	
OCDF	ND	147			ES OCDF	84.3	
Totals					**Standard**	**CS/AS Recoveries**	
					CS 37Cl-2378-TCDD	101	
Total TCDD	ND	60.4	ND		CS 12347-PeCDD	91.2	
Total PeCDD	ND	69.6	ND		CS 12346-PeCDF	73.3	
Total HxCDD	ND	68.4	ND		CS 123469-HxCDF	100	
Total HpCDD	124		124		CS 1234689-HpCDF	92.6	
					AS 1368-TCDD	104	
Total TCDF	ND	46.2	ND		AS 1368-TCDF	95.8	
Total PeCDF	ND	46.9	ND				
Total HxCDF	ND	44.7	ND				
Total HpCDF	ND	58.1	ND				
Total PCDD/Fs	**441**		**441**				
WHO-2005 TEQs							
TEQ: ND=0	0.0949		0.0949				
TEQ: ND=DL/2	95.1	95	95.1				
TEQ: ND=DL	190	190	190				

SGS ANALYTICAL PERSPECTIVES
2714 Exchange Drive
Wilmington, NC 28405 , USA
www.us.sgs.com
Tel: +1 910 794-1613; Toll-Free 866 846-8290; Fax: +1 910 794-3919

Sample ID: DP6CB1-060613 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	SLR International Corporation	Matrix:	Solids	Lab Project ID:	A5633	Date Received:	18-Jun-2013
Project ID:	101.00205.00019 Crowley	Weight/Volume:	0.0100 Kg	Lab Sample ID	A5633_11062_DF_001-RJ2	Date Extracted:	21-Jun-2013
Date Collected:	06-Jun-2013	% Solids:	65.1 %	QC Batch No:	11062	Date Analyzed:	09-Jul-2013
		Split:	-	Dilution:	-	Time Analyzed:	18:33:55

Analyte	Conc. (pg/Kg)	DL (pg/Kg)	EMPC (pg/Kg)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	34500				ES 2378-TCDD	88.2	
12378-PeCDD	76800				ES 12378-PeCDD	87	
123478-HxCDD	78400				ES 123478-HxCDD	76.3	
123678-HxCDD	206000				ES 123678-HxCDD	49.5	
123789-HxCDD	237000				ES 123789-HxCDD	45.7	
1234678-HpCDD	5890000			E	ES 1234678-HpCDD	68.6	
OCDD	28700000			E	ES OCDD	64.9	
2378-TCDF	2640				ES 2378-TCDF	93.5	
12378-PeCDF	2500				ES 12378-PeCDF	90.3	
23478-PeCDF	5230				ES 23478-PeCDF	88.3	
123478-HxCDF	6250				ES 123478-HxCDF	67.3	
123678-HxCDF	7410				ES 123678-HxCDF	59.1	
234678-HxCDF	11200				ES 234678-HxCDF	60.7	
123789-HxCDF	ND	84.4			ES 123789-HxCDF	57.8	
1234678-HpCDF	91200				ES 1234678-HpCDF	63	
1234789-HpCDF	6780				ES 1234789-HpCDF	70.8	
OCDF	128000				ES OCDF	67.2	
Totals					**Standard**	**CS/AS Recoveries**	
					CS 37Cl-2378-TCDD	90.2	
Total TCDD	115000		117000		CS 12347-PeCDD	92.3	
Total PeCDD	351000		351000		CS 12346-PeCDF	66.5	
Total HxCDD	2390000		2390000		CS 123469-HxCDF	65.7	
Total HpCDD	10700000		10700000		CS 1234689-HpCDF	68.9	
					AS 1368-TCDD	104	
Total TCDF	45700		46500		AS 1368-TCDF	99.5	
Total PeCDF	81900		82200				
Total HxCDF	198000		199000				
Total HpCDF	241000		241000				
Total PCDD/Fs	**42900000**		**42900000**				
WHO-2005 TEQs							
TEQ: ND=0	236000		236000				
TEQ: ND=DL/2	236000	169	236000				
TEQ: ND=DL	236000	338	236000				

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Sample ID: DP4CB4-061013 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	SLR International Corporation	Matrix:	Solids	Lab Project ID:	A5633	Date Received:	18-Jun-2013
Project ID:	101.00205.00019 Crowley	Weight/Volume:	0.0081 Kg	Lab Sample ID	A5633_11062_DF_002-RJ2	Date Extracted:	21-Jun-2013
Date Collected:	10-Jun-2013	% Solids:	27.1 %	QC Batch No:	11062	Date Analyzed:	09-Jul-2013
		Split:	-	Dilution:	-	Time Analyzed:	19:27:15

Analyte	Conc. (pg/Kg)	DL (pg/Kg)	EMPC (pg/Kg)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	3420				ES 2378-TCDD	94	
12378-PeCDD	15100				ES 12378-PeCDD	62.1	
123478-HxCDD	24800				ES 123478-HxCDD	87	
123678-HxCDD	51100				ES 123678-HxCDD	61.9	
123789-HxCDD	44100				ES 123789-HxCDD	63.4	
1234678-HpCDD	1200000				ES 1234678-HpCDD	82.3	
OCDD	8800000				ES OCDD	73.9	
2378-TCDF	8290				ES 2378-TCDF	98	
12378-PeCDF	5780				ES 12378-PeCDF	85.4	
23478-PeCDF	13000				ES 23478-PeCDF	81.2	
123478-HxCDF	14100				ES 123478-HxCDF	91.9	
123678-HxCDF	14500				ES 123678-HxCDF	61.4	
234678-HxCDF	20800				ES 234678-HxCDF	74.3	
123789-HxCDF	1950			J	ES 123789-HxCDF	71	
1234678-HpCDF	212000				ES 1234678-HpCDF	78.8	
1234789-HpCDF	12400				ES 1234789-HpCDF	90	
OCDF	437000				ES OCDF	75.2	
Totals					**Standard**	**CS/AS Recoveries**	
					CS 37Cl-2378-TCDD	99.2	
Total TCDD	46000		52700		CS 12347-PeCDD	82.2	
Total PeCDD	149000		149000		CS 12346-PeCDF	67.4	
Total HxCDD	550000		550000		CS 123469-HxCDF	81.8	
Total HpCDD	2630000		2630000		CS 1234689-HpCDF	86.2	
					AS 1368-TCDD	109	
Total TCDF	170000		172000		AS 1368-TCDF	110	
Total PeCDF	219000		219000				
Total HxCDF	362000		362000				
Total HpCDF	520000		520000				
Total PCDD/Fs	**13900000**		**13900000**				
WHO-2005 TEQs							
TEQ: ND=0	57700		57700				
TEQ: ND=DL/2	57700	658	57700				
TEQ: ND=DL	57700	1320	57700				

SGS ANALYTICAL PERSPECTIVES
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A5633

ANALYTICAL PERSPECTIVES

CHAIN-OF-CUSTODY RECORD

PROJECT ID: 101.00205.00019 CROWLEY

P.O. No.: 101.00205.00019

SAMPLER: GREG LISH (PRINTED NAME) (SIGNATURE)

RELINQUISHED BY: (SIGNATURE & PRINTED NAME)	DATE:	TIME:	RECEIVED BY: (SIGNATURE & PRINTED NAME)	DATE:	TIME:
GREG LISH	6/17/13	14:45	Barbara Hager / Barbara Hager	18-June 13	1113
RELINQUISHED BY: (SIGNATURE & PRINTED NAME)	DATE:	TIME:	RECEIVED BY: (SIGNATURE & PRINTED NAME)	DATE:	TIME:

PLEASE SEE NOTES ON THE BACK OF THE COC REGARDING THE SAMPLE ACCEPTANCE POLICY AND THE METHOD 8290 MS/MSD & DUP

REQUESTED TAT: 21 DAYS

SHIP TO: ANALYTICAL PERSPECTIVES
2714 EXCHANGE DRIVE
WILMINGTON, NC 28405
PH.: 910-794-1613

ATTN: YVES TONDEUR

METHOD OF SHIPMENT: FED EX

SHIPMENT ID:

QAPP REFERENCE: _____
SAMPLE ACCEPTANCE POLICY (ON BACK SIDE)

SAMPLE ID	DATE	TIME	SAMPLE DESCRIPTION	MS/MSD	DUP	METHOD 8290	METHOD 1613	METHOD 1668A	METHOD 1668 B	METHOD 1668 C	PAHs BY HRMS	QUANTIC	U-SVOA	WHO-2/WHO-2S		CONTAINER(S) QTY	CONTAINER(S) TYPE	MATRIX
DF6CB1-060613	6/6/13	1645	SEDIMENT/SOLIDS			X										1	4 oz.	SED/SOLIDS
DF4CB4-061013	6/10/13	1430	"			X										"	"	"

SPECIAL INSTRUCTIONS/COMMENTS: (PLEASE CIRCLE OPTION BELOW)

"DF ONLY" "DF & PCB" "DF & PAH" "DF & PCB & PAH

"TRI – OCTA" "2,3,7,8-TCDD & F ONLY" "2,3,7,8-TCDD ONLY"

PLEASE SPECIFY TEFs: (PLEASE CHECK BOXES BELOW)

☐ "ITEFS" ☐ "WHO-98" ☒ "WHO-05" ☐ "MA-TEFS" ☐ "CT-TEFS"

SEND DOCUMENTATION & RESULTS TO:

NAME: MIKE STATON
COMPANY: SLR CONSULTING
ADDRESS: 22118 20TH AVE SE, SUITE G202
CITY: BOTHELL
STATE: WA ZIP: 98021
PH.: 425-402-8800
E-MAIL: mstaton@slrconsulting.com

BILL TO: (☑ CHECK IF SAME)

NAME:
COMPANY:
ADDRESS:
CITY:
STATE: ZIP:
PH.:

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 6, 2013

Mike Staton
SLR International Corp.
22118 20th Ave. SE., G-202
Bothell, WA 98021

Dear Mr. Staton:

Included are the results from the testing of material submitted on June 27, 2013 from the Crowley 101.00205.00030, F&BI 306444 project. There are 53 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michele Costales Poquiz

Michele Costales Poquiz
Chemist

Enclosures
SLR0806R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 27, 2013 by Friedman & Bruya, Inc. from the SLR International Corp. Crowley 101.00205.00030, F&BI 306444 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SLR International Corp.
306444-01	OF-1-062613
306444-02	OF-2-062613
306444-03	OF-4-062613
306444-04	OF-6-062613
306444-05	OF-3-062613
306444-06	OF-5-062613

Total Petroleum Hydrocarbons as Gasoline by Method NWTPH-Gx

All quality control requirements were acceptable.

Total Petroleum Hydrocarbons as Diesel and Motor Oil by Method NWTPH-Dx with Silica Gel

All quality control requirements were acceptable.

Volatile Compounds by EPA Method 8260C

The percent recovery for the matrix spike (MS), laboratory control sample (LCS), and laboratory control sample duplicate (LCSD) exceeded acceptance criteria for bromomethane and chloroethane. These compounds were not found in the samples, therefore the results are valid.

The presence of acetone in the sample OF-5-062613 is likely due to laboratory contamination. The result has been flagged accordingly.

Semivolatile Organic Compounds by EPA Method 8270D

The internal standard associated with benzyl butyl phthalate and the surrogate terphenyl-d14 exceeded acceptance criteria for the sample OF-1-062613. The results have been flagged accordingly.

The presence of diethyl phthalate and bis(2-ethylhexyl) phthalate in the samples and method blank is likely due to laboratory contamination. The results have been flagged accordingly.

The calibration result for di-n-octyl phthalate fell outside of acceptance criteria for the sample OF-2-062613, OF-6-062613, and OF-3-062613. The values reported are estimates.

The percent recovery for the LCS and LCSD as well as the RPD for the LCS/LCSD exceeded acceptance criteria for several compounds. The results have been flagged accordingly.

Semivolatile Organic Compounds by EPA Method 8270D SIM
The samples were extracted outside of the EPA recommended holding time. The results have been flagged accordingly.

A surrogate recovery fell outside of acceptance criteria for the sample OF-3-062613. The results have been flagged accordingly.

Polychlorinated Biphenyls as Aroclor 1016/1260 by EPA Method 8082A
All quality control requirements were acceptable.

Total Metals by EPA Method 200.8
All quality control requirements were acceptable.

Total Mercury by EPA Method 1631E
All quality control requirements were acceptable.

Total Suspended Solids by Method 2540C
All quality control requirements were acceptable.

Total Organic Carbon by EPA Method 9060M
The report generated by Analytical Resouces, Inc. is enclosed.

Chloride by Method SM4500
The report generated by Analytical Resouces, Inc. is enclosed.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444
Date Extracted: 07/02/13
Date Analyzed: 07/02/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE USING METHOD NWTPH-Gx

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Gasoline Range	Surrogate (% Recovery) (Limit 51-134)
OF-1-062613 306444-01	<12	74
OF-2-062613 306444-02	<12	76
OF-4-062613 306444-03	<12	74
OF-6-062613 306444-04	<12	76
OF-3-062613 306444-05	<12	73
OF-5-062613 306444-06	<12	76
Method Blank 03-1271 MB	<12	75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444
Date Extracted: 06/28/13
Date Analyzed: 07/05/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 51-134)
OF-1-062613 306444-01	18 x	120	93
OF-2-062613 306444-02	420 x	1,400	90
OF-4-062613 306444-03	26 x	130	114
OF-6-062613 306444-04	43 x	240	99
OF-3-062613 306444-05	63 x	510	92
OF-5-062613 306444-06	27 x	190	93
Method Blank 03-1289 MB3	<6.9	<52	92

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	OF-1-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	06/28/13	Lab ID:	306444-01
Date Analyzed:	06/28/13	Data File:	062820.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<0.16 j	1,3-Dichloropropane	<0.2
Chloromethane	<0.22	Tetrachloroethene	<0.28
Vinyl chloride	<0.13 j	Dibromochloromethane	<0.24
Bromomethane	<0.2 j	1,2-Dibromoethane (EDB)	<0.24
Chloroethane	<0.18 j	Chlorobenzene	<0.1 j
Trichlorofluoromethane	<0.17 j	Ethylbenzene	<0.16 j
Acetone	<2.6	1,1,1,2-Tetrachloroethane	<0.32
1,1-Dichloroethene	<0.19 j	m,p-Xylene	<0.5
Methylene chloride	<3	o-Xylene	<0.22
Methyl t-butyl ether (MTBE)	<0.13 j	Styrene	<0.22
trans-1,2-Dichloroethene	<0.24	Isopropylbenzene	<0.15 j
1,1-Dichloroethane	<0.18 j	Bromoform	<0.22
2,2-Dichloropropane	<0.3	n-Propylbenzene	<0.14 j
cis-1,2-Dichloroethene	<0.24	Bromobenzene	<0.18 j
Chloroform	<0.24	1,3,5-Trimethylbenzene	<0.18 j
2-Butanone (MEK)	<0.94	1,1,2,2-Tetrachloroethane	<0.24
1,2-Dichloroethane (EDC)	<0.11 j	1,2,3-Trichloropropane	<0.28
1,1,1-Trichloroethane	<0.2	2-Chlorotoluene	<0.13 j
1,1-Dichloropropene	<0.26	4-Chlorotoluene	<0.16 j
Carbon tetrachloride	<0.24	tert-Butylbenzene	<0.15 j
Benzene	<0.13 j	1,2,4-Trimethylbenzene	<0.11 j
Trichloroethene	<0.17 j	sec-Butylbenzene	<0.12 j
1,2-Dichloropropane	<0.32	p-Isopropyltoluene	<0.15 j
Bromodichloromethane	<0.38	1,3-Dichlorobenzene	<0.15 j
Dibromomethane	<0.28	1,4-Dichlorobenzene	<0.094 j
4-Methyl-2-pentanone	<1.3	1,2-Dichlorobenzene	<0.13 j
cis-1,3-Dichloropropene	<0.2	1,2-Dibromo-3-chloropropane	<0.44
Toluene	<0.13 j	1,2,4-Trichlorobenzene	<0.34
trans-1,3-Dichloropropene	<0.34	Hexachlorobutadiene	<0.46
1,1,2-Trichloroethane	<0.28	Naphthalene	<0.28
2-Hexanone	<1	1,2,3-Trichlorobenzene	<0.38

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	OF-2-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	06/28/13	Lab ID:	306444-02
Date Analyzed:	06/28/13	Data File:	062821.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<0.16 j	1,3-Dichloropropane	<0.2
Chloromethane	<0.22	Tetrachloroethene	<0.28
Vinyl chloride	<0.13 j	Dibromochloromethane	<0.24
Bromomethane	<0.2 j	1,2-Dibromoethane (EDB)	<0.24
Chloroethane	<0.18 j	Chlorobenzene	<0.1 j
Trichlorofluoromethane	<0.17 j	Ethylbenzene	<0.16 j
Acetone	<2.6	1,1,1,2-Tetrachloroethane	<0.32
1,1-Dichloroethene	<0.19 j	m,p-Xylene	<0.5
Methylene chloride	<3	o-Xylene	<0.22
Methyl t-butyl ether (MTBE)	<0.13 j	Styrene	<0.22
trans-1,2-Dichloroethene	<0.24	Isopropylbenzene	<0.15 j
1,1-Dichloroethane	<0.18 j	Bromoform	<0.22
2,2-Dichloropropane	<0.3	n-Propylbenzene	<0.14 j
cis-1,2-Dichloroethene	<0.24	Bromobenzene	<0.18 j
Chloroform	<0.24	1,3,5-Trimethylbenzene	<0.18 j
2-Butanone (MEK)	<0.94	1,1,2,2-Tetrachloroethane	<0.24
1,2-Dichloroethane (EDC)	<0.11 j	1,2,3-Trichloropropane	<0.28
1,1,1-Trichloroethane	<0.2	2-Chlorotoluene	<0.13 j
1,1-Dichloropropene	<0.26	4-Chlorotoluene	<0.16 j
Carbon tetrachloride	<0.24	tert-Butylbenzene	<0.15 j
Benzene	<0.13 j	1,2,4-Trimethylbenzene	<0.11 j
Trichloroethene	<0.17 j	sec-Butylbenzene	<0.12 j
1,2-Dichloropropane	<0.32	p-Isopropyltoluene	<0.15 j
Bromodichloromethane	<0.38	1,3-Dichlorobenzene	<0.15 j
Dibromomethane	<0.28	1,4-Dichlorobenzene	<0.094 j
4-Methyl-2-pentanone	<1.3	1,2-Dichlorobenzene	<0.13 j
cis-1,3-Dichloropropene	<0.2	1,2-Dibromo-3-chloropropane	<0.44
Toluene	<0.13 j	1,2,4-Trichlorobenzene	<0.34
trans-1,3-Dichloropropene	<0.34	Hexachlorobutadiene	<0.46
1,1,2-Trichloroethane	<0.28	Naphthalene	<0.28
2-Hexanone	<1	1,2,3-Trichlorobenzene	<0.38

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	OF-4-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	06/28/13	Lab ID:	306444-03
Date Analyzed:	06/28/13	Data File:	062822.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<0.16 j	1,3-Dichloropropane	<0.2
Chloromethane	<0.22	Tetrachloroethene	<0.28
Vinyl chloride	<0.13 j	Dibromochloromethane	<0.24
Bromomethane	<0.2 j	1,2-Dibromoethane (EDB)	<0.24
Chloroethane	<0.18 j	Chlorobenzene	<0.1 j
Trichlorofluoromethane	<0.17 j	Ethylbenzene	<0.16 j
Acetone	<2.6	1,1,1,2-Tetrachloroethane	<0.32
1,1-Dichloroethene	<0.19 j	m,p-Xylene	<0.5
Methylene chloride	<3	o-Xylene	<0.22
Methyl t-butyl ether (MTBE)	<0.13 j	Styrene	<0.22
trans-1,2-Dichloroethene	<0.24	Isopropylbenzene	<0.15 j
1,1-Dichloroethane	<0.18 j	Bromoform	<0.22
2,2-Dichloropropane	<0.3	n-Propylbenzene	<0.14 j
cis-1,2-Dichloroethene	<0.24	Bromobenzene	<0.18 j
Chloroform	<0.24	1,3,5-Trimethylbenzene	<0.18 j
2-Butanone (MEK)	<0.94	1,1,2,2-Tetrachloroethane	<0.24
1,2-Dichloroethane (EDC)	<0.11 j	1,2,3-Trichloropropane	<0.28
1,1,1-Trichloroethane	<0.2	2-Chlorotoluene	<0.13 j
1,1-Dichloropropene	<0.26	4-Chlorotoluene	<0.16 j
Carbon tetrachloride	<0.24	tert-Butylbenzene	<0.15 j
Benzene	<0.13 j	1,2,4-Trimethylbenzene	<0.11 j
Trichloroethene	<0.17 j	sec-Butylbenzene	<0.12 j
1,2-Dichloropropane	<0.32	p-Isopropyltoluene	<0.15 j
Bromodichloromethane	<0.38	1,3-Dichlorobenzene	<0.15 j
Dibromomethane	<0.28	1,4-Dichlorobenzene	<0.094 j
4-Methyl-2-pentanone	<1.3	1,2-Dichlorobenzene	<0.13 j
cis-1,3-Dichloropropene	<0.2	1,2-Dibromo-3-chloropropane	<0.44
Toluene	<0.13 j	1,2,4-Trichlorobenzene	<0.34
trans-1,3-Dichloropropene	<0.34	Hexachlorobutadiene	<0.46
1,1,2-Trichloroethane	<0.28	Naphthalene	<0.28
2-Hexanone	<1	1,2,3-Trichlorobenzene	<0.38

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	OF-6-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	06/28/13	Lab ID:	306444-04
Date Analyzed:	06/28/13	Data File:	062823.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<0.16 j	1,3-Dichloropropane	<0.2
Chloromethane	<0.22	Tetrachloroethene	<0.28
Vinyl chloride	<0.13 j	Dibromochloromethane	<0.24
Bromomethane	<0.2 j	1,2-Dibromoethane (EDB)	<0.24
Chloroethane	<0.18 j	Chlorobenzene	<0.1 j
Trichlorofluoromethane	<0.17 j	Ethylbenzene	<0.16 j
Acetone	<2.6	1,1,1,2-Tetrachloroethane	<0.32
1,1-Dichloroethene	<0.19 j	m,p-Xylene	<0.5
Methylene chloride	<3	o-Xylene	<0.22
Methyl t-butyl ether (MTBE)	<0.13 j	Styrene	<0.22
trans-1,2-Dichloroethene	<0.24	Isopropylbenzene	<0.15 j
1,1-Dichloroethane	<0.18 j	Bromoform	<0.22
2,2-Dichloropropane	<0.3	n-Propylbenzene	<0.14 j
cis-1,2-Dichloroethene	<0.24	Bromobenzene	<0.18 j
Chloroform	<0.24	1,3,5-Trimethylbenzene	<0.18 j
2-Butanone (MEK)	<0.94	1,1,2,2-Tetrachloroethane	<0.24
1,2-Dichloroethane (EDC)	<0.11 j	1,2,3-Trichloropropane	<0.28
1,1,1-Trichloroethane	<0.2	2-Chlorotoluene	<0.13 j
1,1-Dichloropropene	<0.26	4-Chlorotoluene	<0.16 j
Carbon tetrachloride	<0.24	tert-Butylbenzene	<0.15 j
Benzene	<0.13 j	1,2,4-Trimethylbenzene	<0.11 j
Trichloroethene	<0.17 j	sec-Butylbenzene	<0.12 j
1,2-Dichloropropane	<0.32	p-Isopropyltoluene	<0.15 j
Bromodichloromethane	<0.38	1,3-Dichlorobenzene	<0.15 j
Dibromomethane	<0.28	1,4-Dichlorobenzene	<0.094 j
4-Methyl-2-pentanone	<1.3	1,2-Dichlorobenzene	<0.13 j
cis-1,3-Dichloropropene	<0.2	1,2-Dibromo-3-chloropropane	<0.44
Toluene	<0.13 j	1,2,4-Trichlorobenzene	<0.34
trans-1,3-Dichloropropene	<0.34	Hexachlorobutadiene	<0.46
1,1,2-Trichloroethane	<0.28	Naphthalene	<0.28
2-Hexanone	<1	1,2,3-Trichlorobenzene	<0.38

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	OF-3-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	06/28/13	Lab ID:	306444-05
Date Analyzed:	06/28/13	Data File:	062824.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<0.16 j	1,3-Dichloropropane	<0.2
Chloromethane	<0.22	Tetrachloroethene	<0.28
Vinyl chloride	<0.13 j	Dibromochloromethane	<0.24
Bromomethane	<0.2 j	1,2-Dibromoethane (EDB)	<0.24
Chloroethane	<0.18 j	Chlorobenzene	<0.1 j
Trichlorofluoromethane	<0.17 j	Ethylbenzene	<0.16 j
Acetone	<2.6	1,1,1,2-Tetrachloroethane	<0.32
1,1-Dichloroethene	<0.19 j	m,p-Xylene	<0.5
Methylene chloride	<3	o-Xylene	<0.22
Methyl t-butyl ether (MTBE)	<0.13 j	Styrene	<0.22
trans-1,2-Dichloroethene	<0.24	Isopropylbenzene	<0.15 j
1,1-Dichloroethane	<0.18 j	Bromoform	<0.22
2,2-Dichloropropane	<0.3	n-Propylbenzene	<0.14 j
cis-1,2-Dichloroethene	<0.24	Bromobenzene	<0.18 j
Chloroform	<0.24	1,3,5-Trimethylbenzene	<0.18 j
2-Butanone (MEK)	<0.94	1,1,2,2-Tetrachloroethane	<0.24
1,2-Dichloroethane (EDC)	<0.11 j	1,2,3-Trichloropropane	<0.28
1,1,1-Trichloroethane	<0.2	2-Chlorotoluene	<0.13 j
1,1-Dichloropropene	<0.26	4-Chlorotoluene	<0.16 j
Carbon tetrachloride	<0.24	tert-Butylbenzene	<0.15 j
Benzene	<0.13 j	1,2,4-Trimethylbenzene	<0.11 j
Trichloroethene	<0.17 j	sec-Butylbenzene	<0.12 j
1,2-Dichloropropane	<0.32	p-Isopropyltoluene	<0.15 j
Bromodichloromethane	<0.38	1,3-Dichlorobenzene	<0.15 j
Dibromomethane	<0.28	1,4-Dichlorobenzene	<0.094 j
4-Methyl-2-pentanone	<1.3	1,2-Dichlorobenzene	<0.13 j
cis-1,3-Dichloropropene	<0.2	1,2-Dibromo-3-chloropropane	<0.44
Toluene	<0.13 j	1,2,4-Trichlorobenzene	<0.34
trans-1,3-Dichloropropene	<0.34	Hexachlorobutadiene	<0.46
1,1,2-Trichloroethane	<0.28	Naphthalene	<0.28
2-Hexanone	<1	1,2,3-Trichlorobenzene	<0.38

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	OF-5-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	06/28/13	Lab ID:	306444-06
Date Analyzed:	06/28/13	Data File:	062825.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<0.16 j	1,3-Dichloropropane	<0.2
Chloromethane	<0.22	Tetrachloroethene	<0.28
Vinyl chloride	<0.13 j	Dibromochloromethane	<0.24
Bromomethane	<0.2 j	1,2-Dibromoethane (EDB)	<0.24
Chloroethane	<0.18 j	Chlorobenzene	<0.1 j
Trichlorofluoromethane	<0.17 j	Ethylbenzene	<0.16 j
Acetone	3.4 lc	1,1,1,2-Tetrachloroethane	<0.32
1,1-Dichloroethene	<0.19 j	m,p-Xylene	<0.5
Methylene chloride	<3	o-Xylene	<0.22
Methyl t-butyl ether (MTBE)	<0.13 j	Styrene	<0.22
trans-1,2-Dichloroethene	<0.24	Isopropylbenzene	<0.15 j
1,1-Dichloroethane	<0.18 j	Bromoform	<0.22
2,2-Dichloropropane	<0.3	n-Propylbenzene	<0.14 j
cis-1,2-Dichloroethene	<0.24	Bromobenzene	<0.18 j
Chloroform	<0.24	1,3,5-Trimethylbenzene	<0.18 j
2-Butanone (MEK)	<0.94	1,1,2,2-Tetrachloroethane	<0.24
1,2-Dichloroethane (EDC)	<0.11 j	1,2,3-Trichloropropane	<0.28
1,1,1-Trichloroethane	<0.2	2-Chlorotoluene	<0.13 j
1,1-Dichloropropene	<0.26	4-Chlorotoluene	<0.16 j
Carbon tetrachloride	<0.24	tert-Butylbenzene	<0.15 j
Benzene	<0.13 j	1,2,4-Trimethylbenzene	<0.11 j
Trichloroethene	<0.17 j	sec-Butylbenzene	<0.12 j
1,2-Dichloropropane	<0.32	p-Isopropyltoluene	<0.15 j
Bromodichloromethane	<0.38	1,3-Dichlorobenzene	<0.15 j
Dibromomethane	<0.28	1,4-Dichlorobenzene	<0.094 j
4-Methyl-2-pentanone	<1.3	1,2-Dichlorobenzene	<0.13 j
cis-1,3-Dichloropropene	<0.2	1,2-Dibromo-3-chloropropane	<0.44
Toluene	<0.13 j	1,2,4-Trichlorobenzene	<0.34
trans-1,3-Dichloropropene	<0.34	Hexachlorobutadiene	<0.46
1,1,2-Trichloroethane	<0.28	Naphthalene	<0.28
2-Hexanone	<1	1,2,3-Trichlorobenzene	<0.38

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley 101.00205.00030
Date Extracted:	06/28/13	Lab ID:	03-1281 mb
Date Analyzed:	06/28/13	Data File:	062819.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<0.16 j	1,3-Dichloropropane	<0.2
Chloromethane	<0.22	Tetrachloroethene	<0.28
Vinyl chloride	<0.13 j	Dibromochloromethane	<0.24
Bromomethane	<0.2 j	1,2-Dibromoethane (EDB)	<0.24
Chloroethane	<0.18 j	Chlorobenzene	<0.1 j
Trichlorofluoromethane	<0.17 j	Ethylbenzene	<0.16 j
Acetone	<2.6	1,1,1,2-Tetrachloroethane	<0.32
1,1-Dichloroethene	<0.19 j	m,p-Xylene	<0.5
Methylene chloride	<3	o-Xylene	<0.22
Methyl t-butyl ether (MTBE)	<0.13 j	Styrene	<0.22
trans-1,2-Dichloroethene	<0.24	Isopropylbenzene	<0.15 j
1,1-Dichloroethane	<0.18 j	Bromoform	<0.22
2,2-Dichloropropane	<0.3	n-Propylbenzene	<0.14 j
cis-1,2-Dichloroethene	<0.24	Bromobenzene	<0.18 j
Chloroform	<0.24	1,3,5-Trimethylbenzene	<0.18 j
2-Butanone (MEK)	<0.94	1,1,2,2-Tetrachloroethane	<0.24
1,2-Dichloroethane (EDC)	<0.11 j	1,2,3-Trichloropropane	<0.28
1,1,1-Trichloroethane	<0.2	2-Chlorotoluene	<0.13 j
1,1-Dichloropropene	<0.26	4-Chlorotoluene	<0.16 j
Carbon tetrachloride	<0.24	tert-Butylbenzene	<0.15 j
Benzene	<0.13 j	1,2,4-Trimethylbenzene	<0.11 j
Trichloroethene	<0.17 j	sec-Butylbenzene	<0.12 j
1,2-Dichloropropane	<0.32	p-Isopropyltoluene	<0.15 j
Bromodichloromethane	<0.38	1,3-Dichlorobenzene	<0.15 j
Dibromomethane	<0.28	1,4-Dichlorobenzene	<0.094 j
4-Methyl-2-pentanone	<1.3	1,2-Dichlorobenzene	<0.13 j
cis-1,3-Dichloropropene	<0.2	1,2-Dibromo-3-chloropropane	<0.44
Toluene	<0.13 j	1,2,4-Trichlorobenzene	<0.34
trans-1,3-Dichloropropene	<0.34	Hexachlorobutadiene	<0.46
1,1,2-Trichloroethane	<0.28	Naphthalene	<0.28
2-Hexanone	<1	1,2,3-Trichlorobenzene	<0.38

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	OF-1-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-01
Date Analyzed:	07/11/13	Data File:	071107.D
Matrix:	Water	Instrument:	GCMS8
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	67	32	162
Phenol-d6	40	10	170
Nitrobenzene-d5	135	50	150
2-Fluorobiphenyl	140	43	158
2,4,6-Tribromophenol	149 ip	43	146
Terphenyl-d14	156 J	39	168

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Phenol	<0.14	2,4,6-Trichlorophenol	<0.28
Bis(2-chloroethyl) ether	<0.06	2,4,5-Trichlorophenol	<0.22
2-Chlorophenol	<0.16	2-Chloronaphthalene	<0.044
1,3-Dichlorobenzene	<0.034	2-Nitroaniline	<0.086
1,4-Dichlorobenzene	<0.068	Dimethyl phthalate	0.30
1,2-Dichlorobenzene	<0.024	2,6-Dinitrotoluene	<0.062
Benzyl alcohol	<0.4	3-Nitroaniline	<0.46
Bis(2-chloroisopropyl) ether	<0.03	2,4-Dinitrophenol	<2.4
2-Methylphenol	<0.26	Dibenzofuran	<0.034
Hexachloroethane	<0.06	2,4-Dinitrotoluene	<0.056
N-Nitroso-di-n-propylamine	<0.11	4-Nitrophenol	<1.3
3-Methylphenol + 4-Methylphenol	<0.4	Diethyl phthalate	0.27 fb
Nitrobenzene	<0.044	4-Chlorophenyl phenyl ether	<0.072
Isophorone	0.035	N-Nitrosodiphenylamine	<0.05
2-Nitrophenol	<0.17	4-Nitroaniline	<0.6
2,4-Dimethylphenol	<0.28 jl	4,6-Dinitro-2-methylphenol	<0.38
Benzoic acid	<7.4	4-Bromophenyl phenyl ether	<0.056
Bis(2-chloroethoxy)methane	<0.034	Hexachlorobenzene	<0.05
2,4-Dichlorophenol	<0.26	Pentachlorophenol	<0.32
1,2,4-Trichlorobenzene	<0.05	Carbazole	<0.048
Hexachlorobutadiene	<0.07	Di-n-butyl phthalate	<0.068
4-Chloroaniline	<0.056	Benzyl butyl phthalate	<0.086 J
4-Chloro-3-methylphenol	<0.24	Bis(2-ethylhexyl) phthalate	1.4 J fb jr
2-Methylnaphthalene	<0.034	Di-n-octyl phthalate	<0.044
Hexachlorocyclopentadiene	<0.094		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	OF-2-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-02
Date Analyzed:	07/11/13	Data File:	071108.D
Matrix:	Water	Instrument:	GCMS8
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	63	32	162
Phenol-d6	41	10	170
Nitrobenzene-d5	133	50	150
2-Fluorobiphenyl	138	43	158
2,4,6-Tribromophenol	147 ip	43	146
Terphenyl-d14	163	39	168

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Phenol	<0.14	2,4,6-Trichlorophenol	<0.28
Bis(2-chloroethyl) ether	<0.06	2,4,5-Trichlorophenol	<0.22
2-Chlorophenol	<0.16	2-Chloronaphthalene	<0.044
1,3-Dichlorobenzene	<0.034	2-Nitroaniline	<0.086
1,4-Dichlorobenzene	<0.068	Dimethyl phthalate	0.28
1,2-Dichlorobenzene	<0.024	2,6-Dinitrotoluene	<0.062
Benzyl alcohol	<0.4	3-Nitroaniline	<0.46
Bis(2-chloroisopropyl) ether	<0.03	2,4-Dinitrophenol	<2.4
2-Methylphenol	<0.26	Dibenzofuran	<0.034
Hexachloroethane	<0.06	2,4-Dinitrotoluene	<0.056
N-Nitroso-di-n-propylamine	<0.11	4-Nitrophenol	<1.3
3-Methylphenol + 4-Methylphenol	<0.4	Diethyl phthalate	0.25 fb
Nitrobenzene	<0.044	4-Chlorophenyl phenyl ether	<0.072
Isophorone	<0.03	N-Nitrosodiphenylamine	<0.05
2-Nitrophenol	<0.17	4-Nitroaniline	<0.6
2,4-Dimethylphenol	<0.28 jl	4,6-Dinitro-2-methylphenol	<0.38
Benzoic acid	<7.4	4-Bromophenyl phenyl ether	<0.056
Bis(2-chloroethoxy)methane	<0.034	Hexachlorobenzene	<0.05
2,4-Dichlorophenol	<0.26	Pentachlorophenol	<0.32
1,2,4-Trichlorobenzene	<0.05	Carbazole	<0.048
Hexachlorobutadiene	<0.07	Di-n-butyl phthalate	<0.068
4-Chloroaniline	<0.056	Benzyl butyl phthalate	<0.086
4-Chloro-3-methylphenol	<0.24	Bis(2-ethylhexyl) phthalate	8.3 fb jr
2-Methylnaphthalene	<0.034	Di-n-octyl phthalate	0.21 ca
Hexachlorocyclopentadiene	<0.094		

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	OF-4-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-03
Date Analyzed:	07/11/13	Data File:	071109.D
Matrix:	Water	Instrument:	GCMS8
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	67	32	162
Phenol-d6	43	10	170
Nitrobenzene-d5	137	50	150
2-Fluorobiphenyl	135	43	158
2,4,6-Tribromophenol	160 ip	43	146
Terphenyl-d14	155	39	168

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Phenol	<0.14	2,4,6-Trichlorophenol	<0.28
Bis(2-chloroethyl) ether	<0.06	2,4,5-Trichlorophenol	<0.22
2-Chlorophenol	<0.16	2-Chloronaphthalene	<0.044
1,3-Dichlorobenzene	<0.034	2-Nitroaniline	<0.086
1,4-Dichlorobenzene	<0.068	Dimethyl phthalate	<0.05
1,2-Dichlorobenzene	<0.024	2,6-Dinitrotoluene	<0.062
Benzyl alcohol	<0.4	3-Nitroaniline	<0.46
Bis(2-chloroisopropyl) ether	<0.03	2,4-Dinitrophenol	<2.4
2-Methylphenol	<0.26	Dibenzofuran	<0.034
Hexachloroethane	<0.06	2,4-Dinitrotoluene	<0.056
N-Nitroso-di-n-propylamine	<0.11	4-Nitrophenol	<1.3
3-Methylphenol + 4-Methylphenol	<0.4	Diethyl phthalate	0.22 fb
Nitrobenzene	<0.044	4-Chlorophenyl phenyl ether	<0.072
Isophorone	0.035	N-Nitrosodiphenylamine	<0.05
2-Nitrophenol	<0.17	4-Nitroaniline	<0.6
2,4-Dimethylphenol	<0.28 jl	4,6-Dinitro-2-methylphenol	<0.38
Benzoic acid	<7.4	4-Bromophenyl phenyl ether	<0.056
Bis(2-chloroethoxy)methane	<0.034	Hexachlorobenzene	<0.05
2,4-Dichlorophenol	<0.26	Pentachlorophenol	<0.32
1,2,4-Trichlorobenzene	<0.05	Carbazole	<0.048
Hexachlorobutadiene	<0.07	Di-n-butyl phthalate	<0.068
4-Chloroaniline	<0.056	Benzyl butyl phthalate	0.18
4-Chloro-3-methylphenol	<0.24	Bis(2-ethylhexyl) phthalate	2.8 fb jr
2-Methylnaphthalene	<0.034	Di-n-octyl phthalate	<0.044
Hexachlorocyclopentadiene	<0.094		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	OF-6-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-04
Date Analyzed:	07/11/13	Data File:	071110.D
Matrix:	Water	Instrument:	GCMS8
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	65	32	162
Phenol-d6	40	10	170
Nitrobenzene-d5	120	50	150
2-Fluorobiphenyl	136	43	158
2,4,6-Tribromophenol	166 ip	43	146
Terphenyl-d14	170 ip	39	168

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Phenol	<0.14	2,4,6-Trichlorophenol	<0.28
Bis(2-chloroethyl) ether	<0.06	2,4,5-Trichlorophenol	<0.22
2-Chlorophenol	<0.16	2-Chloronaphthalene	<0.044
1,3-Dichlorobenzene	<0.034	2-Nitroaniline	<0.086
1,4-Dichlorobenzene	<0.068	Dimethyl phthalate	0.075
1,2-Dichlorobenzene	<0.024	2,6-Dinitrotoluene	<0.062
Benzyl alcohol	<0.4	3-Nitroaniline	<0.46
Bis(2-chloroisopropyl) ether	<0.03	2,4-Dinitrophenol	<2.4
2-Methylphenol	<0.26	Dibenzofuran	<0.034
Hexachloroethane	<0.06	2,4-Dinitrotoluene	<0.056
N-Nitroso-di-n-propylamine	<0.11	4-Nitrophenol	<1.3
3-Methylphenol + 4-Methylphenol	<0.4	Diethyl phthalate	0.17 fb
Nitrobenzene	<0.044	4-Chlorophenyl phenyl ether	<0.072
Isophorone	<0.03	N-Nitrosodiphenylamine	<0.05
2-Nitrophenol	<0.17	4-Nitroaniline	<0.6
2,4-Dimethylphenol	<0.28 jl	4,6-Dinitro-2-methylphenol	<0.38
Benzoic acid	<7.4	4-Bromophenyl phenyl ether	<0.056
Bis(2-chloroethoxy)methane	<0.034	Hexachlorobenzene	<0.05
2,4-Dichlorophenol	<0.26	Pentachlorophenol	<0.32
1,2,4-Trichlorobenzene	<0.05	Carbazole	<0.048
Hexachlorobutadiene	<0.07	Di-n-butyl phthalate	<0.068
4-Chloroaniline	<0.056	Benzyl butyl phthalate	0.10
4-Chloro-3-methylphenol	<0.24	Bis(2-ethylhexyl) phthalate	2.3 fb jr
2-Methylnaphthalene	<0.034	Di-n-octyl phthalate	0.11 ca
Hexachlorocyclopentadiene	<0.094		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	OF-3-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-05
Date Analyzed:	07/11/13	Data File:	071111.D
Matrix:	Water	Instrument:	GCMS8
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	65	32	162
Phenol-d6	43	10	170
Nitrobenzene-d5	123	50	150
2-Fluorobiphenyl	127	43	158
2,4,6-Tribromophenol	152 ip	43	146
Terphenyl-d14	150	39	168

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Phenol	<0.14	2,4,6-Trichlorophenol	<0.28
Bis(2-chloroethyl) ether	<0.06	2,4,5-Trichlorophenol	<0.22
2-Chlorophenol	<0.16	2-Chloronaphthalene	<0.044
1,3-Dichlorobenzene	<0.034	2-Nitroaniline	<0.086
1,4-Dichlorobenzene	<0.068	Dimethyl phthalate	0.080
1,2-Dichlorobenzene	<0.024	2,6-Dinitrotoluene	<0.062
Benzyl alcohol	<0.4	3-Nitroaniline	<0.46
Bis(2-chloroisopropyl) ether	<0.03	2,4-Dinitrophenol	<2.4
2-Methylphenol	<0.26	Dibenzofuran	<0.034
Hexachloroethane	<0.06	2,4-Dinitrotoluene	<0.056
N-Nitroso-di-n-propylamine	<0.11	4-Nitrophenol	<1.3
3-Methylphenol + 4-Methylphenol	<0.4	Diethyl phthalate	0.77 fb
Nitrobenzene	<0.044	4-Chlorophenyl phenyl ether	<0.072
Isophorone	<0.03	N-Nitrosodiphenylamine	<0.05
2-Nitrophenol	<0.17	4-Nitroaniline	<0.6
2,4-Dimethylphenol	<0.28 jl	4,6-Dinitro-2-methylphenol	<0.38
Benzoic acid	<7.4	4-Bromophenyl phenyl ether	<0.056
Bis(2-chloroethoxy)methane	<0.034	Hexachlorobenzene	<0.05
2,4-Dichlorophenol	<0.26	Pentachlorophenol	<0.32
1,2,4-Trichlorobenzene	<0.05	Carbazole	<0.048
Hexachlorobutadiene	<0.07	Di-n-butyl phthalate	<0.068
4-Chloroaniline	<0.056	Benzyl butyl phthalate	<0.086
4-Chloro-3-methylphenol	<0.24	Bis(2-ethylhexyl) phthalate	3.6 fb jr
2-Methylnaphthalene	<0.034	Di-n-octyl phthalate	0.14 ca
Hexachlorocyclopentadiene	<0.094		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	OF-5-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-06
Date Analyzed:	07/11/13	Data File:	071112.D
Matrix:	Water	Instrument:	GCMS8
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	69	32	162
Phenol-d6	43	10	170
Nitrobenzene-d5	140	50	150
2-Fluorobiphenyl	146	43	158
2,4,6-Tribromophenol	164 ip	43	146
Terphenyl-d14	166	39	168

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Phenol	<0.14	2,4,6-Trichlorophenol	<0.28
Bis(2-chloroethyl) ether	<0.06	2,4,5-Trichlorophenol	<0.22
2-Chlorophenol	<0.16	2-Chloronaphthalene	<0.044
1,3-Dichlorobenzene	<0.034	2-Nitroaniline	<0.086
1,4-Dichlorobenzene	<0.068	Dimethyl phthalate	0.077
1,2-Dichlorobenzene	<0.024	2,6-Dinitrotoluene	<0.062
Benzyl alcohol	<0.4	3-Nitroaniline	<0.46
Bis(2-chloroisopropyl) ether	<0.03	2,4-Dinitrophenol	<2.4
2-Methylphenol	<0.26	Dibenzofuran	<0.034
Hexachloroethane	<0.06	2,4-Dinitrotoluene	<0.056
N-Nitroso-di-n-propylamine	<0.11	4-Nitrophenol	<1.3
3-Methylphenol + 4-Methylphenol	<0.4	Diethyl phthalate	0.22 fb
Nitrobenzene	<0.044	4-Chlorophenyl phenyl ether	<0.072
Isophorone	0.032	N-Nitrosodiphenylamine	<0.05
2-Nitrophenol	<0.17	4-Nitroaniline	<0.6
2,4-Dimethylphenol	<0.28 jl	4,6-Dinitro-2-methylphenol	<0.38
Benzoic acid	<7.4	4-Bromophenyl phenyl ether	<0.056
Bis(2-chloroethoxy)methane	<0.034	Hexachlorobenzene	<0.05
2,4-Dichlorophenol	<0.26	Pentachlorophenol	<0.32
1,2,4-Trichlorobenzene	<0.05	Carbazole	<0.048
Hexachlorobutadiene	<0.07	Di-n-butyl phthalate	0.070
4-Chloroaniline	<0.056	Benzyl butyl phthalate	<0.086
4-Chloro-3-methylphenol	<0.24	Bis(2-ethylhexyl) phthalate	1.0 fb jr
2-Methylnaphthalene	<0.034	Di-n-octyl phthalate	<0.044
Hexachlorocyclopentadiene	<0.094		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	03-1303 mb
Date Analyzed:	07/11/13	Data File:	071106.D
Matrix:	Water	Instrument:	GCMS8
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	36	32	162
Phenol-d6	36	10	170
Nitrobenzene-d5	128	50	150
2-Fluorobiphenyl	129	43	158
2,4,6-Tribromophenol	77	43	146
Terphenyl-d14	155	39	168

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Phenol	<0.14	2,4,6-Trichlorophenol	<0.28
Bis(2-chloroethyl) ether	<0.06	2,4,5-Trichlorophenol	<0.22
2-Chlorophenol	<0.16	2-Chloronaphthalene	<0.044
1,3-Dichlorobenzene	<0.034	2-Nitroaniline	<0.086
1,4-Dichlorobenzene	<0.068	Dimethyl phthalate	<0.05
1,2-Dichlorobenzene	<0.024	2,6-Dinitrotoluene	<0.062
Benzyl alcohol	<0.4	3-Nitroaniline	<0.46
Bis(2-chloroisopropyl) ether	<0.03	2,4-Dinitrophenol	<2.4
2-Methylphenol	<0.26	Dibenzofuran	<0.034
Hexachloroethane	<0.06	2,4-Dinitrotoluene	<0.056
N-Nitroso-di-n-propylamine	<0.11	4-Nitrophenol	<1.3
3-Methylphenol + 4-Methylphenol	<0.4	Diethyl phthalate	0.085 lc
Nitrobenzene	<0.044	4-Chlorophenyl phenyl ether	<0.072
Isophorone	<0.03	N-Nitrosodiphenylamine	<0.05
2-Nitrophenol	<0.17	4-Nitroaniline	<0.6
2,4-Dimethylphenol	<0.28 jl	4,6-Dinitro-2-methylphenol	<0.38
Benzoic acid	<7.4	4-Bromophenyl phenyl ether	<0.056
Bis(2-chloroethoxy)methane	<0.034	Hexachlorobenzene	<0.05
2,4-Dichlorophenol	<0.26	Pentachlorophenol	<0.32
1,2,4-Trichlorobenzene	<0.05	Carbazole	<0.048
Hexachlorobutadiene	<0.07	Di-n-butyl phthalate	<0.068
4-Chloroaniline	<0.056	Benzyl butyl phthalate	<0.086
4-Chloro-3-methylphenol	<0.24	Bis(2-ethylhexyl) phthalate	0.50 lc
2-Methylnaphthalene	<0.034	Di-n-octyl phthalate	<0.044
Hexachlorocyclopentadiene	<0.094		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	OF-1-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/16/13	Lab ID:	306444-01
Date Analyzed:	07/17/13	Data File:	071725.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	78	50	150
Benzo(a)anthracene-d12	90	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	0.0045
Acenaphthylene	<0.0024
Acenaphthene	<0.0038
Fluorene	<0.004
Phenanthrene	0.0075
Anthracene	0.0029
Fluoranthene	0.015
Pyrene	0.0077
Benz(a)anthracene	<0.0042
Chrysene	0.0043
Benzo(a)pyrene	<0.0078
Benzo(b)fluoranthene	<0.0052
Benzo(k)fluoranthene	<0.0076
Indeno(1,2,3-cd)pyrene	<0.007
Dibenz(a,h)anthracene	<0.004
Benzo(g,h,i)perylene	<0.0044

Note - Analysis performed outside the method or client-specified holding time requirement.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	OF-2-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/16/13	Lab ID:	306444-02
Date Analyzed:	07/17/13	Data File:	071726.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	69	50	150
Benzo(a)anthracene-d12	81	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.004
Acenaphthylene	<0.0024
Acenaphthene	<0.0038
Fluorene	<0.004
Phenanthrene	0.0075
Anthracene	0.0054
Fluoranthene	0.019
Pyrene	0.025
Benz(a)anthracene	0.0055
Chrysene	0.017
Benzo(a)pyrene	<0.0078
Benzo(b)fluoranthene	0.0071
Benzo(k)fluoranthene	<0.0076
Indeno(1,2,3-cd)pyrene	<0.007
Dibenz(a,h)anthracene	<0.004
Benzo(g,h,i)perylene	<0.0044

Note - Analysis performed outside the method or client-specified holding time requirement.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	OF-4-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/16/13	Lab ID:	306444-03
Date Analyzed:	07/17/13	Data File:	071727.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	79	50	150
Benzo(a)anthracene-d12	95	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.004
Acenaphthylene	<0.0024
Acenaphthene	<0.0038
Fluorene	<0.004
Phenanthrene	<0.0066
Anthracene	0.0030
Fluoranthene	0.0070
Pyrene	0.0054
Benz(a)anthracene	<0.0042
Chrysene	<0.0038
Benzo(a)pyrene	<0.0078
Benzo(b)fluoranthene	<0.0052
Benzo(k)fluoranthene	<0.0076
Indeno(1,2,3-cd)pyrene	<0.007
Dibenz(a,h)anthracene	<0.004
Benzo(g,h,i)perylene	<0.0044

Note - Analysis performed outside the method or client-specified holding time requirement.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	OF-6-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/16/13	Lab ID:	306444-04
Date Analyzed:	07/17/13	Data File:	071728.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	74	50	150
Benzo(a)anthracene-d12	75	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	0.0045
Acenaphthylene	<0.0024
Acenaphthene	<0.0038
Fluorene	<0.004
Phenanthrene	<0.0066
Anthracene	0.0030
Fluoranthene	0.0077
Pyrene	0.0080
Benz(a)anthracene	<0.0042
Chrysene	0.0059
Benzo(a)pyrene	<0.0078
Benzo(b)fluoranthene	<0.0052
Benzo(k)fluoranthene	<0.0076
Indeno(1,2,3-cd)pyrene	<0.007
Dibenz(a,h)anthracene	<0.004
Benzo(g,h,i)perylene	<0.0044

Note - Analysis performed outside the method or client-specified holding time requirement.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	OF-3-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/16/13	Lab ID:	306444-05
Date Analyzed:	07/17/13	Data File:	071729.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	61	50	150
Benzo(a)anthracene-d12	36 vo	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	0.004
Acenaphthylene	<0.0024
Acenaphthene	<0.0038
Fluorene	<0.004
Phenanthrene	0.0083
Anthracene	0.0045
Fluoranthene	0.014
Pyrene	0.019
Benz(a)anthracene	0.0048 js
Chrysene	0.0088 js
Benzo(a)pyrene	<0.0078 js
Benzo(b)fluoranthene	0.0053 js
Benzo(k)fluoranthene	<0.0076 js
Indeno(1,2,3-cd)pyrene	<0.007 js
Dibenz(a,h)anthracene	<0.004 js
Benzo(g,h,i)perylene	<0.0044 js

Note - Analysis performed outside the method or client-specified holding time requirement.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	OF-5-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/16/13	Lab ID:	306444-06
Date Analyzed:	07/17/13	Data File:	071730.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	85	50	150
Benzo(a)anthracene-d12	105	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.004
Acenaphthylene	<0.0024
Acenaphthene	<0.0038
Fluorene	<0.004
Phenanthrene	0.011
Anthracene	0.013
Fluoranthene	0.014
Pyrene	0.020
Benz(a)anthracene	<0.0042
Chrysene	0.012
Benzo(a)pyrene	<0.0078
Benzo(b)fluoranthene	<0.0052
Benzo(k)fluoranthene	<0.0076
Indeno(1,2,3-cd)pyrene	<0.007
Dibenz(a,h)anthracene	<0.004
Benzo(g,h,i)perylene	<0.0044

Note - Analysis performed outside the method or client-specified holding time requirement.

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley 101.00205.00030
Date Extracted:	07/16/13	Lab ID:	03-1378 mb2
Date Analyzed:	07/16/13	Data File:	071608.D
Matrix:	Water	Instrument:	GCMS6
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	88	50	150
Benzo(a)anthracene-d12	95	50	129

Compounds:	Concentration ug/L (ppb)
Naphthalene	<0.004
Acenaphthylene	<0.0024
Acenaphthene	<0.0038
Fluorene	<0.004
Phenanthrene	<0.0066
Anthracene	<0.0028
Fluoranthene	<0.0046
Pyrene	<0.0036
Benz(a)anthracene	<0.0042
Chrysene	<0.0038
Benzo(a)pyrene	<0.0078
Benzo(b)fluoranthene	<0.0052
Benzo(k)fluoranthene	<0.0076
Indeno(1,2,3-cd)pyrene	<0.007
Dibenz(a,h)anthracene	<0.004
Benzo(g,h,i)perylene	<0.0044

Analysis For PCBs By EPA Method 8082

Client Sample ID:	OF-1-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-01
Date Analyzed:	07/05/13	Data File:	16.D\ECD1A.CH
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	54	50	150

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.01 j
Aroclor 1232	<0.01 j
Aroclor 1016	<0.01 j
Aroclor 1242	<0.01 j
Aroclor 1248	<0.01 j
Aroclor 1254	<0.01 j
Aroclor 1260	<0.01 j

Analysis For PCBs By EPA Method 8082

Client Sample ID:	OF-2-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-02
Date Analyzed:	07/05/13	Data File:	18.D\ECD1A.CH
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	65	50	150

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.01 j
Aroclor 1232	<0.01 j
Aroclor 1016	<0.01 j
Aroclor 1242	<0.01 j
Aroclor 1248	<0.01 j
Aroclor 1254	<0.01 j
Aroclor 1260	<0.01 j

Analysis For PCBs By EPA Method 8082

Client Sample ID:	OF-4-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-03
Date Analyzed:	07/05/13	Data File:	20.D\ECD1A.CH
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	64	50	150

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.01 j
Aroclor 1232	<0.01 j
Aroclor 1016	<0.01 j
Aroclor 1242	<0.01 j
Aroclor 1248	<0.01 j
Aroclor 1254	<0.01 j
Aroclor 1260	<0.01 j

Analysis For PCBs By EPA Method 8082

Client Sample ID:	OF-6-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-04
Date Analyzed:	07/05/13	Data File:	22.D\ECD1A.CH
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	70	50	150

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.01 j
Aroclor 1232	<0.01 j
Aroclor 1016	<0.01 j
Aroclor 1242	<0.01 j
Aroclor 1248	<0.01 j
Aroclor 1254	<0.01 j
Aroclor 1260	<0.01 j

Analysis For PCBs By EPA Method 8082

Client Sample ID:	OF-3-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-05
Date Analyzed:	07/05/13	Data File:	24.D\ECD1A.CH
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	81	50	150

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.01 j
Aroclor 1232	<0.01 j
Aroclor 1016	<0.01 j
Aroclor 1242	<0.01 j
Aroclor 1248	<0.01 j
Aroclor 1254	<0.01 j
Aroclor 1260	<0.01 j

Analysis For PCBs By EPA Method 8082

Client Sample ID:	OF-5-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	306444-06
Date Analyzed:	07/05/13	Data File:	26.D\ECD1A.CH
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	53	50	150

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.01 j
Aroclor 1232	<0.01 j
Aroclor 1016	<0.01 j
Aroclor 1242	<0.01 j
Aroclor 1248	<0.01 j
Aroclor 1254	<0.01 j
Aroclor 1260	<0.01 j

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley 101.00205.00030
Date Extracted:	07/02/13	Lab ID:	MB 03-1330
Date Analyzed:	07/05/13	Data File:	28.D\ECD1A.CH
Matrix:	Water	Instrument:	GC7
Units:	ug/L (ppb)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	50	50	150

Compounds:	Concentration ug/L (ppb)
Aroclor 1221	<0.01 j
Aroclor 1232	<0.01 j
Aroclor 1016	<0.01 j
Aroclor 1242	<0.01 j
Aroclor 1248	<0.01 j
Aroclor 1254	<0.01 j
Aroclor 1260	<0.01 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	OF-1-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/09/13	Lab ID:	306444-01
Date Analyzed:	07/11/13	Data File:	306444-01.063
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	103	60	125
Indium	99	60	125
Holmium	95	60	125

Analyte:	Concentration ug/L (ppb)
Beryllium	<0.098
Chromium	2.20
Nickel	2.31
Copper	15.8
Zinc	81.0
Arsenic	1.33
Selenium	<0.56
Silver	<0.064
Cadmium	0.147
Antimony	1.04
Barium	38.6
Thallium	<0.074 j
Lead	2.43

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	OF-2-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/09/13	Lab ID:	306444-02
Date Analyzed:	07/11/13	Data File:	306444-02.064
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	103	60	125
Indium	97	60	125
Holmium	98	60	125

Analyte:	Concentration ug/L (ppb)
Beryllium	<0.098
Chromium	4.16
Nickel	3.87
Copper	21.1
Zinc	91.9
Arsenic	2.31
Selenium	<0.56
Silver	<0.064
Cadmium	0.197
Antimony	1.52
Barium	56.0
Thallium	<0.074 j
Lead	4.98

Analysis For Total Metals By EPA Method 200.8

Client ID:	OF-4-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/09/13	Lab ID:	306444-03
Date Analyzed:	07/11/13	Data File:	306444-03.065
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	102	60	125
Indium	102	60	125
Holmium	98	60	125

Analyte:	Concentration ug/L (ppb)
Beryllium	<0.098
Chromium	3.76
Nickel	3.30
Copper	35.4
Zinc	134
Arsenic	2.28
Selenium	<0.56
Silver	<0.064
Cadmium	0.252
Antimony	1.55
Barium	33.3
Thallium	<0.074 j
Lead	5.37

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	OF-6-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/09/13	Lab ID:	306444-04
Date Analyzed:	07/11/13	Data File:	306444-04.066
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	100	60	125
Indium	95	60	125
Holmium	94	60	125

Analyte:	Concentration ug/L (ppb)
Beryllium	<0.098
Chromium	2.39
Nickel	2.09
Copper	13.1
Zinc	183
Arsenic	2.15
Selenium	<0.56
Silver	<0.064
Cadmium	0.164
Antimony	1.71
Barium	27.0
Thallium	<0.074 j
Lead	3.58

Analysis For Total Metals By EPA Method 200.8

Client ID:	OF-3-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/09/13	Lab ID:	306444-05
Date Analyzed:	07/11/13	Data File:	306444-05.067
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	98	60	125
Indium	96	60	125
Holmium	96	60	125

Analyte:	Concentration ug/L (ppb)
Beryllium	<0.098
Chromium	3.56
Nickel	4.69
Copper	18.7
Zinc	89.9
Arsenic	3.13
Selenium	<0.56
Silver	<0.064
Cadmium	0.387
Antimony	1.14
Barium	40.8
Thallium	<0.074 j
Lead	5.75

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	OF-5-062613	Client:	SLR International Corp.
Date Received:	06/27/13	Project:	Crowley 101.00205.00030
Date Extracted:	07/09/13	Lab ID:	306444-06
Date Analyzed:	07/11/13	Data File:	306444-06.068
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	99	60	125
Indium	98	60	125
Holmium	95	60	125

Analyte:	Concentration ug/L (ppb)
Beryllium	<0.098
Chromium	2.12
Nickel	3.05
Copper	16.9
Zinc	134
Arsenic	1.23
Selenium	<0.56
Silver	<0.064
Cadmium	0.241
Antimony	0.925
Barium	28.0
Thallium	<0.074 j
Lead	3.99

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley 101.00205.00030
Date Extracted:	07/09/13	Lab ID:	I3-407 mb
Date Analyzed:	07/09/13	Data File:	I3-407 mb.050
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	95	60	125
Indium	92	60	125
Holmium	93	60	125

Analyte:	Concentration ug/L (ppb)
Beryllium	<0.098
Chromium	<0.138
Nickel	<0.46
Copper	<0.34
Zinc	<0.61
Arsenic	<0.15
Selenium	<0.56
Silver	<0.064
Cadmium	<0.094
Antimony	<0.086 j
Barium	<0.26
Thallium	<0.074 j
Lead	<0.144

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley 101.00205.00030
Date Extracted:	07/09/13	Lab ID:	I3-407 mb
Date Analyzed:	07/11/13	Data File:	I3-407 mb.036
Matrix:	Water	Instrument:	ICPMS1
Units:	ug/L (ppb)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	97	60	125
Indium	100	60	125
Holmium	98	60	125

Analyte:	Concentration ug/L (ppb)
Beryllium	<0.098
Chromium	<0.138
Nickel	<0.46
Copper	<0.34
Zinc	<0.61
Arsenic	<0.15
Selenium	<0.56
Silver	<0.064
Cadmium	<0.094
Antimony	<0.052 j
Barium	<0.26
Thallium	<0.074
Lead	<0.144

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444
Date Extracted: 07/08/13
Date Analyzed: 07/10/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Results Reported as ug/L (ppb)

Sample ID Laboratory ID	Total Mercury
OF-1-062613 306444-01	0.0065
OF-2-062613 306444-02	0.010
OF-4-062613 306444-03	0.013
OF-6-062613 306444-04	0.0051
OF-3-062613 306444-05	0.012
OF-5-062613 306444-06	0.0060
Method Blank	<0.0015

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444
Date Extracted: NA
Date Analyzed: 07/03/13

RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL SUSPENDED SOLIDS BY METHOD 2540D

Results Reported as mg/L (ppm)

Sample ID Laboratory ID	Total Suspended Solids
OF-1-062613 306444-01	24
OF-2-062613 306444-02	23
OF-4-062613 306444-03	10
OF-6-062613 306444-04	12
OF-3-062613 306444-05	20
OF-5-062613 306444-06	<10
Method Blank	<10

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TPH AS GASOLINE USING METHOD NWTPH-Gx

Laboratory Code: 306444-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Gasoline	ug/L (ppb)	<12	<12	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	96	69-134

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	107	101	58-134	6

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: 306444-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<0.16	92	55-144
Chloromethane	ug/L (ppb)	50	<0.22	89	67-131
Vinyl chloride	ug/L (ppb)	50	<0.13	91	61-139
Bromomethane	ug/L (ppb)	50	<0.2	554 vo	66-129
Chloroethane	ug/L (ppb)	50	<0.18	160 vo	68-126
Trichlorofluoromethane	ug/L (ppb)	50	<0.17	116	71-128
Acetone	ug/L (ppb)	250	3.4	96	48-149
1,1-Dichloroethene	ug/L (ppb)	50	<0.19	109	71-123
Methylene chloride	ug/L (ppb)	50	<3	98	61-126
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<0.13	97	68-125
trans-1,2-Dichloroethene	ug/L (ppb)	50	<0.24	99	72-122
1,1-Dichloroethane	ug/L (ppb)	50	<0.18	99	79-113
2,2-Dichloropropane	ug/L (ppb)	50	<0.3	97	58-132
cis-1,2-Dichloroethene	ug/L (ppb)	50	<0.24	99	73-119
Chloroform	ug/L (ppb)	50	<0.24	100	80-112
2-Butanone (MEK)	ug/L (ppb)	250	<0.94	100	69-123
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<0.11	97	78-113
1,1,1-Trichloroethane	ug/L (ppb)	50	<0.2	104	79-116
1,1-Dichloropropene	ug/L (ppb)	50	<0.26	100	67-121
Carbon tetrachloride	ug/L (ppb)	50	<0.24	113	72-123
Benzene	ug/L (ppb)	50	<0.13	94	79-109
Trichloroethene	ug/L (ppb)	50	<0.17	98	75-109
1,2-Dichloropropane	ug/L (ppb)	50	<0.32	99	80-111
Bromodichloromethane	ug/L (ppb)	50	<0.38	113	78-117
Dibromomethane	ug/L (ppb)	50	<0.28	100	80-112
4-Methyl-2-pentanone	ug/L (ppb)	250	<1.3	104	79-123
cis-1,3-Dichloropropene	ug/L (ppb)	50	<0.2	110	76-120
Toluene	ug/L (ppb)	50	<0.13	95	73-117
trans-1,3-Dichloropropene	ug/L (ppb)	50	<0.34	101	75-122
1,1,2-Trichloroethane	ug/L (ppb)	50	<0.28	99	81-111
2-Hexanone	ug/L (ppb)	250	<1	101	75-126
1,3-Dichloropropane	ug/L (ppb)	50	<0.2	99	81-111
Tetrachloroethene	ug/L (ppb)	50	<0.28	95	72-113
Dibromochloromethane	ug/L (ppb)	50	<0.24	110	69-129
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<0.24	107	83-114
Chlorobenzene	ug/L (ppb)	50	<0.1	96	75-115
Ethylbenzene	ug/L (ppb)	50	<0.16	96	71-120
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<0.32	110	78-122
m,p-Xylene	ug/L (ppb)	100	<0.5	96	63-128
o-Xylene	ug/L (ppb)	50	<0.22	96	64-129
Styrene	ug/L (ppb)	50	<0.22	99	70-122
Isopropylbenzene	ug/L (ppb)	50	<0.15	98	76-118
Bromoform	ug/L (ppb)	50	<0.22	113	49-138
n-Propylbenzene	ug/L (ppb)	50	<0.14	102	74-117
Bromobenzene	ug/L (ppb)	50	<0.18	100	70-121
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<0.18	103	81-112
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<0.24	106	79-120
1,2,3-Trichloropropane	ug/L (ppb)	50	<0.28	100	72-119
2-Chlorotoluene	ug/L (ppb)	50	<0.13	99	77-114
4-Chlorotoluene	ug/L (ppb)	50	<0.16	100	81-109
tert-Butylbenzene	ug/L (ppb)	50	<0.15	102	81-116
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<0.11	102	74-118
sec-Butylbenzene	ug/L (ppb)	50	<0.12	100	77-118
p-Isopropyltoluene	ug/L (ppb)	50	<0.15	100	64-132
1,3-Dichlorobenzene	ug/L (ppb)	50	<0.15	97	81-111
1,4-Dichlorobenzene	ug/L (ppb)	50	<0.094	95	78-110
1,2-Dichlorobenzene	ug/L (ppb)	50	<0.13	97	81-111
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<0.44	111	69-129
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<0.34	97	74-115
Hexachlorobutadiene	ug/L (ppb)	50	<0.46	86	67-120
Naphthalene	ug/L (ppb)	50	<0.28	105	63-136
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<0.38	95	79-115

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR VOLATILES BY EPA METHOD 8260C

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	91	88	54-149	3
Chloromethane	ug/L (ppb)	50	89	88	67-133	1
Vinyl chloride	ug/L (ppb)	50	92	89	73-132	3
Bromomethane	ug/L (ppb)	50	602 vo	611 vo	69-123	1
Chloroethane	ug/L (ppb)	50	162 vo	158 vo	68-126	2
Trichlorofluoromethane	ug/L (ppb)	50	117	116	70-132	1
Acetone	ug/L (ppb)	250	104	101	44-145	3
1,1-Dichloroethene	ug/L (ppb)	50	108	109	75-119	1
Methylene chloride	ug/L (ppb)	50	97	97	63-132	0
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	99	100	70-122	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	99	99	76-118	0
1,1-Dichloroethane	ug/L (ppb)	50	100	99	80-116	1
2,2-Dichloropropane	ug/L (ppb)	50	106	105	62-141	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	98	98	81-111	0
Chloroform	ug/L (ppb)	50	99	100	81-109	1
2-Butanone (MEK)	ug/L (ppb)	250	103	102	53-140	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	98	97	79-109	1
1,1,1-Trichloroethane	ug/L (ppb)	50	106	107	80-116	1
1,1-Dichloropropene	ug/L (ppb)	50	99	100	78-112	1
Carbon tetrachloride	ug/L (ppb)	50	116	117	72-128	1
Benzene	ug/L (ppb)	50	94	95	81-108	1
Trichloroethene	ug/L (ppb)	50	99	99	77-108	0
1,2-Dichloropropane	ug/L (ppb)	50	99	101	82-109	2
Bromodichloromethane	ug/L (ppb)	50	113	115	76-120	2
Dibromomethane	ug/L (ppb)	50	100	101	80-110	1
4-Methyl-2-pentanone	ug/L (ppb)	250	106	108	59-142	2
cis-1,3-Dichloropropene	ug/L (ppb)	50	114	116	76-128	2
Toluene	ug/L (ppb)	50	95	96	83-108	1
trans-1,3-Dichloropropene	ug/L (ppb)	50	107	110	76-128	3
1,1,2-Trichloroethane	ug/L (ppb)	50	101	101	82-110	0
2-Hexanone	ug/L (ppb)	250	102	105	53-145	3
1,3-Dichloropropane	ug/L (ppb)	50	99	102	83-110	3
Tetrachloroethene	ug/L (ppb)	50	94	97	78-109	3
Dibromochloromethane	ug/L (ppb)	50	113	115	63-140	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	110	112	85-113	2
Chlorobenzene	ug/L (ppb)	50	96	96	84-108	0
Ethylbenzene	ug/L (ppb)	50	96	98	84-110	2
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	113	114	76-125	1
m,p-Xylene	ug/L (ppb)	100	96	98	84-112	2
o-Xylene	ug/L (ppb)	50	97	97	82-113	0
Styrene	ug/L (ppb)	50	99	101	84-116	2
Isopropylbenzene	ug/L (ppb)	50	98	99	81-122	1
Bromoform	ug/L (ppb)	50	117	119	40-161	2
n-Propylbenzene	ug/L (ppb)	50	100	102	81-115	2
Bromobenzene	ug/L (ppb)	50	98	101	80-113	3
1,3,5-Trimethylbenzene	ug/L (ppb)	50	101	102	83-117	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	107	108	79-118	1
1,2,3-Trichloropropane	ug/L (ppb)	50	102	103	74-116	1
2-Chlorotoluene	ug/L (ppb)	50	98	99	79-112	1
4-Chlorotoluene	ug/L (ppb)	50	99	101	81-113	2
tert-Butylbenzene	ug/L (ppb)	50	101	101	81-119	0
1,2,4-Trimethylbenzene	ug/L (ppb)	50	101	102	83-116	1
sec-Butylbenzene	ug/L (ppb)	50	99	100	83-116	1
p-Isopropyltoluene	ug/L (ppb)	50	99	101	82-119	2
1,3-Dichlorobenzene	ug/L (ppb)	50	95	96	83-111	1
1,4-Dichlorobenzene	ug/L (ppb)	50	94	95	82-109	1
1,2-Dichlorobenzene	ug/L (ppb)	50	95	96	83-111	1
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	118	116	62-133	2
1,2,4-Trichlorobenzene	ug/L (ppb)	50	98	97	77-117	1
Hexachlorobutadiene	ug/L (ppb)	50	88	87	74-118	1
Naphthalene	ug/L (ppb)	50	109	107	75-131	2
1,2,3-Trichlorobenzene	ug/L (ppb)	50	97	96	82-115	1

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Phenol	ug/L (ppb)	10	36	37	18-52	3
Bis(2-chloroethyl) ether	ug/L (ppb)	10	113	85	52-113	28 vo
2-Chlorophenol	ug/L (ppb)	10	75	82	50-110	9
1,3-Dichlorobenzene	ug/L (ppb)	10	79	87	45-109	10
1,4-Dichlorobenzene	ug/L (ppb)	10	82	89	44-118	8
1,2-Dichlorobenzene	ug/L (ppb)	10	82	89	46-116	8
Benzyl alcohol	ug/L (ppb)	10	66	72	42-100	9
Bis(2-chloroisopropyl) ether	ug/L (ppb)	10	82	88	51-124	7
2-Methylphenol	ug/L (ppb)	10	61	66	38-100	8
Hexachloroethane	ug/L (ppb)	10	81	89	42-117	9
N-Nitroso-di-n-propylamine	ug/L (ppb)	10	76	87	48-124	13
3-Methylphenol + 4-Methylphenol	ug/L (ppb)	10	58	61	48-87	5
Nitrobenzene	ug/L (ppb)	10	79	88	50-118	11
Isophorone	ug/L (ppb)	10	84	91	55-116	8
2-Nitrophenol	ug/L (ppb)	10	85	94	42-127	10
2,4-Dimethylphenol	ug/L (ppb)	10	29 vo	32 vo	45-100	10
Benzoic acid	ug/L (ppb)	65	91 vo	81 vo	10-46	12
Bis(2-chloroethoxy)methane	ug/L (ppb)	10	83	89	55-115	7
2,4-Dichlorophenol	ug/L (ppb)	10	83	88	55-113	6
1,2,4-Trichlorobenzene	ug/L (ppb)	10	84	91	50-109	8
Hexachlorobutadiene	ug/L (ppb)	10	86	94	50-109	9
4-Chloroaniline	ug/L (ppb)	20	76	84	30-109	10
4-Chloro-3-methylphenol	ug/L (ppb)	10	81	84	54-114	4
2-Methylnaphthalene	ug/L (ppb)	10	82	86	53-113	5
Hexachlorocyclopentadiene	ug/L (ppb)	10	58	73	26-94	23 vo
2,4,6-Trichlorophenol	ug/L (ppb)	10	83	88	46-114	6
2,4,5-Trichlorophenol	ug/L (ppb)	10	86	90	57-122	5
2-Chloronaphthalene	ug/L (ppb)	10	85	92	52-112	8
2-Nitroaniline	ug/L (ppb)	10	85	90	47-128	6
Dimethyl phthalate	ug/L (ppb)	10	95	98	55-116	3
2,6-Dinitrotoluene	ug/L (ppb)	10	96	100	49-126	4
3-Nitroaniline	ug/L (ppb)	20	81	84	21-125	4
2,4-Dinitrophenol	ug/L (ppb)	10	69	67	29-130	3
Dibenzofuran	ug/L (ppb)	10	90	94	53-113	4
2,4-Dinitrotoluene	ug/L (ppb)	10	101	101	48-129	0
4-Nitrophenol	ug/L (ppb)	10	29	28	12-59	4
Diethyl phthalate	ug/L (ppb)	10	97	98	55-116	1
4-Chlorophenyl phenyl ether	ug/L (ppb)	10	92	96	52-115	4
N-Nitrosodiphenylamine	ug/L (ppb)	10	85	97	51-112	13
4-Nitroaniline	ug/L (ppb)	20	86	95	42-115	10
4,6-Dinitro-2-methylphenol	ug/L (ppb)	10	78	82	40-128	5
4-Bromophenyl phenyl ether	ug/L (ppb)	10	91	100	53-114	9
Hexachlorobenzene	ug/L (ppb)	10	91	102	54-115	11
Pentachlorophenol	ug/L (ppb)	10	71	75	49-114	5
Carbazole	ug/L (ppb)	10	85	91	54-115	7
Di-n-butyl phthalate	ug/L (ppb)	10	91	95	54-115	4
Benzyl butyl phthalate	ug/L (ppb)	10	91	99	53-122	8
Bis(2-ethylhexyl) phthalate	ug/L (ppb)	10	76	98	54-122	25 vo
Di-n-octyl phthalate	ug/L (ppb)	10	90	99	50-131	10

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	ug/L (ppb)	1	78	75	67-116	4
Acenaphthylene	ug/L (ppb)	1	94	91	65-119	3
Acenaphthene	ug/L (ppb)	1	90	88	66-118	2
Fluorene	ug/L (ppb)	1	96	95	64-125	1
Phenanthrene	ug/L (ppb)	1	91	93	67-120	2
Anthracene	ug/L (ppb)	1	94	95	65-122	1
Fluoranthene	ug/L (ppb)	1	96	101	65-127	5
Pyrene	ug/L (ppb)	1	97	99	62-130	2
Benz(a)anthracene	ug/L (ppb)	1	92	94	60-118	2
Chrysene	ug/L (ppb)	1	95	97	66-125	2
Benzo(b)fluoranthene	ug/L (ppb)	1	85	90	55-135	6
Benzo(k)fluoranthene	ug/L (ppb)	1	81	81	62-125	0
Benzo(a)pyrene	ug/L (ppb)	1	83	85	58-127	2
Indeno(1,2,3-cd)pyrene	ug/L (ppb)	1	85	87	36-142	2
Dibenz(a,h)anthracene	ug/L (ppb)	1	82	84	37-133	2
Benzo(g,h,i)perylene	ug/L (ppb)	1	84	85	34-135	1

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	ug/L (ppb)	2.5	70	72	70-130	1
Aroclor 1260	ug/L (ppb)	2.5	85	93	70-130	9

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Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 307082-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Beryllium	ug/L (ppb)	5	<0.0978	95	96	67-145	1
Chromium	ug/L (ppb)	20	0.990	91	90	64-132	1
Nickel	ug/L (ppb)	20	7.57	87 b	88 b	61-128	1 b
Copper	ug/L (ppb)	20	507	0 b	0 b	63-124	0 b
Zinc	ug/L (ppb)	50	442	30 b	18 b	55-141	50 b
Arsenic	ug/L (ppb)	10	12.1	89 b	88 b	60-150	1 b
Selenium	ug/L (ppb)	5	0.746	104	97	43-178	7
Silver	ug/L (ppb)	5	<0.064	91	91	71-115	0
Cadmium	ug/L (ppb)	5	0.886	96	95	83-116	1
Antimony	ug/L (ppb)	20	1.09	91	92	62-125	1
Barium	ug/L (ppb)	50	25.5	93 b	90 b	79-126	3 b
Thallium	ug/L (ppb)	5	<0.0739	98	96	73-119	2
Lead	ug/L (ppb)	10	7.07	90 b	89 b	79-121	1 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Beryllium	ug/L (ppb)	5	107	73-135
Chromium	ug/L (ppb)	20	98	80-119
Nickel	ug/L (ppb)	20	103	79-122
Copper	ug/L (ppb)	20	109	81-119
Zinc	ug/L (ppb)	50	102	76-124
Arsenic	ug/L (ppb)	10	101	80-111
Selenium	ug/L (ppb)	5	108	81-119
Silver	ug/L (ppb)	5	104	80-116
Cadmium	ug/L (ppb)	5	106	83-113
Antimony	ug/L (ppb)	20	96	79-108
Barium	ug/L (ppb)	50	105	83-117
Thallium	ug/L (ppb)	5	102	78-116
Lead	ug/L (ppb)	10	104	83-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Laboratory Code: 306444-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	ug/L (ppb)	0.01	0.0065	92	89	63-132	3

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	ug/L (ppb)	0.01	94	78-118

Date of Report: 08/06/13
Date Received: 06/27/13
Project: Crowley 101.00205.00030, F&BI 306444

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF WATER SAMPLES FOR TOTAL SUSPENDED SOLIDS BY METHOD 2540D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
TSS	mg/L	50	114	117	61-131	3

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

RECEIVED
JUL 5 1 2013

RECEIVED
JUL 5 1 2013

July 8, 2013

Michele Costales Poquiz
Friedman & Bruya
3012 16th Ave W
Seattle, WA 98119

RE: Project: 306444
ARI Job No.: WV90

Dear Michele:

Please find enclosed the Chain-of-Custody record (COC), sample receipt documentation, and the final data for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted six water samples on June 28, 2013, under ARI job WV90. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for chloride and TOC, as requested on the COC.

There were no anomalies associated with the analyses of these samples.

An electronic copy of this report and all associated raw data will be kept on file at ARI. Should you have any questions or concerns, please feel free to call me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com
www.arilabs.com

cc: eFile WV90

Enclosures

SAMPLE CHAIN OF CUSTODY

Send Report To Michele Costales Poquiz

Company Friedman & Bruya, Inc.

Address 3012 16th Ave. W.

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

Email Address mpoquiz@friedmanandbruya.com

SUBCONTRACTOR
Analytical Resources, Inc. (ARI)

PROJECT NAME/NO.: 306444

PO #: C-436

REMARKS

Please e-mail results

ELECTRONIC DATA REQUESTED (EIM)

Page # 1 of 1

TURNAROUND TIME
- [x] Standard Turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [x] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Samples Received at ____ °C

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Hexavalent Cr by 7196A	Total Organic Carbon by 9060M	Chloride by SM4500			Notes
OF-1-062613		6/26/13	1355	water	~~1~~ 2								X	X			
OF-2-062613		↓	1425	↓	2								X	X			
OF-4-062613		↓	1445	↓	2								X	X			
OF-6-062613		↓	1600	↓	2								X	X			
OF-3-062613		↓	1630	↓	2								X	X			
OF-5-062613		↓	1645	↓	2								X	X			

ANALYSES REQUESTED

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michele Costales Poquiz	Michele Costales Poquiz	F&B1	6/~~27~~ 25/13	9:07 AM
Received by:	[illegible]	Taylor St Peter	ARI	6-25-13	1020
Relinquished by:					
Received by:					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC SLRC.DOC

ZOOOOO : 0S:AM

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: F & B

COC No(s): _____ NA

Assigned ARI Job No: WVGD

Project Name: _____

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: Postal Ex

Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 4.9 ___ ___ ___ ___

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90877952

Cooler Accepted by: TB Date: 6-28-13 Time: 1020

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:			
Was sufficient ice used (if appropriate)?	NA	YES	NO
Were all bottles sealed in individual plastic bags?		YES	NO
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA		

Was Sample Split by ARI : NA YES Date/Time:_____ Equipment:_____ Split by:_____

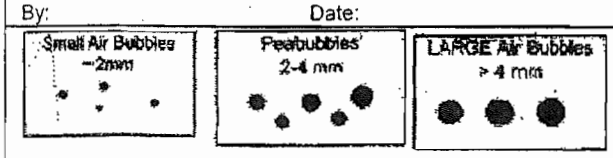
Samples Logged by: TB Date: 6-28-13 Time: 1108

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"	
Peabubbles → "pb"	
Large → "lg"	
Headspace → "hs"	

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: WV90
Client: Friedman & Bruay
Project Event: 306444
Project Name: N/A

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	OF-1-062613	WV90A	13-13804	Water	06/26/13 13:55	06/28/13 10:20
2.	OF-2-062613	WV90B	13-13805	Water	06/26/13 14:25	06/28/13 10:20
3.	OF-4-062613	WV90C	13-13806	Water	06/26/13 14:45	06/28/13 10:20
4.	OF-6-062613	WV90D	13-13807	Water	06/26/13 16:00	06/28/13 10:20
5.	OF-3-062613	WV90E	13-13808	Water	06/26/13 16:30	06/28/13 10:20
6.	OF-5-062613	WV90F	13-13809	Water	06/26/13 16:45	06/28/13 10:20

PRESERVATION VERIFICATION 06/28/13
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **WV90**

Inquiry Number: NONE
Analysis Requested: 06/28/13
Contact: COSTALES,MICHELE
Client: Friedman & Bruay
Logged by: TS
Sample Set Used: Yes-481
Validatable Package: No
Deliverables:

PC: Cheronne
VTSR: 06/28/13

Project #: 306444
Project:
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	TPHD <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
13-13804 **WV90A**	OF-1-062613											Pass										
13-13805 **WV90B**	OF-2-062613											Pass										
13-13806 **WV90C**	OF-4-062613											Pass										
13-13807 **WV90D**	OF-6-062613											Pass										
13-13808 **WV90E**	OF-3-062613											Pass										
13-13809 **WV90F**	OF-5-062613											Pass										

Checked By TS Date 6-28-13

WV90 : 00005

SAMPLE RESULTS-CONVENTIONALS
WV90-Friedman & Bruay

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: MB
Reported: 07/08/13

Project: NA
Event: 306444
Date Sampled: 06/26/13
Date Received: 06/28/13

Client ID: OF-1-062613
ARI ID: 13-13804 WV90A

Analyte	Date Batch	Method	Units	RL	Sample
Chloride	07/05/13 070513#1	SM4500-CLE	mg/L	1.0	2.2
Total Organic Carbon	07/01/13 070113#1	EPA 9060	mg/L	1.50	11.3

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WV90-Friedman & Bruay

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 07/08/13

Project: NA
Event: 306444
Date Sampled: 06/26/13
Date Received: 06/28/13

Client ID: OF-2-062613
ARI ID: 13-13805 WV90B

Analyte	Date Batch	Method	Units	RL	Sample
Chloride	07/05/13 070513#1	SM4500-CLE	mg/L	1.0	4.9
Total Organic Carbon	07/01/13 070113#1	EPA 9060	mg/L	1.50	19.2

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WV90-Friedman & Bruay

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: NB
Reported: 07/08/13

Project: NA
Event: 306444
Date Sampled: 06/26/13
Date Received: 06/28/13

Client ID: OF-4-062613
ARI ID: 13-13806 WV90C

Analyte	Date Batch	Method	Units	RL	Sample
Chloride	07/05/13 070513#1	SM4500-CLE	mg/L	1.0	4.8
Total Organic Carbon	07/01/13 070113#1	EPA 9060	mg/L	1.50	10.7

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WV90-Friedman & Bruay

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: MB
Reported: 07/08/13

Project: NA
Event: 306444
Date Sampled: 06/26/13
Date Received: 06/28/13

Client ID: OF-6-062613
ARI ID: 13-13807 WV90D

Analyte	Date Batch	Method	Units	RL	Sample
Chloride	07/05/13 070513#1	SM4500-CLE	mg/L	10.0	37.0
Total Organic Carbon	07/01/13 070113#1	EPA 9060	mg/L	1.50	7.33

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WV90-Friedman & Bruay

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized MB
Reported: 07/08/13

Project: NA
Event: 306444
Date Sampled: 06/26/13
Date Received: 06/28/13

Client ID: OF-3-062613
ARI ID: 13-13808 WV90E

Analyte	Date Batch	Method	Units	RL	Sample
Chloride	07/05/13 070513#1	SM4500-CLE	mg/L	2.0	15.0
Total Organic Carbon	07/01/13 070113#1	EPA 9060	mg/L	1.50	22.8

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WV90-Friedman & Bruay

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized
Reported: 07/08/13

Project: NA
Event: 306444
Date Sampled: 06/26/13
Date Received: 06/28/13

Client ID: OF-5-062613
ARI ID: 13-13809 WV90F

Analyte	Date Batch	Method	Units	RL	Sample
Chloride	07/05/13 070513#1	SM4500-CLE	mg/L	1.0	3.1
Total Organic Carbon	07/01/13 070113#1	EPA 9060	mg/L	1.50	10.8

RL Analytical reporting limit
U Undetected at reported detection limit

MS/MSD RESULTS-CONVENTIONALS
WV90-Friedman & Bruay

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 07/08/13

Project: NA
Event: 306444
Date Sampled: 06/26/13
Date Received: 06/28/13

Analyte	Method	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: WV90A Client ID: OF-1-062613							
Chloride	SM4500-CLE	07/05/13	mg/L	2.2	7.5	5.0	106.0%
Total Organic Carbon	EPA 9060	07/01/13	mg/L	11.3	32.3	20.0	105.0%

REPLICATE RESULTS-CONVENTIONALS
WV90-Friedman & Bruay

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 07/08/13

Project: NA
Event: 306444
Date Sampled: 06/26/13
Date Received: 06/28/13

Analyte	Method	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: WV90A Client ID: OF-1-062613						
Chloride	SM4500-CLE	07/05/13	mg/L	2.2	2.3	4.4%
Total Organic Carbon	EPA 9060	07/01/13	mg/L	11.3	11.4	0.9%

METHOD BLANK RESULTS-CONVENTIONALS
WV90-Friedman & Bruay

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 07/08/13

Project: NA
Event: 306444
Date Sampled: NA
Date Received: NA

Analyte	Method	Date	Units	Blank	ID
Chloride	SM4500-CLE	07/05/13	mg/L	< 1.0 U	FB
Total Organic Carbon	EPA 9060	07/01/13	mg/L	< 1.50 U	

FB Filtration Blank

STANDARD REFERENCE RESULTS-CONVENTIONALS
WV90-Friedman & Bruay

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: MB
Reported: 07/08/13

Project: NA
Event: 306444
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Method	Date	Units	SRM	True Value	Recovery
Chloride ERA #411010	SM4500-CLE	07/05/13	mg/L	5.1	5.0	102.0%
Total Organic Carbon ERA 0409-12-01	EPA 9060	07/01/13	mg/L	21.5	20.0	107.5%

306444

SAMPLE CHAIN OF CUSTODY

KJ 06-27-13

BT4/V4/D03

Page # _____ of _____

Send Report To MIKE STATON

Company SLR

Address 22118 20TH AVE SE, SUITE G202

City, State, ZIP BOTHELL, WA

Phone # 425-402-8800 Fax #

SAMPLERS (signature)

PROJECT NAME/NO. CROWLEY 101.00205.00030

PO#

REMARKS

TURNAROUND TIME
- ☑ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☑ Will call with instructions

ANALYSES REQUESTED

Lab ID	Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel w/ silica gel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260C	SVOCs by 8270D	MERCURY 1631E	PAHs 8270D SIM	PCBs 8082A	TOTAL METALS (PROBITY + Ba) 200.8	TOTAL SUSPENDED SOLIDS 2540D	CHLORINE SM4500	TOTAL ORGANIC CARBON 9060A	Notes
01 A-S	OF-1-062613	01 A S	6/26/13	1355	WATER	19	X	X		X	X	X	X	X	X	X	X	X	
02	OF-2-062613	2		1425															
03	OF-4-062613	3		1445															
04	OF-6-062613	4		1600															
05	OF-3-062613	5		1630															
06	OF-5-062613	6		1645															

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:		GREG LISH	SLR	6/27/13	10:25
Received by:	PKG	JORGE SALTER	POSTAL Corp.	6/27/13	10:25
Relinquished by:					
Received by:			Samples received at 1 °C		

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 21, 2013

Mike Staton
SLR International Corp.
22118 20th Ave. SE., G-202
Bothell, WA 98021

Dear Mr. Staton:

Included are the results from the testing of material submitted on July 23, 2013 from the 8th Avenue Terminals, Inc., Crowley RI/FS 101.00205.00030, F&BI 307331 project. There are 38 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michele Costales Poquiz

Michele Costales Poquiz
Chemist

Enclosures
SLR0821R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 23, 2013 by Friedman & Bruya, Inc. from the SLR International Corp. 8th Avenue Terminals, Inc., Crowley RI/FS 101.00205.00030, F&BI 307331 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SLR International Corp.
307331-01	IS-1
307331-02	IS-2
307331-03	IS-3
307331-04	IS-4

Total Petroleum Hydrocarbons as Diesel and Motor Oil by Method NWTPH-Dx with Silica Gel

All quality control requirements were acceptable.

Semivolatile Organic Compounds by EPA Method 8270D

The presence of bis(2-ethylhexyl) phthalate in the samples is likely due to laboratory contamination. The results have been flagged accordingly.

The estimated concentration calculated for bis(2-ethylhexyl) phthalate was above the valid instrument calibration range for the samples IS-1 and IS-2. The samples were diluted and reanalyzed. The results of the original analysis and the reanalysis are included.

The internal standard associated with benzyl butyl phthalate and bis(2-ethylhexyl) phthalate exceeded acceptance criteria for the sample IS-1. The results have been flagged accordingly.

The percent recovery for the matrix spike (MS), matrix spike duplicate (MSD), laboratory control sample (LCS), and laboratory control sample duplicate (LCSD) exceeded acceptance criteria for several compounds. In addition, the relative percent difference (RPD) for the LCS/LCSD and the MS/MSD failed high for several compounds. The results have been flagged accordingly.

Semivolatile Organic Compounds by EPA Method 8270D SIM

The samples were diluted due to matrix interferences. The reporting limits have been raised accordingly.

Polychlorinated Biphenyls as Aroclor 1016/1260 by EPA Method 8082A

The surrogate associated with Aroclors 1254 and 1260 is out of control limits for the sample IS-4. The reported concentration should be considered an estimate.

Total Metals by EPA Method 200.8

The internal standards associated with several analytes exceeded acceptance criteria for the samples IS-1, IS-2, IS-3, and IS-4. The samples were diluted and reanalyzed. The results from the original analysis and the re-analysis are included.

Total Mercury by EPA Method 1631E

All quality control requirements were acceptable.

Total Organic Carbon by EPA Method 9060M

The samples were sent to Analytical Resources, Inc. (ARI) for analysis. The report generated by ARI is enclosed.

Grain Size by ASTM D-422

The samples were sent to ARI for analysis. The report generated by ARI is enclosed.

Date of Report: 08/21/13
Date Received: 07/23/13
Project: 8th Avenue Terminals, Inc., Crowley RI/FS 101.00205.00030, F&BI 307331
Date Extracted: 07/29/13
Date Analyzed: 08/01/13 and 08/02/13

RESULTS FROM THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
IS-1 307331-01	38 x	230	92
IS-2 307331-02 1/10	740 x	6,100	94
IS-3 307331-03	100 x	640	104
IS-4 307331-04	63 x	470	102
Method Blank 03-1483 MB	<2.8	<4.5	104

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	IS-1	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307331-01
Date Analyzed:	08/08/13	Data File:	080804.D
Matrix:	Soil/Sediment	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	79	56	115
Phenol-d6	88	54	113
Nitrobenzene-d5	91	31	164
2-Fluorobiphenyl	93	47	133
2,4,6-Tribromophenol	109	35	141
Terphenyl-d14	103	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	0.0097	2,4,6-Trichlorophenol	<0.008
Bis(2-chloroethyl) ether	<0.0016	2,4,5-Trichlorophenol	<0.0096
2-Chlorophenol	<0.0062	2-Chloronaphthalene	<0.0014
1,3-Dichlorobenzene	<0.0026	2-Nitroaniline	<0.0026
1,4-Dichlorobenzene	<0.0024	Dimethyl phthalate	0.0071
1,2-Dichlorobenzene	<0.004	2,6-Dinitrotoluene	<0.0019
Benzyl alcohol	0.030	3-Nitroaniline	<0.017
Bis(2-chloroisopropyl) ether	<0.0016	2,4-Dinitrophenol	<0.014
2-Methylphenol	<0.0064	Dibenzofuran	0.0067
Hexachloroethane	<0.0032	2,4-Dinitrotoluene	<0.0016
N-Nitroso-di-n-propylamine	<0.003	4-Nitrophenol	<0.018
3-Methylphenol + 4-Methylphenol	<0.014	Diethyl phthalate	0.012
Nitrobenzene	<0.0026	4-Chlorophenyl phenyl ether	<0.0016
Isophorone	<0.0011	N-Nitrosodiphenylamine	<0.001
2-Nitrophenol	<0.0082	4-Nitroaniline	<0.018
2,4-Dimethylphenol	<0.019	4,6-Dinitro-2-methylphenol	<0.011
Benzoic acid	<0.054	4-Bromophenyl phenyl ether	<0.0016
Bis(2-chloroethoxy)methane	<0.0014	Hexachlorobenzene	<0.001
2,4-Dichlorophenol	<0.0058	Pentachlorophenol	0.024 jl
1,2,4-Trichlorobenzene	<0.0034	Carbazole	0.025
Hexachlorobutadiene	<0.002	Di-n-butyl phthalate	<0.02
4-Chloroaniline	<0.18	Benzyl butyl phthalate	0.024
4-Chloro-3-methylphenol	<0.0044	Bis(2-ethylhexyl) phthalate	1.4 ve fc
2-Methylnaphthalene	0.0058	Di-n-octyl phthalate	<0.0032
Hexachlorocyclopentadiene	<0.0022		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	IS-1	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307331-01 1/50
Date Analyzed:	08/05/13	Data File:	080505.D
Matrix:	Soil/Sediment	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	63 ds	56	115
Phenol-d6	68 ds	54	113
Nitrobenzene-d5	77 ds	31	164
2-Fluorobiphenyl	91 ds	47	133
2,4,6-Tribromophenol	71 ds	35	141
Terphenyl-d14	92 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.27	2,4,6-Trichlorophenol	<0.4
Bis(2-chloroethyl) ether	<0.079	2,4,5-Trichlorophenol	<0.48
2-Chlorophenol	<0.31	2-Chloronaphthalene	<0.072
1,3-Dichlorobenzene	<0.13	2-Nitroaniline	<0.13
1,4-Dichlorobenzene	<0.12	Dimethyl phthalate	<0.06
1,2-Dichlorobenzene	<0.2	2,6-Dinitrotoluene	<0.094
Benzyl alcohol	<0.25	3-Nitroaniline	<0.87
Bis(2-chloroisopropyl) ether	<0.079	2,4-Dinitrophenol	<0.69
2-Methylphenol	<0.32	Dibenzofuran	<0.051
Hexachloroethane	<0.16	2,4-Dinitrotoluene	<0.079
N-Nitroso-di-n-propylamine	<0.15	4-Nitrophenol	<0.89
3-Methylphenol + 4-Methylphenol	<0.72	Diethyl phthalate	<0.2
Nitrobenzene	<0.13	4-Chlorophenyl phenyl ether	<0.079
Isophorone	<0.056	N-Nitrosodiphenylamine	<0.051
2-Nitrophenol	<0.41	4-Nitroaniline	<0.91
2,4-Dimethylphenol	<0.93	4,6-Dinitro-2-methylphenol	<0.53
Benzoic acid	<2.7	4-Bromophenyl phenyl ether	<0.082
Bis(2-chloroethoxy)methane	<0.072	Hexachlorobenzene	<0.051
2,4-Dichlorophenol	<0.29	Pentachlorophenol	<0.31
1,2,4-Trichlorobenzene	<0.17	Carbazole	<0.1
Hexachlorobutadiene	<0.1	Di-n-butyl phthalate	<1
4-Chloroaniline	<8.9	Benzyl butyl phthalate	<0.29 J
4-Chloro-3-methylphenol	<0.22	Bis(2-ethylhexyl) phthalate	2.0 J fc
2-Methylnaphthalene	<0.051	Di-n-octyl phthalate	<0.16
Hexachlorocyclopentadiene	<0.11		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	IS-2	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307331-02
Date Analyzed:	08/08/13	Data File:	080805.D
Matrix:	Soil/Sediment	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	75	56	115
Phenol-d6	81	54	113
Nitrobenzene-d5	85	31	164
2-Fluorobiphenyl	88	47	133
2,4,6-Tribromophenol	102	35	141
Terphenyl-d14	100	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	0.057	2,4,6-Trichlorophenol	<0.008
Bis(2-chloroethyl) ether	<0.0016	2,4,5-Trichlorophenol	<0.0096
2-Chlorophenol	<0.0062	2-Chloronaphthalene	<0.0014
1,3-Dichlorobenzene	<0.0026	2-Nitroaniline	<0.0026
1,4-Dichlorobenzene	<0.0024	Dimethyl phthalate	0.017
1,2-Dichlorobenzene	<0.004	2,6-Dinitrotoluene	<0.0019
Benzyl alcohol	0.028	3-Nitroaniline	<0.017
Bis(2-chloroisopropyl) ether	<0.0016	2,4-Dinitrophenol	<0.014
2-Methylphenol	<0.0064	Dibenzofuran	0.018
Hexachloroethane	<0.0032	2,4-Dinitrotoluene	<0.0016
N-Nitroso-di-n-propylamine	<0.003	4-Nitrophenol	<0.018
3-Methylphenol + 4-Methylphenol	<0.014	Diethyl phthalate	0.055
Nitrobenzene	<0.0026	4-Chlorophenyl phenyl ether	<0.0016
Isophorone	<0.0011	N-Nitrosodiphenylamine	<0.001
2-Nitrophenol	<0.0082	4-Nitroaniline	<0.018
2,4-Dimethylphenol	<0.019	4,6-Dinitro-2-methylphenol	<0.011
Benzoic acid	<0.054	4-Bromophenyl phenyl ether	<0.0016
Bis(2-chloroethoxy)methane	<0.0014	Hexachlorobenzene	<0.001
2,4-Dichlorophenol	<0.0058	Pentachlorophenol	0.031 jl
1,2,4-Trichlorobenzene	<0.0034	Carbazole	0.087
Hexachlorobutadiene	<0.002	Di-n-butyl phthalate	0.069
4-Chloroaniline	<0.18	Benzyl butyl phthalate	0.082
4-Chloro-3-methylphenol	<0.0044	Bis(2-ethylhexyl) phthalate	0.55 fc
2-Methylnaphthalene	0.011	Di-n-octyl phthalate	<0.0032
Hexachlorocyclopentadiene	<0.0022		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	IS-3	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307331-03
Date Analyzed:	08/08/13	Data File:	080806.D
Matrix:	Soil/Sediment	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	78	56	115
Phenol-d6	84	54	113
Nitrobenzene-d5	88	31	164
2-Fluorobiphenyl	84	47	133
2,4,6-Tribromophenol	111	35	141
Terphenyl-d14	95	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	0.0085	2,4,6-Trichlorophenol	<0.008
Bis(2-chloroethyl) ether	<0.0016	2,4,5-Trichlorophenol	<0.0096
2-Chlorophenol	<0.0062	2-Chloronaphthalene	<0.0014
1,3-Dichlorobenzene	<0.0026	2-Nitroaniline	<0.0026
1,4-Dichlorobenzene	<0.0024	Dimethyl phthalate	0.013
1,2-Dichlorobenzene	<0.004	2,6-Dinitrotoluene	<0.0019
Benzyl alcohol	0.041	3-Nitroaniline	<0.017
Bis(2-chloroisopropyl) ether	<0.0016	2,4-Dinitrophenol	<0.014
2-Methylphenol	<0.0064	Dibenzofuran	0.0064
Hexachloroethane	<0.0032	2,4-Dinitrotoluene	<0.0016
N-Nitroso-di-n-propylamine	<0.003	4-Nitrophenol	<0.018
3-Methylphenol + 4-Methylphenol	<0.014	Diethyl phthalate	0.076
Nitrobenzene	<0.0026	4-Chlorophenyl phenyl ether	<0.0016
Isophorone	<0.0011	N-Nitrosodiphenylamine	<0.001
2-Nitrophenol	<0.0082	4-Nitroaniline	<0.018
2,4-Dimethylphenol	<0.019	4,6-Dinitro-2-methylphenol	<0.011
Benzoic acid	0.063	4-Bromophenyl phenyl ether	<0.0016
Bis(2-chloroethoxy)methane	<0.0014	Hexachlorobenzene	<0.001
2,4-Dichlorophenol	<0.0058	Pentachlorophenol	0.033 jl
1,2,4-Trichlorobenzene	<0.0034	Carbazole	0.023
Hexachlorobutadiene	<0.002	Di-n-butyl phthalate	0.037
4-Chloroaniline	<0.18	Benzyl butyl phthalate	0.040
4-Chloro-3-methylphenol	<0.0044	Bis(2-ethylhexyl) phthalate	0.86 ve fc
2-Methylnaphthalene	0.0044	Di-n-octyl phthalate	<0.0032
Hexachlorocyclopentadiene	<0.0022		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	IS-3	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307331-03 1/50
Date Analyzed:	08/05/13	Data File:	080507.D
Matrix:	Soil/Sediment	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	71 ds	56	115
Phenol-d6	67 ds	54	113
Nitrobenzene-d5	76 ds	31	164
2-Fluorobiphenyl	76 ds	47	133
2,4,6-Tribromophenol	72 ds	35	141
Terphenyl-d14	82 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.27	2,4,6-Trichlorophenol	<0.4
Bis(2-chloroethyl) ether	<0.079	2,4,5-Trichlorophenol	<0.48
2-Chlorophenol	<0.31	2-Chloronaphthalene	<0.072
1,3-Dichlorobenzene	<0.13	2-Nitroaniline	<0.13
1,4-Dichlorobenzene	<0.12	Dimethyl phthalate	<0.06
1,2-Dichlorobenzene	<0.2	2,6-Dinitrotoluene	<0.094
Benzyl alcohol	<0.25	3-Nitroaniline	<0.87
Bis(2-chloroisopropyl) ether	<0.079	2,4-Dinitrophenol	<0.69
2-Methylphenol	<0.32	Dibenzofuran	<0.051
Hexachloroethane	<0.16	2,4-Dinitrotoluene	<0.079
N-Nitroso-di-n-propylamine	<0.15	4-Nitrophenol	<0.89
3-Methylphenol + 4-Methylphenol	<0.72	Diethyl phthalate	<0.2
Nitrobenzene	<0.13	4-Chlorophenyl phenyl ether	<0.079
Isophorone	<0.056	N-Nitrosodiphenylamine	<0.051
2-Nitrophenol	<0.41	4-Nitroaniline	<0.91
2,4-Dimethylphenol	<0.93	4,6-Dinitro-2-methylphenol	<0.53
Benzoic acid	<2.7	4-Bromophenyl phenyl ether	<0.082
Bis(2-chloroethoxy)methane	<0.072	Hexachlorobenzene	<0.051
2,4-Dichlorophenol	<0.29	Pentachlorophenol	<0.31
1,2,4-Trichlorobenzene	<0.17	Carbazole	<0.1
Hexachlorobutadiene	<0.1	Di-n-butyl phthalate	<1
4-Chloroaniline	<8.9	Benzyl butyl phthalate	<0.29
4-Chloro-3-methylphenol	<0.22	Bis(2-ethylhexyl) phthalate	1.2 fc
2-Methylnaphthalene	<0.051	Di-n-octyl phthalate	<0.16
Hexachlorocyclopentadiene	<0.11		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	IS-4	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307331-04 1/50
Date Analyzed:	08/05/13	Data File:	080508.D
Matrix:	Soil/Sediment	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	58 ds	56	115
Phenol-d6	63 ds	54	113
Nitrobenzene-d5	68 ds	31	164
2-Fluorobiphenyl	68 ds	47	133
2,4,6-Tribromophenol	82 ds	35	141
Terphenyl-d14	77 ds	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.27	2,4,6-Trichlorophenol	<0.4
Bis(2-chloroethyl) ether	<0.079	2,4,5-Trichlorophenol	<0.48
2-Chlorophenol	<0.31	2-Chloronaphthalene	<0.072
1,3-Dichlorobenzene	<0.13	2-Nitroaniline	<0.13
1,4-Dichlorobenzene	<0.12	Dimethyl phthalate	<0.06
1,2-Dichlorobenzene	<0.2	2,6-Dinitrotoluene	<0.094
Benzyl alcohol	<0.25	3-Nitroaniline	<0.87
Bis(2-chloroisopropyl) ether	<0.079	2,4-Dinitrophenol	<0.69
2-Methylphenol	<0.32	Dibenzofuran	<0.051
Hexachloroethane	<0.16	2,4-Dinitrotoluene	<0.079
N-Nitroso-di-n-propylamine	<0.15	4-Nitrophenol	<0.89
3-Methylphenol + 4-Methylphenol	<0.72	Diethyl phthalate	<0.2
Nitrobenzene	<0.13	4-Chlorophenyl phenyl ether	<0.079
Isophorone	<0.056	N-Nitrosodiphenylamine	<0.051
2-Nitrophenol	<0.41	4-Nitroaniline	<0.91
2,4-Dimethylphenol	<0.93	4,6-Dinitro-2-methylphenol	<0.53
Benzoic acid	<2.7	4-Bromophenyl phenyl ether	<0.082
Bis(2-chloroethoxy)methane	<0.072	Hexachlorobenzene	<0.051
2,4-Dichlorophenol	<0.29	Pentachlorophenol	<0.31
1,2,4-Trichlorobenzene	<0.17	Carbazole	<0.1
Hexachlorobutadiene	<0.1	Di-n-butyl phthalate	<1
4-Chloroaniline	<8.9	Benzyl butyl phthalate	<0.29
4-Chloro-3-methylphenol	<0.22	Bis(2-ethylhexyl) phthalate	<0.67
2-Methylnaphthalene	<0.051	Di-n-octyl phthalate	<0.16
Hexachlorocyclopentadiene	<0.11		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	03-1489 mb
Date Analyzed:	08/05/13	Data File:	080504.D
Matrix:	Soil/Sediment	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	89	32	162
Phenol-d6	91	10	170
Nitrobenzene-d5	100	50	150
2-Fluorobiphenyl	103	43	158
2,4,6-Tribromophenol	119	43	146
Terphenyl-d14	110	39	168

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.0054	2,4,6-Trichlorophenol	<0.008
Bis(2-chloroethyl) ether	<0.0016	2,4,5-Trichlorophenol	<0.0096
2-Chlorophenol	<0.0062	2-Chloronaphthalene	<0.0014
1,3-Dichlorobenzene	<0.0026	2-Nitroaniline	<0.0026
1,4-Dichlorobenzene	<0.0024	Dimethyl phthalate	<0.0012
1,2-Dichlorobenzene	<0.004	2,6-Dinitrotoluene	<0.0019
Benzyl alcohol	<0.005	3-Nitroaniline	<0.017
Bis(2-chloroisopropyl) ether	<0.0016	2,4-Dinitrophenol	<0.014
2-Methylphenol	<0.0064	Dibenzofuran	<0.001
Hexachloroethane	<0.0032	2,4-Dinitrotoluene	<0.0016
N-Nitroso-di-n-propylamine	<0.003	4-Nitrophenol	<0.018
3-Methylphenol + 4-Methylphenol	<0.014	Diethyl phthalate	<0.004
Nitrobenzene	<0.0026	4-Chlorophenyl phenyl ether	<0.0016
Isophorone	<0.0011	N-Nitrosodiphenylamine	<0.001
2-Nitrophenol	<0.0082	4-Nitroaniline	<0.018
2,4-Dimethylphenol	<0.019	4,6-Dinitro-2-methylphenol	<0.011
Benzoic acid	<0.054	4-Bromophenyl phenyl ether	<0.0016
Bis(2-chloroethoxy)methane	<0.0014	Hexachlorobenzene	<0.001
2,4-Dichlorophenol	<0.0058	Pentachlorophenol	<0.0062 j
1,2,4-Trichlorobenzene	<0.0034	Carbazole	<0.002
Hexachlorobutadiene	<0.002	Di-n-butyl phthalate	<0.02
4-Chloroaniline	<0.18	Benzyl butyl phthalate	<0.0058
4-Chloro-3-methylphenol	<0.0044	Bis(2-ethylhexyl) phthalate	<0.013
2-Methylnaphthalene	<0.001	Di-n-octyl phthalate	<0.0032
Hexachlorocyclopentadiene	<0.0022		

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	IS-1	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307331-01 1/50
Date Analyzed:	08/02/13	Data File:	080209.D
Matrix:	Soil/Sediment	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	97 ds	50	150
Benzo(a)anthracene-d12	55 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.011
Acenaphthylene	<0.0046
Acenaphthene	<0.007
Fluorene	0.0078
Phenanthrene	0.11
Anthracene	0.036
Fluoranthene	0.54
Pyrene	0.51
Benz(a)anthracene	0.24
Chrysene	0.33
Benzo(a)pyrene	0.17
Benzo(b)fluoranthene	0.28
Benzo(k)fluoranthene	0.13
Indeno(1,2,3-cd)pyrene	0.11
Dibenz(a,h)anthracene	0.027
Benzo(g,h,i)perylene	0.089

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	IS-2	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307331-02 1/50
Date Analyzed:	08/02/13	Data File:	080210.D
Matrix:	Soil/Sediment	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	150 ds	50	150
Benzo(a)anthracene-d12	106 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.011
Acenaphthylene	0.0093
Acenaphthene	<0.007
Fluorene	0.012
Phenanthrene	0.13
Anthracene	0.043
Fluoranthene	0.32
Pyrene	0.31
Benz(a)anthracene	0.13
Chrysene	0.20
Benzo(a)pyrene	0.099
Benzo(b)fluoranthene	0.27
Benzo(k)fluoranthene	0.074
Indeno(1,2,3-cd)pyrene	0.078
Dibenz(a,h)anthracene	<0.017
Benzo(g,h,i)perylene	0.068

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	IS-3	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307331-03 1/50
Date Analyzed:	08/02/13	Data File:	080211.D
Matrix:	Soil/Sediment	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	157 ds	50	150
Benzo(a)anthracene-d12	79 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.011
Acenaphthylene	0.013
Acenaphthene	0.0082
Fluorene	0.0096
Phenanthrene	0.11
Anthracene	0.038
Fluoranthene	0.42
Pyrene	0.34
Benz(a)anthracene	0.13
Chrysene	0.28
Benzo(a)pyrene	0.093
Benzo(b)fluoranthene	0.24
Benzo(k)fluoranthene	0.079
Indeno(1,2,3-cd)pyrene	0.079
Dibenz(a,h)anthracene	<0.017
Benzo(g,h,i)perylene	0.074

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	IS-4	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307331-04 1/50
Date Analyzed:	08/02/13	Data File:	080212.D
Matrix:	Soil/Sediment	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	180 ds	50	150
Benzo(a)anthracene-d12	100 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.011
Acenaphthylene	0.018
Acenaphthene	0.010
Fluorene	0.011
Phenanthrene	0.24
Anthracene	0.056
Fluoranthene	0.52
Pyrene	0.49
Benz(a)anthracene	0.16
Chrysene	0.33
Benzo(a)pyrene	0.16
Benzo(b)fluoranthene	0.33
Benzo(k)fluoranthene	0.11
Indeno(1,2,3-cd)pyrene	0.17
Dibenz(a,h)anthracene	0.034
Benzo(g,h,i)perylene	0.17

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	03-1488 mb
Date Analyzed:	08/02/13	Data File:	080205.D
Matrix:	Soil/Sediment	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	91	50	150
Benzo(a)anthracene-d12	115	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.00022
Acenaphthylene	<0.000091
Acenaphthene	<0.00014
Fluorene	<0.00015
Phenanthrene	<0.00032
Anthracene	<0.000088
Fluoranthene	<0.00028
Pyrene	<0.00026
Benz(a)anthracene	<0.00018
Chrysene	<0.00019
Benzo(a)pyrene	<0.00022
Benzo(b)fluoranthene	<0.00018
Benzo(k)fluoranthene	<0.00036
Indeno(1,2,3-cd)pyrene	<0.00062
Dibenz(a,h)anthracene	<0.00034
Benzo(g,h,i)perylene	<0.00034

Analysis For PCBs By EPA Method 8082

Client Sample ID:	IS-1	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/15/13	Lab ID:	307331-01
Date Analyzed:	08/16/13	Data File:	26.D\ECD1A.CH
Matrix:	Soil/Sediment	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	124	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.033
Aroclor 1232	<0.033
Aroclor 1016	<0.033
Aroclor 1242	<0.033
Aroclor 1248	<0.033
Aroclor 1254	0.16
Aroclor 1260	0.19

Analysis For PCBs By EPA Method 8082

Client Sample ID:	IS-2	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/15/13	Lab ID:	307331-02
Date Analyzed:	08/16/13	Data File:	18.D\ECD1A.CH
Matrix:	Soil/Sediment	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	109	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.033
Aroclor 1232	<0.033
Aroclor 1016	<0.033
Aroclor 1242	<0.033
Aroclor 1248	<0.033
Aroclor 1254	0.09
Aroclor 1260	0.13

Analysis For PCBs By EPA Method 8082

Client Sample ID:	IS-3	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/15/13	Lab ID:	307331-03
Date Analyzed:	08/16/13	Data File:	20.D\ECD1A.CH
Matrix:	Soil/Sediment	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	108	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.033
Aroclor 1232	<0.033
Aroclor 1016	<0.033
Aroclor 1242	<0.033
Aroclor 1248	<0.033
Aroclor 1254	0.18
Aroclor 1260	0.20

Analysis For PCBs By EPA Method 8082

Client Sample ID:	IS-4	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/15/13	Lab ID:	307331-04
Date Analyzed:	08/16/13	Data File:	22.D\ECD1A.CH
Matrix:	Soil/Sediment	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	160 vo	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.033
Aroclor 1232	<0.033
Aroclor 1016	<0.033
Aroclor 1242	<0.033
Aroclor 1248	<0.033
Aroclor 1254	0.34 js
Aroclor 1260	0.56 js

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/15/13	Lab ID:	03-1599 mb
Date Analyzed:	08/16/13	Data File:	12.D\ECD1A.CH
Matrix:	Soil/Sediment	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	113	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.033
Aroclor 1232	<0.033
Aroclor 1016	<0.033
Aroclor 1242	<0.033
Aroclor 1248	<0.033
Aroclor 1254	<0.033
Aroclor 1260	<0.033

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Total Metals By EPA Method 200.8

Client ID:	IS-1	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	307331-01
Date Analyzed:	08/14/13	Data File:	307331-01.019
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	141 vo	60	125
Indium	96	60	125
Holmium	99	60	125

Analyte:	Concentration mg/kg (ppm)
Selenium	<0.920
Cadmium	<0.200
Thallium	<0.0440

Analysis For Total Metals By EPA Method 200.8

Client ID:	IS-1	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	307331-01 x10
Date Analyzed:	08/14/13	Data File:	307331-01 x10.039
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	94	60	125
Indium	94	60	125
Holmium	99	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.860
Chromium	45.7
Nickel	49.0
Copper	88.6
Zinc	145
Arsenic	28.6
Selenium	<9.20
Silver	<0.780
Cadmium	<2.00
Antimony	13.5
Barium	73.8
Thallium	<0.440
Lead	27.4

Analysis For Total Metals By EPA Method 200.8

Client ID:	IS-2	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	307331-02
Date Analyzed:	08/14/13	Data File:	307331-02.022
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	160 vo	60	125
Indium	88	60	125
Holmium	90	60	125

Analyte:	Concentration mg/kg (ppm)
Selenium	<0.920
Cadmium	0.672
Thallium	0.138

Analysis For Total Metals By EPA Method 200.8

Client ID:	IS-2	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	307331-02 x10
Date Analyzed:	08/14/13	Data File:	307331-02 x10.042
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	88	60	125
Indium	84	60	125
Holmium	88	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.860
Chromium	40.3
Nickel	27.7
Copper	88.7
Zinc	388
Arsenic	26.2
Selenium	<9.20
Silver	<0.780
Cadmium	<2.00
Antimony	3.30
Barium	81.2
Thallium	<0.440
Lead	74.5

Analysis For Total Metals By EPA Method 200.8

Client ID:	IS-3	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	307331-03
Date Analyzed:	08/14/13	Data File:	307331-03.023
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	148 vo	60	125
Indium	89	60	125
Holmium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Selenium	<0.920
Cadmium	0.562
Thallium	0.0957

Analysis For Total Metals By EPA Method 200.8

Client ID:	IS-3	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	307331-03 x10
Date Analyzed:	08/14/13	Data File:	307331-03 x10.043
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	93	60	125
Indium	93	60	125
Holmium	98	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.860
Chromium	33.6
Nickel	23.8
Copper	68.5
Zinc	209
Arsenic	19.0
Selenium	<9.20
Silver	<0.780
Cadmium	<2.00
Antimony	<1.06
Barium	86.0
Thallium	<0.440
Lead	45.7

Analysis For Total Metals By EPA Method 200.8

Client ID:	IS-4	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	307331-04
Date Analyzed:	08/14/13	Data File:	307331-04.024
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	168 vo	60	125
Indium	91	60	125
Holmium	93	60	125

Analyte:	Concentration mg/kg (ppm)
Selenium	<0.920
Cadmium	0.669
Thallium	<0.0440

Analysis For Total Metals By EPA Method 200.8

Client ID:	IS-4	Client:	SLR International Corp.
Date Received:	07/23/13	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	307331-04 x10
Date Analyzed:	08/14/13	Data File:	307331-04 x10.044
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	92	60	125
Indium	91	60	125
Holmium	96	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.860
Chromium	38.8
Nickel	29.8
Copper	110
Zinc	398
Arsenic	30.0
Selenium	<9.20
Silver	<0.780
Cadmium	<2.00
Antimony	5.67
Barium	96.7
Thallium	<0.440
Lead	96.5

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley RI/FS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	I3-476 mb
Date Analyzed:	08/14/13	Data File:	I3-476 mb.016
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	80	60	125
Indium	87	60	125
Holmium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.0860
Chromium	<0.480
Nickel	<0.200
Copper	<0.0720
Zinc	<0.980
Arsenic	<0.420
Selenium	<0.920
Silver	<0.0780
Cadmium	<0.200
Antimony	<0.106
Barium	<0.0520
Thallium	<0.0440
Lead	<0.0500

Date of Report: 08/21/13
Date Received: 07/23/13
Project: 8th Avenue Terminals, Inc., Crowley RI/FS 101.00205.00030, F&BI 307331
Date Extracted: 08/02/13
Date Analyzed: 08/05/13

RESULTS FROM THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Total Mercury
IS-1 307331-01	0.13
IS-2 307331-02	0.10
IS-3 307331-03	0.13
IS-4 307331-04	0.16
Method Blank	<0.002

Date of Report: 08/21/13
Date Received: 07/23/13
Project: 8th Avenue Terminals, Inc., Crowley RI/FS 101.00205.00030, F&BI 307331

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 307331-04 (Matrix Spike) Silica Gel

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	500	160	109	109	64-133	0

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	500	126	58-147

Date of Report: 08/21/13
Date Received: 07/23/13
Project: 8th Avenue Terminals, Inc., Crowley RI/FS 101.00205.00030, F&BI 307331

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

Laboratory Code: 307331-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Phenol	mg/kg (ppm)	1.7	<0.0054	74	94	50-150	24 vo
Bis(2-chloroethyl) ether	mg/kg (ppm)	1.7	<0.00158	65	84	50-150	26 vo
2-Chlorophenol	mg/kg (ppm)	1.7	<0.0062	76	87	50-150	13
1,3-Dichlorobenzene	mg/kg (ppm)	1.7	<0.0026	41 vo	63	50-150	42 vo
1,4-Dichlorobenzene	mg/kg (ppm)	1.7	<0.0024	40 vo	65	50-150	48 vo
1,2-Dichlorobenzene	mg/kg (ppm)	1.7	<0.004	45 vo	67	50-150	39 vo
Benzyl alcohol	mg/kg (ppm)	1.7	0.019326	65	70	50-150	7
Bis(2-chloroisopropyl) ether	mg/kg (ppm)	1.7	<0.00158	49 vo	65	50-150	28 vo
2-Methylphenol	mg/kg (ppm)	1.7	<0.0064	87	92	50-150	6
Hexachloroethane	mg/kg (ppm)	1.7	<0.0032	12 vo	10 vo	50-150	18
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	<0.003	77	81	50-150	5
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	1.7	<0.0144	91	100	50-150	9
Nitrobenzene	mg/kg (ppm)	1.7	<0.0026	75	87	50-150	15
Isophorone	mg/kg (ppm)	1.7	<0.00112	77	88	50-150	13
2-Nitrophenol	mg/kg (ppm)	1.7	<0.0082	71	32 vo	50-150	76 vo
2,4-Dimethylphenol	mg/kg (ppm)	1.7	<0.0186	91	102	50-150	11
Benzoic acid	mg/kg (ppm)	2.5	<0.054	64	40 vo	50-150	46 vo
Bis(2-chloroethoxy)methane	mg/kg (ppm)	1.7	<0.00144	79	91	50-150	14
2,4-Dichlorophenol	mg/kg (ppm)	1.7	<0.0058	102	110	50-150	8
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	<0.0034	65	84	50-150	26 vo
Hexachlorobutadiene	mg/kg (ppm)	1.7	<0.002	59	84	50-150	35 vo
4-Chloroaniline	mg/kg (ppm)	3.3	<0.178	12 vo	13 vo	50-150	8
4-Chloro-3-methylphenol	mg/kg (ppm)	1.7	<0.0044	111	110	50-150	1
2-Methylnaphthalene	mg/kg (ppm)	1.7	0.002083	78	94	50-150	19
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	<0.0022	0 vo	0 vo	50-150	
2,4,6-Trichlorophenol	mg/kg (ppm)	1.7	<0.008	110	112	50-150	2
2,4,5-Trichlorophenol	mg/kg (ppm)	1.7	<0.0096	96	107	50-150	11
2-Chloronaphthalene	mg/kg (ppm)	1.7	<0.00144	82	98	50-150	18
2-Nitroaniline	mg/kg (ppm)	1.7	<0.0026	94	107	50-150	13
Dimethyl phthalate	mg/kg (ppm)	1.7	0.006248	84	99	50-150	16
2,6-Dinitrotoluene	mg/kg (ppm)	1.7	<0.00188	79	57	50-150	32 vo
3-Nitroaniline	mg/kg (ppm)	3.3	<0.0174	10 vo	36 vo	50-150	113 vo
2,4-Dinitrophenol	mg/kg (ppm)	1.7	<0.0138	20 vo	14 vo	50-150	35 vo
Dibenzofuran	mg/kg (ppm)	1.7	0.002999	85	97	50-150	13
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	<0.00158	84	50	50-150	51 vo
4-Nitrophenol	mg/kg (ppm)	1.7	<0.0178	40 vo	15 vo	50-150	91 vo
Diethyl phthalate	mg/kg (ppm)	1.7	0.035569	82	74	50-150	10
4-Chlorophenyl phenyl ether	mg/kg (ppm)	1.7	<0.00158	86	99	50-150	14
N-Nitrosodiphenylamine	mg/kg (ppm)	1.7	<0.00102	86	103	50-150	18
4-Nitroaniline	mg/kg (ppm)	3.3	<0.0182	21 vo	55	50-150	89 vo
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	1.7	<0.0106	17 vo	6 vo	50-150	96 vo
4-Bromophenyl phenyl ether	mg/kg (ppm)	1.7	<0.00164	91	108	50-150	17
Hexachlorobenzene	mg/kg (ppm)	1.7	<0.00102	89	105	50-150	16
Pentachlorophenol	mg/kg (ppm)	1.7	0.015494	105	105	50-150	0
Carbazole	mg/kg (ppm)	1.7	0.010996	79	86	50-150	8
Di-n-butyl phthalate	mg/kg (ppm)	1.7	<0.02	86	136	50-150	45 vo
Benzyl butyl phthalate	mg/kg (ppm)	1.7	0.018743	111	176 vo	50-150	45 vo
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	1.7	0.404255	-61	-165	50-150	
Di-n-octyl phthalate	mg/kg (ppm)	1.7	0.013994	73	91	50-150	22 vo

Date of Report: 08/21/13
Date Received: 07/23/13
Project: 8th Avenue Terminals, Inc., Crowley RI/FS 101.00205.00030, F&BI 307331

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Phenol	mg/kg (ppm)	1.7	98	91	51-119	7
Bis(2-chloroethyl) ether	mg/kg (ppm)	1.7	100	93	60-112	7
2-Chlorophenol	mg/kg (ppm)	1.7	96	90	59-114	6
1,3-Dichlorobenzene	mg/kg (ppm)	1.7	95	87	62-113	9
1,4-Dichlorobenzene	mg/kg (ppm)	1.7	96	88	61-114	9
1,2-Dichlorobenzene	mg/kg (ppm)	1.7	97	88	61-113	10
Benzyl alcohol	mg/kg (ppm)	1.7	103	97	50-119	6
Bis(2-chloroisopropyl) ether	mg/kg (ppm)	1.7	111	102	59-113	8
2-Methylphenol	mg/kg (ppm)	1.7	95	91	58-115	4
Hexachloroethane	mg/kg (ppm)	1.7	95	87	63-114	9
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	101	97	62-114	4
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	1.7	99	94	54-120	5
Nitrobenzene	mg/kg (ppm)	1.7	104	96	59-114	8
Isophorone	mg/kg (ppm)	1.7	109	102	61-113	7
2-Nitrophenol	mg/kg (ppm)	1.7	104	98	59-114	6
2,4-Dimethylphenol	mg/kg (ppm)	1.7	77	78	54-107	1
Benzoic acid	mg/kg (ppm)	2.5	127	112	43-150	13
Bis(2-chloroethoxy)methane	mg/kg (ppm)	1.7	104	96	60-114	8
2,4-Dichlorophenol	mg/kg (ppm)	1.7	106	98	57-118	8
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	100	91	56-112	9
Hexachlorobutadiene	mg/kg (ppm)	1.7	103	93	60-116	10
4-Chloroaniline	mg/kg (ppm)	3.3	73	67	10-126	9
4-Chloro-3-methylphenol	mg/kg (ppm)	1.7	112	104	59-115	7
2-Methylnaphthalene	mg/kg (ppm)	1.7	106	99	60-115	7
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	108 vo	96	41-107	12
2,4,6-Trichlorophenol	mg/kg (ppm)	1.7	109	102	47-119	7
2,4,5-Trichlorophenol	mg/kg (ppm)	1.7	113	105	61-121	7
2-Chloronaphthalene	mg/kg (ppm)	1.7	104	99	58-114	5
2-Nitroaniline	mg/kg (ppm)	1.7	115	111	55-119	4
Dimethyl phthalate	mg/kg (ppm)	1.7	112	108	58-116	4
2,6-Dinitrotoluene	mg/kg (ppm)	1.7	113	110	57-119	3
3-Nitroaniline	mg/kg (ppm)	3.3	100	96	10-143	4
2,4-Dinitrophenol	mg/kg (ppm)	1.7	108	103	40-122	5
Dibenzofuran	mg/kg (ppm)	1.7	107	102	56-115	5
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	120	116	53-126	3
4-Nitrophenol	mg/kg (ppm)	1.7	121	112	40-124	8
Diethyl phthalate	mg/kg (ppm)	1.7	109	104	57-116	5
4-Chlorophenyl phenyl ether	mg/kg (ppm)	1.7	109	104	54-119	5
N-Nitrosodiphenylamine	mg/kg (ppm)	1.7	104	103	54-113	1
4-Nitroaniline	mg/kg (ppm)	3.3	106	106	47-109	0
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	1.7	113 vo	110 vo	57-108	3
4-Bromophenyl phenyl ether	mg/kg (ppm)	1.7	109	105	56-116	4
Hexachlorobenzene	mg/kg (ppm)	1.7	105	104	57-115	1
Pentachlorophenol	mg/kg (ppm)	1.7	125 vo	122	45-123	2
Carbazole	mg/kg (ppm)	1.7	105	104	57-116	1
Di-n-butyl phthalate	mg/kg (ppm)	1.7	118	114	56-118	3
Benzyl butyl phthalate	mg/kg (ppm)	1.7	119	113	56-122	5
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	1.7	122	116	56-125	5
Di-n-octyl phthalate	mg/kg (ppm)	1.7	106	96	58-120	10

Date of Report: 08/21/13
Date Received: 07/23/13
Project: 8th Avenue Terminals, Inc., Crowley RI/FS 101.00205.00030, F&BI 307331

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	85	90	58-121	6
Acenaphthylene	mg/kg (ppm)	0.17	93	98	54-121	5
Acenaphthene	mg/kg (ppm)	0.17	89	94	54-123	5
Fluorene	mg/kg (ppm)	0.17	94	98	56-127	4
Phenanthrene	mg/kg (ppm)	0.17	91	94	55-122	3
Anthracene	mg/kg (ppm)	0.17	88	92	50-120	4
Fluoranthene	mg/kg (ppm)	0.17	96	97	54-129	1
Pyrene	mg/kg (ppm)	0.17	98	104	53-127	6
Benz(a)anthracene	mg/kg (ppm)	0.17	91	92	51-115	1
Chrysene	mg/kg (ppm)	0.17	95	101	55-129	6
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	99	105	56-123	6
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	84	86	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	78	80	51-118	3
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	90	94	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	88	91	50-141	3
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	87	91	52-131	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/13
Date Received: 07/23/13
Project: 8th Avenue Terminals, Inc., Crowley RI/FS 101.00205.00030, F&BI 307331

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 307357-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	<0.033	<0.033	nm
Aroclor 1260	mg/kg (ppm)	<0.033	<0.033	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	88	93	70-130	6
Aroclor 1260	mg/kg (ppm)	0.8	92	95	70-130	3

Date of Report: 08/21/13
Date Received: 07/23/13
Project: 8th Avenue Terminals, Inc., Crowley RI/FS 101.00205.00030, F&BI 307331

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 307331-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Beryllium	mg/kg (ppm)	5	0.155	74	62 vo	67-138	18
Chromium	mg/kg (ppm)	50	12.9	62 b	60 b	57-128	3 b
Nickel	mg/kg (ppm)	25	13.2	58 b	69 b	69-112	17 b
Copper	mg/kg (ppm)	50	24.7	61 b	61 b	57-120	0 b
Zinc	mg/kg (ppm)	50	42.6	78 b	61 b	55-129	24 b
Arsenic	mg/kg (ppm)	10	12.5	94 b	121 b	70-118	25 b
Selenium	mg/kg (ppm)	5	<0.920	88	85	64-117	3
Silver	mg/kg (ppm)	10	0.0990	103	107	73-122	4
Cadmium	mg/kg (ppm)	10	<0.200	106	108	83-116	2
Antimony	mg/kg (ppm)	20	0.722	69	73	54-116	6
Barium	mg/kg (ppm)	50	31.0	111 b	113 b	60-141	2 b
Thallium	mg/kg (ppm)	5	<0.0440	96	98	68-121	2
Lead	mg/kg (ppm)	50	11.6	107 b	107 b	59-148	0 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Beryllium	mg/kg (ppm)	5	114	69-146
Chromium	mg/kg (ppm)	50	103	78-121
Nickel	mg/kg (ppm)	25	100	82-122
Copper	mg/kg (ppm)	50	99	82-119
Zinc	mg/kg (ppm)	50	100	81-120
Arsenic	mg/kg (ppm)	10	93	83-113
Selenium	mg/kg (ppm)	5	94	84-115
Silver	mg/kg (ppm)	10	100	81-116
Cadmium	mg/kg (ppm)	10	100	54-114
Antimony	mg/kg (ppm)	20	106	69-114
Barium	mg/kg (ppm)	50	98	85-116
Thallium	mg/kg (ppm)	5	96	77-123
Lead	mg/kg (ppm)	50	101	80-120

Date of Report: 08/21/13
Date Received: 07/23/13
Project: 8th Avenue Terminals, Inc., Crowley RI/FS 101.00205.00030, F&BI 307331

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Laboratory Code: 307331-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	0.13	101	100	62-140	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	100	63-131

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

August 5, 2013

Michele Costales Poquiz
Friedman & Bruya
3012 16th Ave W
Seattle, WA 98119

RE: Project: 307331
ARI Job No.: WY49

Dear Michele:

Please find enclosed the Chain-of-Custody record (COC), sample receipt documentation, and the final data for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted four sediment samples on July 24, 2013, under ARI job WY49. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

The samples were analyzed for TOC, as requested on the COC.

The matrix spike percent recovery of TOC fell outside the control limits low for sample **IS-1**. All other quality control parameters were met for this analysis. No corrective action was taken.

There were no other anomalies associated with the analysis of these samples.

An electronic copy of this report and all associated raw data will be kept on file at ARI. Should you have any questions or concerns, please feel free to call me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com
www.arilabs.com

cc: eFile WY49

Enclosures

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

WY49

SAMPLE CHAIN OF CUSTODY

Send Report To Michele Costales Poquiz

Company Friedman & Bruya, Inc.

Address 3012 16th Ave. W.

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

Email Address mpoquiz@friedmanandbruya.com

SUBCONTRACTOR
Analytical Resources, Inc. (ARI)

PROJECT NAME/NO.: 307331

PO #: C-478

REMARKS

Please e-mail results

ELECTRONIC DATA REQUESTED (EIM)

Page # 1 of 1

TURNAROUND TIME
- [x] Standard Turnaround
- [ ] RUSH
Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Samples Received at ____ °C

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Hexavalent Cr by 7196A	Total Organic Carbon by 9060M				Notes
IS-1		7/23/13	1225	Sediment	1								X				
IS-2		↓	1300	↓	↓								X				
IS-3		↓	1335	↓	↓								X				
IS-4		↓	1350	↓	↓								X				

	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Michele Costales Poquiz	Michele Costales Poquiz	F&B	7/24/13	10:45 AM
Received by:	[signature]	A. Volgardsen	ARI	7/24/13	1250
Relinquished by:					
Received by:					

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC SLRC.DOC

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Friedman + Bruya

COC No(s): _____ (NA)

Assigned ARI Job No: WY49

Project Name: _____

Delivered by: Fed-Ex UPS Courier Hand Delivered Other Postal Exp

Tracking No: 45582416 (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 6.0 ___ ___ ___ ___

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90877958

Cooler Accepted by: AV Date: 7/24/13 Time: 1250

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ... (Bubble Wrap) Wet Ice (Gel Packs) (Baggies) Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		(YES)	~~NO~~ N/
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)	_____	

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

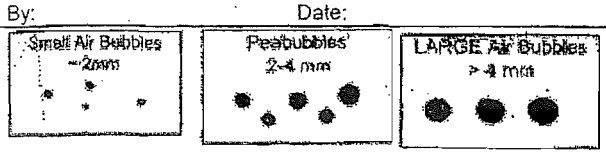
Samples Logged by: AV Date: 7/24/13 Time: 1427

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____



Small → "sm"	
Peabubbles → "pb"	
Large → "lg"	
Headspace → "hs"	

WY49 : 00003

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: WY49
Client: Friedman and Bruya, Inc
Project Event: 307331
Project Name: N/A

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	IS-1	WY49A	13-15490	Sediment	07/23/13 12:25	07/24/13 12:50
2.	IS-2	WY49B	13-15491	Sediment	07/23/13 13:00	07/24/13 12:50
3.	IS-3	WY49C	13-15492	Sediment	07/23/13 13:35	07/24/13 12:50
4.	IS-4	WY49D	13-15493	Sediment	07/23/13 13:50	07/24/13 12:50

SAMPLE RESULTS-CONVENTIONALS
WY49-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 08/02/13

Project: NA
Event: 307331
Date Sampled: 07/23/13
Date Received: 07/24/13

Client ID: IS-1
ARI ID: 13-15490 WY49A

Analyte	Date	Method	Units	RL	Sample
Total Solids	07/25/13 072513#1	SM2540B	Percent	0.01	42.28
Total Organic Carbon	08/02/13 080213#1	EPA 9060M	Percent	0.020	3.62

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WY49-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 08/02/13

Project: NA
Event: 307331
Date Sampled: 07/23/13
Date Received: 07/24/13

Client ID: IS-2
ARI ID: 13-15491 WY49B

Analyte	Date	Method	Units	RL	Sample
Total Solids	07/25/13 072513#1	SM2540B	Percent	0.01	55.98
Total Organic Carbon	08/02/13 080213#1	EPA 9060M	Percent	0.020	2.67

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
WY49-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 08/02/13

Project: NA
Event: 307331
Date Sampled: 07/23/13
Date Received: 07/24/13

Client ID: IS-3
ARI ID: 13-15492 WY49C

Analyte	Date	Method	Units	RL	Sample
Total Solids	07/25/13 072513#1	SM2540B	Percent	0.01	46.00
Total Organic Carbon	08/02/13 080213#1	EPA 9060M	Percent	0.020	3.29

RL Analytical reporting limit
U Undetected at reported detection limit

WY49:00007

SAMPLE RESULTS-CONVENTIONALS
WY49-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized
Reported: 08/02/13

Project: NA
Event: 307331
Date Sampled: 07/23/13
Date Received: 07/24/13

Client ID: IS-4
ARI ID: 13-15493 WY49D

Analyte	Date	Method	Units	RL	Sample
Total Solids	07/25/13 072513#1	SM2540B	Percent	0.01	49.89
Total Organic Carbon	08/02/13 080213#1	EPA 9060M	Percent	0.020	2.15

RL Analytical reporting limit
U Undetected at reported detection limit

WY49:00008

MS/MSD RESULTS-CONVENTIONALS
WY49-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 08/02/13

Project: NA
Event: 307331
Date Sampled: 07/23/13
Date Received: 07/24/13

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: WY49A Client ID: IS-1						
Total Organic Carbon	08/02/13	Percent	3.62	6.28	4.03	66.1%

WY49:00003

REPLICATE RESULTS-CONVENTIONALS
WY49-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 08/02/13

Project: NA
Event: 307331
Date Sampled: 07/23/13
Date Received: 07/24/13

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: WY49A Client ID: IS-1					
Total Solids	07/25/13	Percent	42.28	43.26 42.16	1.4%
Total Organic Carbon	08/02/13	Percent	3.62	3.34 3.24	5.8%

WY49:00019

LAB CONTROL RESULTS-CONVENTIONALS
WY49-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 08/02/13

Project: NA
Event: 307331
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Organic Carbon EPA 9060M	ICVL	08/02/13	Percent	0.094	0.100	94.0%

METHOD BLANK RESULTS-CONVENTIONALS
WY49-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 08/02/13

Project: NA
Event: 307331
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank	QC ID
Total Solids	07/25/13	Percent	< 0.01 U	ICB
Total Organic Carbon	08/02/13	Percent	< 0.020 U	ICB

STANDARD REFERENCE RESULTS-CONVENTIONALS
WY49-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 08/02/13

Project: NA
Event: 307331
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST 1941B	08/02/13	Percent	2.60	2.99	87.0%

WY49:00013

Budinger & Associates

Proudly serving the Inland Northwest for over 30 years

RECEIVED
AUG 12 2013

Geotechnical Engineering
Environmental Engineering
Construction Materials Testing
Subsurface Exploration
Special Inspection

Michele Costales Porquiz
Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119

August 7, 2013

Project Number L13372

PROJECT: 307331 Soils
Seattle, WA

SUBJECT: Results of Laboratory Testing
Report # 1

At your request, we provided laboratory testing services for the subject project. Services were limited to the performance of specific laboratory tests, selected at your discretion.

For this period our involvement was limited to laboratory testing of four samples delivered to us on July 25, 2013. Laboratory tests were performed in general accordance with methods listed on the attached *Laboratory Summary* and *Particle Size Distribution* sheets.

If you have any questions, please call.

Respectfully Submitted,
BUDINGER & ASSOCIATES, INC.

Kyle L. Sanford
Mgr. Construction Services

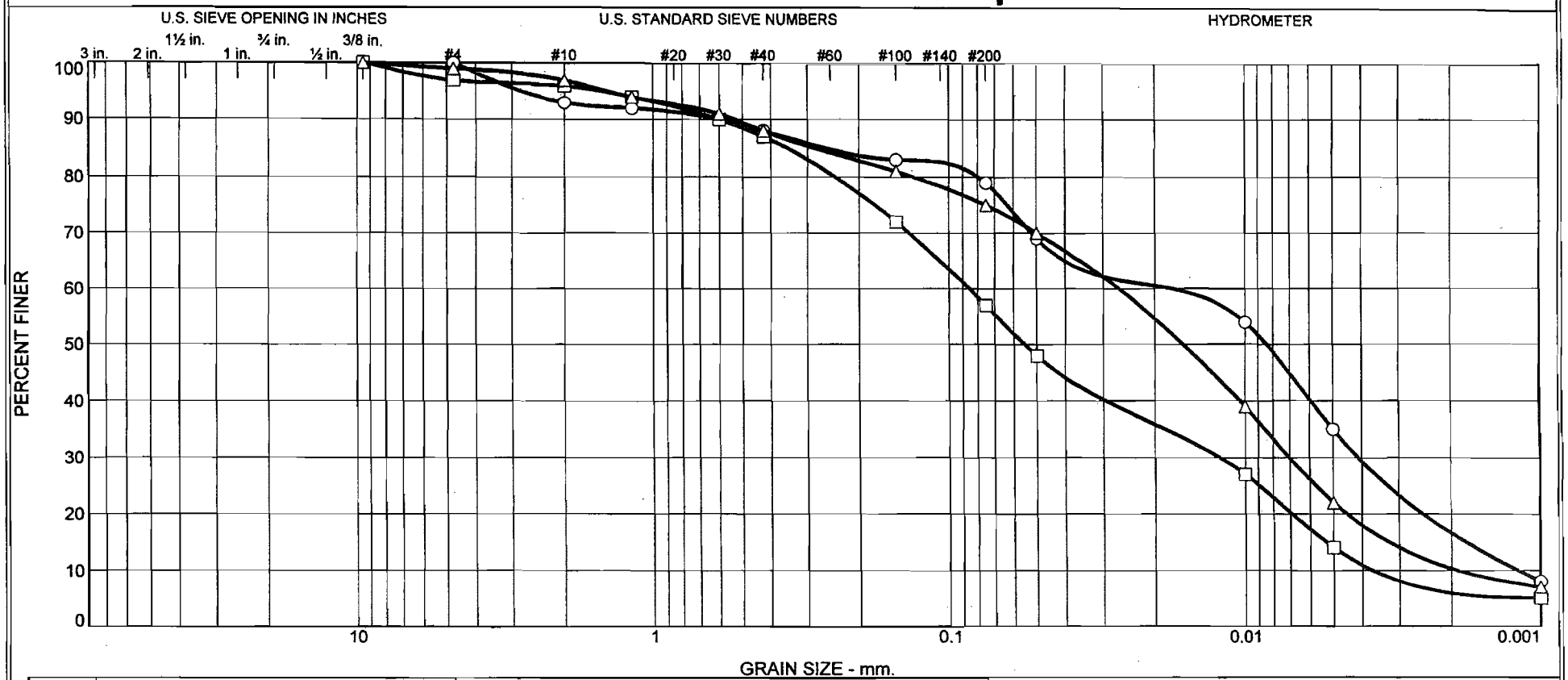
KLS/kh
Addressee – 2
Attachments:
- Soils - Laboratory Summary (1 page)
- Particle Size Distribution (2 pages)

1101 North Fancher Road
Spokane Valley, WA 99212
Tel: 509-535-8841
Fax:509-535-9589

SOILS
LABORATORY SUMMARY

		Units	Test Method				
LABORATORY NUMBER				13-0633	13-0634	13-0635	13-0636
SAMPLE NUMBER				1	2	3	4
SAMPLED BY				Client	Client	Client	Client
SAMPLE TYPE				Bulk	Bulk	Bulk	Bulk
DATE RECEIVED				7/25/13	7/25/13	7/25/13	7/25/13
CLIENT SAMPLE ID				IS-1	IS-2	IS-3	IS-4
SIEVE ANALYSIS			ASTM D-422				
	3/4"						100
S	1/2"	%					99
I	3/8"				100	100	99
E	#4	P		100	97	99	98
V	#10	A		93	96	97	97
E	#16	S		92	94	94	95
	#30	S		90	90	91	92
S	#40	I		88	87	88	90
I	#100	N		83	72	81	79
Z	#200	G		79	57	75	72
E	.05mm			69	48	70	69
	.01mm			54	27	39	40
	.005mm			35	14	22	22
	.001mm			8	5	7	6

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	0	7	5	9	44	35
□	0	0	3	1	9	30	43	14
△	0	0	1	2	9	13	53	22

	Identification		Date Sampled	Date Received	Date Tested
○	Source of Sample: on site	Sample Number: 1 (13-0633)	7/23/13	7/25/13	7/29/13
□	Source of Sample: on site	Sample Number: 2 (13-0634)	7/23/13	7/25/13	7/29/13
△	Source of Sample: on site	Sample Number: 3 (13-0635)	7/23/13	7/25/13	7/29/13

Client Friedman & Bruya, Inc.

Project 307331 Soils

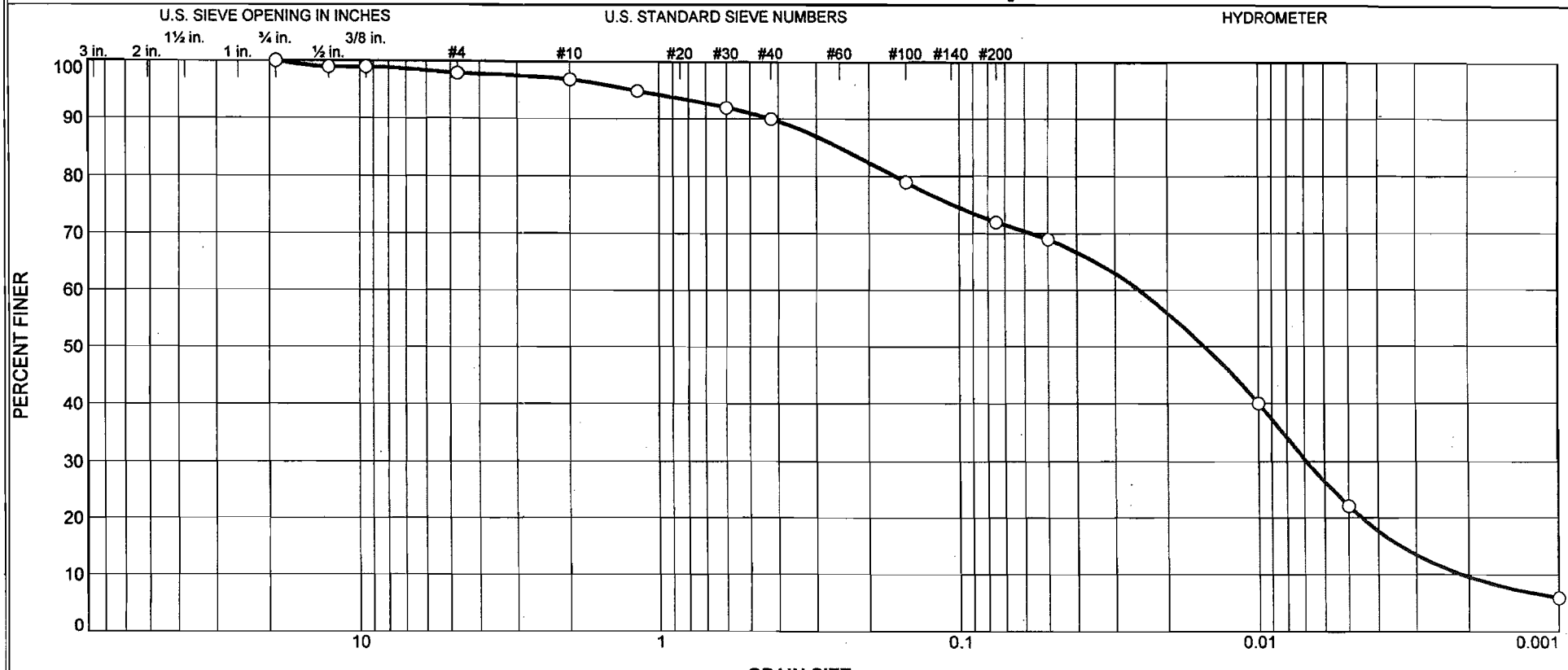
Project No. L13372 Date 8/2/13

BUDINGER & ASSOCIATES, INC.

○ Sampled by Client, sample ID IS-1
□ Sampled by Client, sample ID IS-2
△ Sampled by Client, sample ID IS-3

Tested By: KB **Checked By:** TB

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	2	1	7	18	50	22

	Identification	Date Sampled	Date Received	Date Tested
○	Source of Sample: on site Sample Number: 4 (3-0636)	7/23/13	7/25/13	7/29/13

Client Friedman & Bruya, Inc.

Project 307331 Soils

Project No. L13372 Date 8/2/13

BUDINGER & ASSOCIATES, INC.

○ Sampled by Client, sample ID IS-4

Tested By: KB **Checked By:** TB

307331

SAMPLE CHAIN OF CUSTODY

KJ 7/23/13 AO2

Page # 1 of 1

Send Report To MIKE STATON

Company SLR INTERNATIONAL CORPORATION

Address 22118 20TH AVE SE, G-202

City, State, ZIP BOTHELL, WA 98021

Phone # (425)402-8800 Fax # (425)402-8488

SAMPLERS (signature)

PROJECT NAME/NO. 8TH AVENUE TERMINALS, INC CROWLEY RI/FS 101.00205.00030

PO# 101.00205.00030

REMARKS NWTPH-Dx FOR DRO & HO AFTER SILICA GEL CLEANUP

TURNAROUND TIME
- [x] Standard (2 Weeks)
- [ ] RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [x] Will call with instructions

ANALYSES REQUESTED

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270	HFS	Metals (Priority Pollutants + Ba) by 200.8	PAHs by 8270D-SIM	PCBs by 8082	TOC by 9060	GRAIN SIZE	Mercury by 1631E	Notes
IS-1	01A-F	7/23/13	1225	SEDIMENT	7	X				X		X	X	X	X	X	X	
IS-2	02A-F	↓	1300	↓	↓	↓				↓		↓	↓	↓	↓	↓	↓	
IS-3	03A-F	↓	1335	↓	↓	↓				↓		↓	↓	↓	↓	↓	↓	
IS-4	04A-F	↓	1350	↓	↓	↓				↓		↓	↓	↓	↓	↓	↓	

Samples received at 2 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	CHRIS LEE	SLR	7/23/13	1457
Received by:	Michael E-dell	F&B	↓	↓
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Kurt Johnson, B.S.
Eric Young, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

August 21, 2013

Mike Staton
SLR International Corp.
22118 20th Ave. SE., G-202
Bothell, WA 98021

Dear Mr. Staton:

Included are the results from the testing of material submitted on July 24, 2013 from the Crowley RIFS, 8th Ave Terminals 101.00205.00030, F&BI 307357 project. There are 20 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Michele Costales Poquiz

Michele Costales Poquiz
Chemist

Enclosures
SLR0821R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on July 24, 2013 by Friedman & Bruya, Inc. from the SLR International Corp. Crowley RIFS, 8th Ave Terminals 101.00205.00030, F&BI 307357 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID	SLR International Corp.
307357-01	IS-5

Total Petroleum Hydrocarbons as Diesel and Motor Oil by Method NWTPH-Dx with Silica Gel

All quality control requirements were acceptable.

Semivolatile Organic Compounds by EPA Method 8270D

The presence of bis(2-ethylhexyl) phthalate in the sample is likely due to laboratory contamination. The results have been flagged accordingly.

The percent recovery for the matrix spike (MS), matrix spike duplicate (MSD), laboratory control sample (LCS), and laboratory control sample duplicate (LCSD) exceeded acceptance criteria for several compounds. In addition, the relative percent difference (RPD) for the LCS/LCSD and the MS/MSD failed high for several compounds. The results have been flagged accordingly.

Semivolatile Organic Compounds by EPA Method 8270D SIM

The sample was diluted due to matrix interferences. The reporting limits have been raised accordingly.

Polychlorinated Biphenyls as Aroclor 1016/1260 by EPA Method 8082A

All quality control requirements were acceptable.

Total Metals by EPA Method 200.8

The internal standards associated with several analytes exceeded acceptance criteria. The sample was diluted and reanalyzed. The results from the original analysis and the re-analysis are included.

Total Mercury by EPA Method 1631E

All quality control requirements were acceptable.

Total Organic Carbon by EPA Method 9060M

The sample was sent to Analytical Resources, Inc. (ARI) for analysis. The report generated by ARI is enclosed.

Grain Size by ASTM D-422

The sample was sent to ARI for analysis. The report generated by ARI is enclosed.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/21/13
Date Received: 07/24/13
Project: Crowley RIFS, 8th Ave Terminals 101.00205.00030, F&BI 307357
Date Extracted: 07/29/13
Date Analyzed: 08/01/13

RESULTS FROM THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL AND MOTOR OIL USING METHOD NWTPH-Dx
Sample Extracts Passed Through a Silica Gel Column Prior to Analysis
Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Diesel Range (C_{10}-C_{25})	Motor Oil Range (C_{25}-C_{36})	Surrogate (% Recovery) (Limit 53-144)
IS-5 307357-01	49 x	320	102
Method Blank 03-1483 MB	<2.8	<4.5	104

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	IS-5	Client:	SLR International Corp.
Date Received:	07/24/13	Project:	Crowley RIFS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307357-01
Date Analyzed:	08/09/13	Data File:	080908.D
Matrix:	Soil/Sediment	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	80	56	115
Phenol-d6	93	54	113
Nitrobenzene-d5	92	31	164
2-Fluorobiphenyl	87	47	133
2,4,6-Tribromophenol	112	35	141
Terphenyl-d14	96	64	125

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.0054	2,4,6-Trichlorophenol	<0.008
Bis(2-chloroethyl) ether	<0.0016	2,4,5-Trichlorophenol	<0.0096
2-Chlorophenol	<0.0062	2-Chloronaphthalene	<0.0014
1,3-Dichlorobenzene	<0.0026	2-Nitroaniline	<0.0026
1,4-Dichlorobenzene	<0.0024	Dimethyl phthalate	0.0076
1,2-Dichlorobenzene	<0.004	2,6-Dinitrotoluene	<0.0019
Benzyl alcohol	0.012	3-Nitroaniline	<0.017
Bis(2-chloroisopropyl) ether	<0.0016	2,4-Dinitrophenol	<0.014
2-Methylphenol	<0.0064	Dibenzofuran	0.0063
Hexachloroethane	<0.0032	2,4-Dinitrotoluene	<0.0016
N-Nitroso-di-n-propylamine	<0.003	4-Nitrophenol	<0.018
3-Methylphenol + 4-Methylphenol	<0.014	Diethyl phthalate	0.016
Nitrobenzene	<0.0026	4-Chlorophenyl phenyl ether	<0.0016
Isophorone	<0.0011	N-Nitrosodiphenylamine	0.0015
2-Nitrophenol	<0.0082	4-Nitroaniline	<0.018
2,4-Dimethylphenol	<0.019	4,6-Dinitro-2-methylphenol	<0.011
Benzoic acid	0.056	4-Bromophenyl phenyl ether	<0.0016
Bis(2-chloroethoxy)methane	<0.0014	Hexachlorobenzene	<0.001
2,4-Dichlorophenol	<0.0058	Pentachlorophenol	0.018 j jl
1,2,4-Trichlorobenzene	<0.0034	Carbazole	0.024
Hexachlorobutadiene	<0.002	Di-n-butyl phthalate	<0.02
4-Chloroaniline	<0.18	Benzyl butyl phthalate	0.044
4-Chloro-3-methylphenol	<0.0044	Bis(2-ethylhexyl) phthalate	0.40 fc
2-Methylnaphthalene	0.0050	Di-n-octyl phthalate	<0.0032
Hexachlorocyclopentadiene	<0.0022		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley RIFS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	03-1489 mb
Date Analyzed:	08/05/13	Data File:	080504.D
Matrix:	Soil/Sediment	Instrument:	GCMS8
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
2-Fluorophenol	89	32	162
Phenol-d6	91	10	170
Nitrobenzene-d5	100	50	150
2-Fluorobiphenyl	103	43	158
2,4,6-Tribromophenol	119	43	146
Terphenyl-d14	110	39	168

Compounds:	Concentration mg/kg (ppm)	Compounds:	Concentration mg/kg (ppm)
Phenol	<0.0054	2,4,6-Trichlorophenol	<0.008
Bis(2-chloroethyl) ether	<0.0016	2,4,5-Trichlorophenol	<0.0096
2-Chlorophenol	<0.0062	2-Chloronaphthalene	<0.0014
1,3-Dichlorobenzene	<0.0026	2-Nitroaniline	<0.0026
1,4-Dichlorobenzene	<0.0024	Dimethyl phthalate	<0.0012
1,2-Dichlorobenzene	<0.004	2,6-Dinitrotoluene	<0.0019
Benzyl alcohol	<0.005	3-Nitroaniline	<0.017
Bis(2-chloroisopropyl) ether	<0.0016	2,4-Dinitrophenol	<0.014
2-Methylphenol	<0.0064	Dibenzofuran	<0.001
Hexachloroethane	<0.0032	2,4-Dinitrotoluene	<0.0016
N-Nitroso-di-n-propylamine	<0.003	4-Nitrophenol	<0.018
3-Methylphenol + 4-Methylphenol	<0.014	Diethyl phthalate	<0.004
Nitrobenzene	<0.0026	4-Chlorophenyl phenyl ether	<0.0016
Isophorone	<0.0011	N-Nitrosodiphenylamine	<0.001
2-Nitrophenol	<0.0082	4-Nitroaniline	<0.018
2,4-Dimethylphenol	<0.019	4,6-Dinitro-2-methylphenol	<0.011
Benzoic acid	<0.054	4-Bromophenyl phenyl ether	<0.0016
Bis(2-chloroethoxy)methane	<0.0014	Hexachlorobenzene	<0.001
2,4-Dichlorophenol	<0.0058	Pentachlorophenol	<0.0062 j
1,2,4-Trichlorobenzene	<0.0034	Carbazole	<0.002
Hexachlorobutadiene	<0.002	Di-n-butyl phthalate	<0.02
4-Chloroaniline	<0.18	Benzyl butyl phthalate	<0.0058
4-Chloro-3-methylphenol	<0.0044	Bis(2-ethylhexyl) phthalate	<0.013
2-Methylnaphthalene	<0.001	Di-n-octyl phthalate	<0.0032
Hexachlorocyclopentadiene	<0.0022		

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	IS-5	Client:	SLR International Corp.
Date Received:	07/24/13	Project:	Crowley RIFS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	307357-01 1/50
Date Analyzed:	08/02/13	Data File:	080213.D
Matrix:	Soil/Sediment	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	220 ds	50	150
Benzo(a)anthracene-d12	145 ds	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.011
Acenaphthylene	0.018
Acenaphthene	<0.007
Fluorene	<0.0075
Phenanthrene	0.082
Anthracene	0.038
Fluoranthene	0.25
Pyrene	0.23
Benz(a)anthracene	0.13
Chrysene	0.27
Benzo(a)pyrene	0.18
Benzo(b)fluoranthene	0.38
Benzo(k)fluoranthene	0.11
Indeno(1,2,3-cd)pyrene	0.19
Dibenz(a,h)anthracene	0.037
Benzo(g,h,i)perylene	0.19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Semivolatile Compounds By EPA Method 8270D SIM

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley RIFS 101.00205.00030
Date Extracted:	08/01/13	Lab ID:	03-1488 mb
Date Analyzed:	08/02/13	Data File:	080205.D
Matrix:	Soil/Sediment	Instrument:	GCMS6
Units:	mg/kg (ppm)	Operator:	ya

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
Anthracene-d10	91	50	150
Benzo(a)anthracene-d12	115	35	159

Compounds:	Concentration mg/kg (ppm)
Naphthalene	<0.00022
Acenaphthylene	<0.000091
Acenaphthene	<0.00014
Fluorene	<0.00015
Phenanthrene	<0.00032
Anthracene	<0.000088
Fluoranthene	<0.00028
Pyrene	<0.00026
Benz(a)anthracene	<0.00018
Chrysene	<0.00019
Benzo(a)pyrene	<0.00022
Benzo(b)fluoranthene	<0.00018
Benzo(k)fluoranthene	<0.00036
Indeno(1,2,3-cd)pyrene	<0.00062
Dibenz(a,h)anthracene	<0.00034
Benzo(g,h,i)perylene	<0.00034

Analysis For PCBs By EPA Method 8082

Client Sample ID:	IS-5	Client:	SLR International Corp.
Date Received:	07/24/13	Project:	Crowley RIFS 101.00205.00030
Date Extracted:	08/15/13	Lab ID:	307357-01
Date Analyzed:	08/16/13	Data File:	14.D\ECD1A.CH
Matrix:	Soil/Sediment	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	104	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.033
Aroclor 1232	<0.033
Aroclor 1016	<0.033
Aroclor 1242	<0.033
Aroclor 1248	<0.033
Aroclor 1254	0.25
Aroclor 1260	0.24

Analysis For PCBs By EPA Method 8082

Client Sample ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley RIFS 101.00205.00030
Date Extracted:	08/15/13	Lab ID:	03-1599 mb
Date Analyzed:	08/16/13	Data File:	12.D\ECD1A.CH
Matrix:	Soil/Sediment	Instrument:	GC7
Units:	mg/kg (ppm)	Operator:	mwdl

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
TCMX	113	50	150

Compounds:	Concentration mg/kg (ppm)
Aroclor 1221	<0.033
Aroclor 1232	<0.033
Aroclor 1016	<0.033
Aroclor 1242	<0.033
Aroclor 1248	<0.033
Aroclor 1254	<0.033
Aroclor 1260	<0.033

Analysis For Total Metals By EPA Method 200.8

Client ID:	IS-5	Client:	SLR International Corp.
Date Received:	07/24/13	Project:	Crowley RIFS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	307357-01
Date Analyzed:	08/14/13	Data File:	307357-01.025
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	145 vo	60	125
Indium	88	60	125
Holmium	92	60	125

Analyte:	Concentration mg/kg (ppm)
Selenium	<0.920
Cadmium	0.622
Thallium	<0.0440

Analysis For Total Metals By EPA Method 200.8

Client ID:	IS-5	Client:	SLR International Corp.
Date Received:	07/24/13	Project:	Crowley RIFS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	307357-01 x10
Date Analyzed:	08/14/13	Data File:	307357-01 x10.045
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	90	60	125
Indium	91	60	125
Holmium	95	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.860
Chromium	35.8
Nickel	37.6
Copper	128
Zinc	249
Arsenic	17.9
Selenium	<9.20
Silver	<0.780
Cadmium	<2.00
Antimony	<1.06
Barium	56.7
Thallium	<0.440
Lead	71.1

Analysis For Total Metals By EPA Method 200.8

Client ID:	Method Blank	Client:	SLR International Corp.
Date Received:	N/A	Project:	Crowley RIFS 101.00205.00030
Date Extracted:	08/02/13	Lab ID:	I3-476 mb
Date Analyzed:	08/14/13	Data File:	I3-476 mb.016
Matrix:	Soil/Sediment	Instrument:	ICPMS1
Units:	mg/kg (ppm)	Operator:	AP

Internal Standard:	% Recovery:	Lower Limit:	Upper Limit:
Germanium	80	60	125
Indium	87	60	125
Holmium	87	60	125

Analyte:	Concentration mg/kg (ppm)
Beryllium	<0.0860
Chromium	<0.480
Nickel	<0.200
Copper	<0.0720
Zinc	<0.980
Arsenic	<0.420
Selenium	<0.920
Silver	<0.0780
Cadmium	<0.200
Antimony	<0.106
Barium	<0.0520
Thallium	<0.0440
Lead	<0.0500

Date of Report: 08/21/13
Date Received: 07/24/13
Project: Crowley RIFS, 8th Ave Terminals 101.00205.00030, F&BI 307357
Date Extracted: 08/02/13
Date Analyzed: 08/05/13

RESULTS FROM THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Results Reported on a Dry Weight Basis
Results Reported as mg/kg (ppm)

Sample ID Laboratory ID	Total Mercury
IS-5 307357-01	0.11
Method Blank	<0.002

Date of Report: 08/21/13
Date Received: 07/24/13
Project: Crowley RIFS, 8th Ave Terminals 101.00205.00030, F&BI 307357

QUALITY ASSURANCE RESULTS FROM THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS DIESEL EXTENDED USING METHOD NWTPH-Dx

Laboratory Code: 307331-04 (Matrix Spike) Silica Gel

Analyte	Reporting Units	Spike Level	Sample Result (Wet Wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	mg/kg (ppm)	500	160	109	109	64-133	0

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Diesel Extended	mg/kg (ppm)	500	126	58-147

Date of Report: 08/21/13
Date Received: 07/24/13
Project: Crowley RIFS, 8th Ave Terminals 101.00205.00030, F&BI 307357

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

Laboratory Code: 307331-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Phenol	mg/kg (ppm)	1.7	<0.0054	74	94	50-150	24 vo
Bis(2-chloroethyl) ether	mg/kg (ppm)	1.7	<0.00158	65	84	50-150	26 vo
2-Chlorophenol	mg/kg (ppm)	1.7	<0.0062	76	87	50-150	13
1,3-Dichlorobenzene	mg/kg (ppm)	1.7	<0.0026	41 vo	63	50-150	42 vo
1,4-Dichlorobenzene	mg/kg (ppm)	1.7	<0.0024	40 vo	65	50-150	48 vo
1,2-Dichlorobenzene	mg/kg (ppm)	1.7	<0.004	45 vo	67	50-150	39 vo
Benzyl alcohol	mg/kg (ppm)	1.7	0.019326	65	70	50-150	7
Bis(2-chloroisopropyl) ether	mg/kg (ppm)	1.7	<0.00158	49 vo	65	50-150	28 vo
2-Methylphenol	mg/kg (ppm)	1.7	<0.0064	87	92	50-150	6
Hexachloroethane	mg/kg (ppm)	1.7	<0.0032	12 vo	10 vo	50-150	18
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	<0.003	77	81	50-150	5
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	1.7	<0.0144	91	100	50-150	9
Nitrobenzene	mg/kg (ppm)	1.7	<0.0026	75	87	50-150	15
Isophorone	mg/kg (ppm)	1.7	<0.00112	77	88	50-150	13
2-Nitrophenol	mg/kg (ppm)	1.7	<0.0082	71	32 vo	50-150	76 vo
2,4-Dimethylphenol	mg/kg (ppm)	1.7	<0.0186	91	102	50-150	11
Benzoic acid	mg/kg (ppm)	2.5	<0.054	64	40 vo	50-150	46 vo
Bis(2-chloroethoxy)methane	mg/kg (ppm)	1.7	<0.00144	79	91	50-150	14
2,4-Dichlorophenol	mg/kg (ppm)	1.7	<0.0058	102	110	50-150	8
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	<0.0034	65	84	50-150	26 vo
Hexachlorobutadiene	mg/kg (ppm)	1.7	<0.002	59	84	50-150	35 vo
4-Chloroaniline	mg/kg (ppm)	3.3	<0.178	12 vo	13 vo	50-150	8
4-Chloro-3-methylphenol	mg/kg (ppm)	1.7	<0.0044	111	110	50-150	1
2-Methylnaphthalene	mg/kg (ppm)	1.7	0.002083	78	94	50-150	19
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	<0.0022	0 vo	0 vo	50-150	
2,4,6-Trichlorophenol	mg/kg (ppm)	1.7	<0.008	110	112	50-150	2
2,4,5-Trichlorophenol	mg/kg (ppm)	1.7	<0.0096	96	107	50-150	11
2-Chloronaphthalene	mg/kg (ppm)	1.7	<0.00144	82	98	50-150	18
2-Nitroaniline	mg/kg (ppm)	1.7	<0.0026	94	107	50-150	13
Dimethyl phthalate	mg/kg (ppm)	1.7	0.006248	84	99	50-150	16
2,6-Dinitrotoluene	mg/kg (ppm)	1.7	<0.00188	79	57	50-150	32 vo
3-Nitroaniline	mg/kg (ppm)	3.3	<0.0174	10 vo	36 vo	50-150	113 vo
2,4-Dinitrophenol	mg/kg (ppm)	1.7	<0.0138	20 vo	14 vo	50-150	35 vo
Dibenzofuran	mg/kg (ppm)	1.7	0.002999	85	97	50-150	13
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	<0.00158	84	50	50-150	51 vo
4-Nitrophenol	mg/kg (ppm)	1.7	<0.0178	40 vo	15 vo	50-150	91 vo
Diethyl phthalate	mg/kg (ppm)	1.7	0.035569	82	74	50-150	10
4-Chlorophenyl phenyl ether	mg/kg (ppm)	1.7	<0.00158	86	99	50-150	14
N-Nitrosodiphenylamine	mg/kg (ppm)	1.7	<0.00102	86	103	50-150	18
4-Nitroaniline	mg/kg (ppm)	3.3	<0.0182	21 vo	55	50-150	89 vo
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	1.7	<0.0106	17 vo	6 vo	50-150	96 vo
4-Bromophenyl phenyl ether	mg/kg (ppm)	1.7	<0.00164	91	108	50-150	17
Hexachlorobenzene	mg/kg (ppm)	1.7	<0.00102	89	105	50-150	16
Pentachlorophenol	mg/kg (ppm)	1.7	0.015494	105	105	50-150	0
Carbazole	mg/kg (ppm)	1.7	0.010996	79	86	50-150	8
Di-n-butyl phthalate	mg/kg (ppm)	1.7	<0.02	86	136	50-150	45 vo
Benzyl butyl phthalate	mg/kg (ppm)	1.7	0.018743	111	176 vo	50-150	45 vo
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	1.7	0.404255	-61	-165	50-150	
Di-n-octyl phthalate	mg/kg (ppm)	1.7	0.013994	73	91	50-150	22 vo

Date of Report: 08/21/13
Date Received: 07/24/13
Project: Crowley RIFS, 8th Ave Terminals 101.00205.00030, F&BI 307357

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR SEMIVOLATILES BY EPA METHOD 8270D

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Phenol	mg/kg (ppm)	1.7	98	91	51-119	7
Bis(2-chloroethyl) ether	mg/kg (ppm)	1.7	100	93	60-112	7
2-Chlorophenol	mg/kg (ppm)	1.7	96	90	59-114	6
1,3-Dichlorobenzene	mg/kg (ppm)	1.7	95	87	62-113	9
1,4-Dichlorobenzene	mg/kg (ppm)	1.7	96	88	61-114	9
1,2-Dichlorobenzene	mg/kg (ppm)	1.7	97	88	61-113	10
Benzyl alcohol	mg/kg (ppm)	1.7	103	97	50-119	6
Bis(2-chloroisopropyl) ether	mg/kg (ppm)	1.7	111	102	59-113	8
2-Methylphenol	mg/kg (ppm)	1.7	95	91	58-115	4
Hexachloroethane	mg/kg (ppm)	1.7	95	87	63-114	9
N-Nitroso-di-n-propylamine	mg/kg (ppm)	1.7	101	97	62-114	4
3-Methylphenol + 4-Methylphenol	mg/kg (ppm)	1.7	99	94	54-120	5
Nitrobenzene	mg/kg (ppm)	1.7	104	96	59-114	8
Isophorone	mg/kg (ppm)	1.7	109	102	61-113	7
2-Nitrophenol	mg/kg (ppm)	1.7	104	98	59-114	6
2,4-Dimethylphenol	mg/kg (ppm)	1.7	77	78	54-107	1
Benzoic acid	mg/kg (ppm)	2.5	127	112	43-150	13
Bis(2-chloroethoxy)methane	mg/kg (ppm)	1.7	104	96	60-114	8
2,4-Dichlorophenol	mg/kg (ppm)	1.7	106	98	57-118	8
1,2,4-Trichlorobenzene	mg/kg (ppm)	1.7	100	91	56-112	9
Hexachlorobutadiene	mg/kg (ppm)	1.7	103	93	60-116	10
4-Chloroaniline	mg/kg (ppm)	3.3	73	67	10-126	9
4-Chloro-3-methylphenol	mg/kg (ppm)	1.7	112	104	59-115	7
2-Methylnaphthalene	mg/kg (ppm)	1.7	106	99	60-115	7
Hexachlorocyclopentadiene	mg/kg (ppm)	1.7	108 vo	96	41-107	12
2,4,6-Trichlorophenol	mg/kg (ppm)	1.7	109	102	47-119	7
2,4,5-Trichlorophenol	mg/kg (ppm)	1.7	113	105	61-121	7
2-Chloronaphthalene	mg/kg (ppm)	1.7	104	99	58-114	5
2-Nitroaniline	mg/kg (ppm)	1.7	115	111	55-119	4
Dimethyl phthalate	mg/kg (ppm)	1.7	112	108	58-116	4
2,6-Dinitrotoluene	mg/kg (ppm)	1.7	113	110	57-119	3
3-Nitroaniline	mg/kg (ppm)	3.3	100	96	10-143	4
2,4-Dinitrophenol	mg/kg (ppm)	1.7	108	103	40-122	5
Dibenzofuran	mg/kg (ppm)	1.7	107	102	56-115	5
2,4-Dinitrotoluene	mg/kg (ppm)	1.7	120	116	53-126	3
4-Nitrophenol	mg/kg (ppm)	1.7	121	112	40-124	8
Diethyl phthalate	mg/kg (ppm)	1.7	109	104	57-116	5
4-Chlorophenyl phenyl ether	mg/kg (ppm)	1.7	109	104	54-119	5
N-Nitrosodiphenylamine	mg/kg (ppm)	1.7	104	103	54-113	1
4-Nitroaniline	mg/kg (ppm)	3.3	106	106	47-109	0
4,6-Dinitro-2-methylphenol	mg/kg (ppm)	1.7	113 vo	110 vo	57-108	3
4-Bromophenyl phenyl ether	mg/kg (ppm)	1.7	109	105	56-116	4
Hexachlorobenzene	mg/kg (ppm)	1.7	105	104	57-115	1
Pentachlorophenol	mg/kg (ppm)	1.7	125 vo	122	45-123	2
Carbazole	mg/kg (ppm)	1.7	105	104	57-116	1
Di-n-butyl phthalate	mg/kg (ppm)	1.7	118	114	56-118	3
Benzyl butyl phthalate	mg/kg (ppm)	1.7	119	113	56-122	5
Bis(2-ethylhexyl) phthalate	mg/kg (ppm)	1.7	122	116	56-125	5
Di-n-octyl phthalate	mg/kg (ppm)	1.7	106	96	58-120	10

Date of Report: 08/21/13
Date Received: 07/24/13
Project: Crowley RIFS, 8th Ave Terminals 101.00205.00030, F&BI 307357

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR PNA'S BY EPA METHOD 8270D SIM

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Naphthalene	mg/kg (ppm)	0.17	85	90	58-121	6
Acenaphthylene	mg/kg (ppm)	0.17	93	98	54-121	5
Acenaphthene	mg/kg (ppm)	0.17	89	94	54-123	5
Fluorene	mg/kg (ppm)	0.17	94	98	56-127	4
Phenanthrene	mg/kg (ppm)	0.17	91	94	55-122	3
Anthracene	mg/kg (ppm)	0.17	88	92	50-120	4
Fluoranthene	mg/kg (ppm)	0.17	96	97	54-129	1
Pyrene	mg/kg (ppm)	0.17	98	104	53-127	6
Benz(a)anthracene	mg/kg (ppm)	0.17	91	92	51-115	1
Chrysene	mg/kg (ppm)	0.17	95	101	55-129	6
Benzo(b)fluoranthene	mg/kg (ppm)	0.17	99	105	56-123	6
Benzo(k)fluoranthene	mg/kg (ppm)	0.17	84	86	54-131	2
Benzo(a)pyrene	mg/kg (ppm)	0.17	78	80	51-118	3
Indeno(1,2,3-cd)pyrene	mg/kg (ppm)	0.17	90	94	49-148	4
Dibenz(a,h)anthracene	mg/kg (ppm)	0.17	88	91	50-141	3
Benzo(g,h,i)perylene	mg/kg (ppm)	0.17	87	91	52-131	4

Date of Report: 08/21/13
Date Received: 07/24/13
Project: Crowley RIFS, 8th Ave Terminals 101.00205.00030, F&BI 307357

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR POLYCHLORINATED BIPHENYLS AS AROCLOR 1016/1260 BY EPA METHOD 8082A

Laboratory Code: 307357-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	<0.033	<0.033	nm
Aroclor 1260	mg/kg (ppm)	<0.033	<0.033	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Aroclor 1016	mg/kg (ppm)	0.8	88	93	70-130	6
Aroclor 1260	mg/kg (ppm)	0.8	92	95	70-130	3

Date of Report: 08/21/13
Date Received: 07/24/13
Project: Crowley RIFS, 8th Ave Terminals 101.00205.00030, F&BI 307357

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR TOTAL METALS USING EPA METHOD 200.8

Laboratory Code: 307331-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Beryllium	mg/kg (ppm)	5	0.155	74	62 vo	67-138	18
Chromium	mg/kg (ppm)	50	12.9	62 b	60 b	57-128	3 b
Nickel	mg/kg (ppm)	25	13.2	58 b	69 b	69-112	17 b
Copper	mg/kg (ppm)	50	24.7	61 b	61 b	57-120	0 b
Zinc	mg/kg (ppm)	50	42.6	78 b	61 b	55-129	24 b
Arsenic	mg/kg (ppm)	10	12.5	94 b	121 b	70-118	25 b
Selenium	mg/kg (ppm)	5	<0.920	88	85	64-117	3
Silver	mg/kg (ppm)	10	0.0990	103	107	73-122	4
Cadmium	mg/kg (ppm)	10	<0.200	106	108	83-116	2
Antimony	mg/kg (ppm)	20	0.722	69	73	54-116	6
Barium	mg/kg (ppm)	50	31.0	111 b	113 b	60-141	2 b
Thallium	mg/kg (ppm)	5	<0.0440	96	98	68-121	2
Lead	mg/kg (ppm)	50	11.6	107 b	107 b	59-148	0 b

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Beryllium	mg/kg (ppm)	5	114	69-146
Chromium	mg/kg (ppm)	50	103	78-121
Nickel	mg/kg (ppm)	25	100	82-122
Copper	mg/kg (ppm)	50	99	82-119
Zinc	mg/kg (ppm)	50	100	81-120
Arsenic	mg/kg (ppm)	10	93	83-113
Selenium	mg/kg (ppm)	5	94	84-115
Silver	mg/kg (ppm)	10	100	81-116
Cadmium	mg/kg (ppm)	10	100	54-114
Antimony	mg/kg (ppm)	20	106	69-114
Barium	mg/kg (ppm)	50	98	85-116
Thallium	mg/kg (ppm)	5	96	77-123
Lead	mg/kg (ppm)	50	101	80-120

Date of Report: 08/21/13
Date Received: 07/24/13
Project: Crowley RIFS, 8th Ave Terminals 101.00205.00030, F&BI 307357

QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL/SEDIMENT SAMPLES FOR TOTAL MERCURY USING EPA METHOD 1631E

Laboratory Code: 307331-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Percent Recovery MSD	Acceptance Criteria	RPD (Limit 20)
Mercury	mg/kg (ppm)	0.125	0.13	101	100	62-140	1

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Mercury	mg/kg (ppm)	0.125	100	63-131

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 – More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc – The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j – The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc – The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr – The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

August 1, 2013

Michele Costales Poquiz
Friedman & Bruya
3012 16th Ave W
Seattle, WA 98119

RE: Project: 307357
ARI Job No.: WY67

Dear Michele:

Please find enclosed the Chain-of-Custody record (COC), sample receipt documentation, and the final data for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted one sediment sample on July 25, 2013, under ARI job WY67. For further details regarding sample receipt, please refer to the enclosed Cooler Receipt Form.

The sample was analyzed for TOC, as requested on the COC.

There were no anomalies associated with the analysis of this sample.

An electronic copy of this report and all associated raw data will be kept on file at ARI. Should you have any questions or concerns, please feel free to call me at your convenience.

Respectfully,
ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com
www.arilabs.com

cc: eFile WY67

Enclosures

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

WY60+

SAMPLE CHAIN OF CUSTODY

Send Report To Michele Costales Poquiz

Company Friedman & Bruya, Inc.

Address 3012 16th Ave. W.

City, State, ZIP Seattle, WA 98119

Phone # (206) 285-8282 Fax # (206) 283-5044

Email Address mpoquiz@friedmanandbruya.com

SUBCONTRACTOR
Analytical Resources, Inc. (ARI)

PROJECT NAME/NO.: 307357

PO #: C-483

REMARKS

Please e-mail results

ELECTRONIC DATA REQUESTED (EIM)

Page # 1 of 1

TURNAROUND TIME
- [x] Standard Turnaround
- [ ] RUSH
- Rush charges authorized by:

SAMPLE DISPOSAL
- [ ] Dispose after 30 days
- [ ] Return samples
- [ ] Will call with instructions

Samples Received at ____ °C

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	Hexavalent Cr by 7196A	Total Organic Carbon by 9060M				Notes
IS-5		7/24/13	1200	sediment	1								X				

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: Michele Costales Poquiz	Michele Costales Poquiz	F&B	7/25/13	8:22AM
Received by:	A. Volgardsen	ARI	7/25/13	1100
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC SLRC.DOC

Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Friedman + Bruya

Project Name: _____

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: Postal Express

Assigned ARI Job No. WY167

Tracking No: 4538993 NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry). ... 5.6 ____ ____ ____

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90877152

Cooler Accepted by: AV Date: 7/25/13 Time: 1100

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: ____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	(NA)	YES	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)	____	

Was Sample Split by ARI: (NA) YES Date/Time ____ Equipment ____ Split by: ____

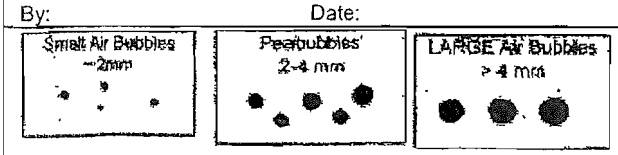
Samples Logged by: AV Date: 7/25/13 Time: 1127

*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"	
Peabubbles → "pb"	
Large → "lg"	
Headspace → "hs"	

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: WY67
Client: Friedman and Bruya, Inc
Project Event: 307357
Project Name: N/A

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	IS-5	WY67A	13-15593	Sediment	07/24/13 12:00	07/25/13 11:00

SAMPLE RESULTS-CONVENTIONALS
WY67-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/31/13

Project: NA
Event: 307357
Date Sampled: 07/24/13
Date Received: 07/25/13

Client ID: IS-5
ARI ID: 13-15593 WY67A

Analyte	Date	Method	Units	RL	Sample
Total Solids	07/25/13 072513#1	SM2540B	Percent	0.01	45.58
Total Organic Carbon	07/29/13 072913#1	EPA 9060M	Percent	0.020	3.05

RL Analytical reporting limit
U Undetected at reported detection limit

LAB CONTROL RESULTS-CONVENTIONALS
WY67-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/31/13

Project: NA
Event: 307357
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Organic Carbon EPA 9060M	ICVL	07/29/13	Percent	0.092	0.100	92.0%

METHOD BLANK RESULTS-CONVENTIONALS
WY67-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/31/13

Project: NA
Event: 307357
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank	QC ID
Total Solids	07/25/13	Percent	< 0.01 U	ICB
Total Organic Carbon	07/29/13	Percent	< 0.020 U	ICB

STANDARD REFERENCE RESULTS-CONVENTIONALS
WY67-Friedman and Bruya, Inc

ANALYTICAL RESOURCES INCORPORATED

Matrix: Sediment
Data Release Authorized:
Reported: 07/31/13

Project: NA
Event: 307357
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST 1941B	07/29/13	Percent	2.56	2.99	85.6%

Budinger
& Associates

Geotechnical Engineering
Environmental Engineering
Construction Materials Testing
Subsurface Exploration
Special Inspection

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AUG 12 2013

Proudly serving the Inland Northwest for over 30 years

Michele Costales Porquiz
Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119

August 7, 2013

Project Number L13378

PROJECT: 307357 Soils
Seattle, WA

SUBJECT: Results of Laboratory Testing
Report # 1

At your request, we provided laboratory testing services for the subject project. Services were limited to the performance of specific laboratory tests, selected at your discretion.

For this period our involvement was limited to laboratory testing of one sample delivered to us on July 26, 2013. Laboratory tests were performed in general accordance with methods listed on the attached *Laboratory Summary* and *Particle Size Distribution* sheets.

If you have any questions, please call.

Respectfully Submitted,
BUDINGER & ASSOCIATES, INC.

Kyle L. Sanford
Mgr. Construction Services

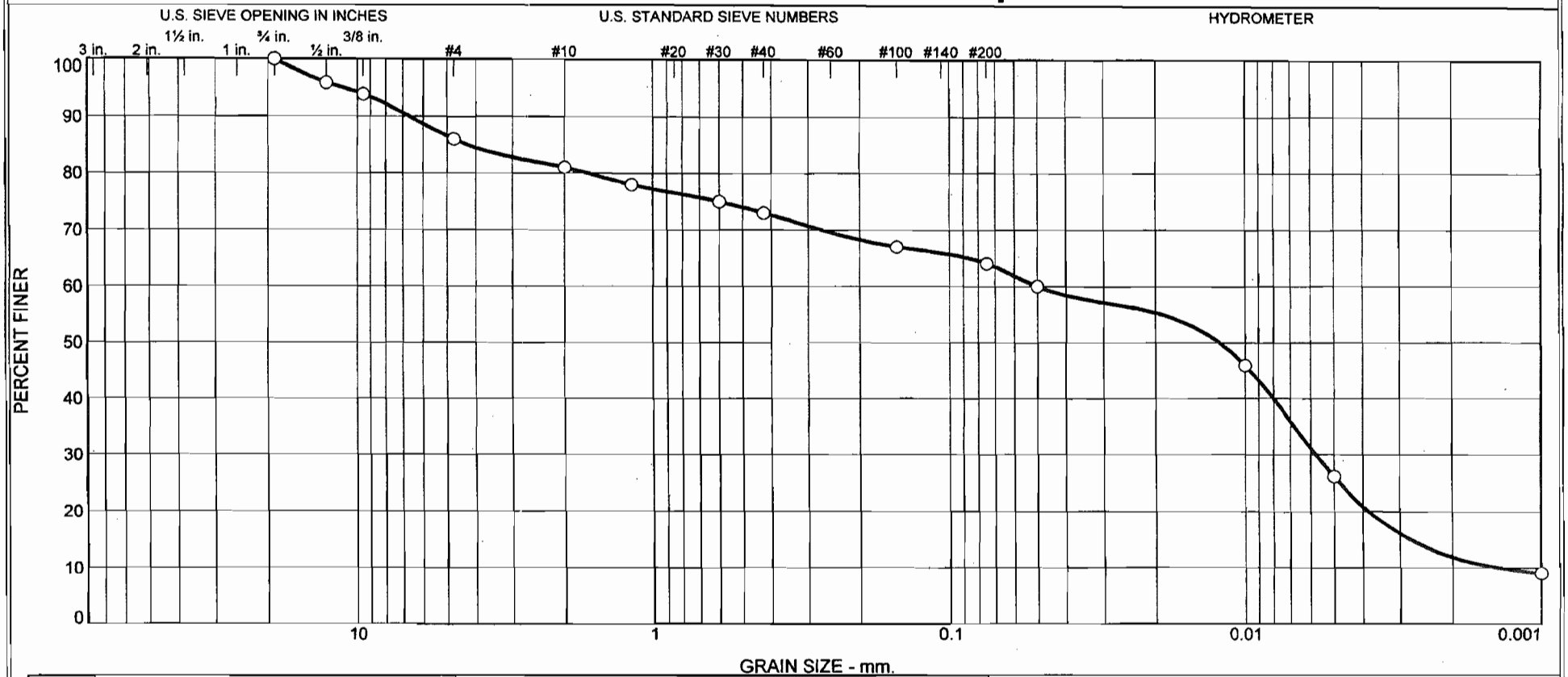
KLS/kh
Addressee – 2
Attachments:
- Soils - Laboratory Summary (1 page)
- Particle Size Distribution (1 page)

1101 North Fancher Road
Spokane Valley, WA 99212
Tel: 509-535-8841
Fax:509-535-9589

SOILS
LABORATORY SUMMARY

LABORATORY NUMBER				13-0636
SAMPLE NUMBER				1
SAMPLED BY				Client
SAMPLE TYPE				Bulk
DATE RECEIVED				7/26/13
CLIENT SAMPLE ID				IS-5
		Units	Test Method	
SIEVE ANALYSIS			ASTM D-422	
	3/4"			100
S	1/2"	%		96
I	3/8"			94
E	#4	P		86
V	#10	A		81
E	#16	S		78
	#30	S		75
S	#40	I		73
I	#100	N		67
Z	#200	G		64
E	.05mm			60
	.01mm			46
	.005mm			26
	.001mm			9

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	14	5	8	9	38	26

	Identification	Date Sampled	Date Received	Date Tested
○	Source of Sample: on site Sample Number: 1 (13-0636)	7/24/13	7/26/13	7/30/13

Client Friedman & Bruya, Inc.

Project 307357 Soils

Project No. L13378 Date 8/2/13

BUDINGER & ASSOCIATES, INC.

○ Sampled by Client, sample ID IS-5

Tested By: KB **Checked By:** TB

307357

SAMPLE CHAIN OF CUSTODY

KJ 07/24/13 BT2

Page # 1 of 1

Send Report To Mike Staton

Company SLR International Corp.

Address 22118 20th Ave SE, G202

City, State, ZIP Bothell, WA 98021

Phone # 425-402-8800 Fax # 425-402-8488

SAMPLERS (signature)

PROJECT NAME/NO. Crowley RIFS 8th Ave Terminals 101.00205.00030

PO# 101.00205.00030

REMARKS NWTPH-Dx after silica gel cleanup

TURNAROUND TIME
- ☒ Standard (2 Weeks)
- ☐ RUSH
- Rush charges authorized by

SAMPLE DISPOSAL
- ☐ Dispose after 30 days
- ☐ Return samples
- ☒ Will call with instructions

Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type per Amanda M. 7/24/13	# of containers	TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by8260	SVOCs by 8270D	HFS	Priority Pollutant Metals+Sb by 200.8	Mercury by 1631E	PAHs by 8270D SIM	PCBs by 8082A	Grain Size by ASTM D-422	TOC by 9060	Notes
IS-5	01 A-F	7/24/13	1200	sediment ~~Soil~~	6	X				X		X	X	X	X	X	X	
~~IS-6~~																		

Samples received at 3 °C

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by:	Amanda Mengriot	SLR	7/24/13	1300
Received by:	Nhan Phan	FeBT	7/24/13	1300
Relinquished by:				
Received by:				

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119-2029
Ph. (206) 285-8282
Fax (206) 283-5044

FORMS\COC\COC.DOC

SGS

ANALYTICAL PERSPECTIVES

7 August 2013

Mike Staton
SLR Consulting
22118 20th Ave SE
Suite G202
Bothell, WA 98021

Ph.: 425-402-8800
Email: mstaton@slrconsulting.com

Subject: Certificate of Results

Dear Mike;

Attached to this narrative are the analytical results you requested on the samples submitted for the determination of polychlorinated dibenzo-*p*-dioxins and dibenzofurans. The insert below summarizes the relevant information pertaining to your project. In particular, QC annotations bring to your attention specific analytical observations and assessments made during the sample handling and data interpretation phases. Results reported relate only to the items tested.

Project Information Summary	When applicable, see QC Annotations for details
Client Project No.	Crowley RIFS 101.00205.00030
AP Project #	**A5767**
Analytical Protocol	Method 8290
No. Samples Submitted	5
No. Samples Analyzed	5
No. Laboratory Method Blanks	1
No. OPRs / Batch CS3	1
No. Outstanding Samples	0
Date Received	26-Jul-2013
Condition Received	good
Temperature upon Receipt (C)	3
Extraction within Holding Time	yes
Analysis within Holding Time	yes
Data meet QA/QC Requirements	yes
Exceptions	none
Analytical Difficulties	none

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QC Annotations:

Please see Appendix A & B attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

Analytical Perspectives Certification IDs:

SOUTH CAROLINA	99054
ARKANSAS	88-0628
NEW JERSEY-NELAP SECONDARY	NC005
FLORIDA-NELAP PRIMARY	E87608
LOUISIANA	4024
NORTH CAROLINA	37783
WASHINGTON	C2027
NEW YORK	11988
VIRGINIA	460180
MINNESOTA	037-999-448
OREGON	pending
TEXAS	T104704484-10-1
PENNSYLVANIA-NELAP SECONDARY	68-01849

SGS Analytical Perspectives remains committed to serving you in the most effective manner. Should you have any questions or need additional information and technical support, please do not hesitate to contact us.

The management and staff of SGS Analytical Perspectives welcomes customer feedback, both positive and negative, as we continually improve our services. Please visit our web site at www.ultratrace.com and click on the 'Leave Your Feedback Here!' link on the Home Page. Thank you for choosing SGS Analytical Perspectives.

Sincerely,

Heather Distel

Heather Distel, Ph.D.
Senior Project Scientist/Team Lead

APPENDIX A: DATA QUALIFIERS / DATA ATTRIBUTES	
>	Indicates high recoveries. Shown with the numeric value at the top of the range.[1]
B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve).
EMPC	Represents an Estimated Maximum Possible Concentration. EMPC's arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
ETH	Indicates the presence of a diphenyl ether that appears to interfere with the quantitation of a furan. The reported concentration is the maximum.
H/h	If the standard recovery is below the method or SOP specified value "H" is assigned. If the obtained value is less than half the specified value "h" is assigned.[1]
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve).
ND	Indicates a non-detect.
NR	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes "Single Ion Mode" and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.[1]
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.
X	Indicates results reported from reinjection, refractionation, or repeat analyses.
APPENDIX B: LAB ID IDENTIFIERS	
AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.

[1]Denotes data qualifiers/attributes whose use will be phased out over time

Sample ID: Method Blank — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	SLR International Corporation	Matrix:	Solids	Lab Project ID:	A5767	Date Received:	n/a
Project ID:	Crowley RIFS 101.00205.00030	Weight/Volume:	0.0100 Kg	Lab Sample ID	MB1_11183_DF_SDS	Date Extracted:	29-Jul-2013
Date Collected:	n/a	% Solids:	100.0 %	QC Batch No:	11183	Date Analyzed:	05-Aug-2013
		Split:	-	Dilution:	-	Time Analyzed:	07:42:45

Analyte	Conc. (pg/Kg)	DL (pg/Kg)	EMPC (pg/Kg)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	66.5			ES 2378-TCDD	94.8	
12378-PeCDD	ND	68.2			ES 12378-PeCDD	90.2	
123478-HxCDD	ND	51.7			ES 123478-HxCDD	91.3	
123678-HxCDD	ND	56.6			ES 123678-HxCDD	89.1	
123789-HxCDD	EMPC		79.8	J	ES 123789-HxCDD	91.7	
1234678-HpCDD	81.5			J	ES 1234678-HpCDD	84.1	
OCDD	EMPC		401	J	ES OCDD	65.8	
2378-TCDF	ND	44.2			ES 2378-TCDF	94.8	
12378-PeCDF	ND	49.9			ES 12378-PeCDF	92.6	
23478-PeCDF	ND	46.9			ES 23478-PeCDF	91.2	
123478-HxCDF	ND	48.4			ES 123478-HxCDF	88.3	
123678-HxCDF	ND	45.2			ES 123678-HxCDF	88	
234678-HxCDF	ND	45.9			ES 234678-HxCDF	87.8	
123789-HxCDF	ND	55.3			ES 123789-HxCDF	90.4	
1234678-HpCDF	ND	54.2			ES 1234678-HpCDF	83.1	
1234789-HpCDF	ND	62.7			ES 1234789-HpCDF	85.5	
OCDF	ND	78.1			ES OCDF	73.5	
Totals					**Standard**	**CS/AS Recoveries**	
					CS 37Cl-2378-TCDD	89.4	
Total TCDD	ND	66.5	ND		CS 12347-PeCDD	91.6	
Total PeCDD	ND	68.2	ND		CS 12346-PeCDF	92.1	
Total HxCDD	ND		79.8		CS 123469-HxCDF	90.6	
Total HpCDD	211		211		CS 1234689-HpCDF	84.5	
					AS 1368-TCDD	94.6	
Total TCDF	ND	44.2	ND		AS 1368-TCDF	99.6	
Total PeCDF	ND	48.4	ND				
Total HxCDF	ND	48.4	ND				
Total HpCDF	ND	58.2	ND				
Total PCDD/Fs	**211**		**692**				
WHO-2005 TEQs							
TEQ: ND=0	0.815		8.92				
TEQ: ND=DL/2	96.6	96.1	102				
TEQ: ND=DL	192	192	195				

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Sample ID: IS-1 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	SLR International Corporation	Matrix:	Solids	Lab Project ID:	A5767	Date Received:	26-Jul-2013
Project ID:	Crowley RIFS 101.00205.00030	Weight/Volume:	0.0100 Kg	Lab Sample ID	A5767_11183_DF_001	Date Extracted:	29-Jul-2013
Date Collected:	23-Jul-2013	% Solids:	41.5 %	QC Batch No:	11183	Date Analyzed:	05-Aug-2013
		Split:	-	Dilution:	-	Time Analyzed:	08:35:25

Analyte	Conc. (pg/Kg)	DL (pg/Kg)	EMPC (pg/Kg)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	EMPC		503		ES 2378-TCDD	92.2	
12378-PeCDD	1930			J	ES 12378-PeCDD	86.6	
123478-HxCDD	3620				ES 123478-HxCDD	88.9	
123678-HxCDD	10900				ES 123678-HxCDD	88.9	
123789-HxCDD	7830				ES 123789-HxCDD	84.7	
1234678-HpCDD	333000				ES 1234678-HpCDD	85.5	
OCDD	3350000				ES OCDD	79.1	
2378-TCDF	2310				ES 2378-TCDF	95.5	
12378-PeCDF	2080			J	ES 12378-PeCDF	89.8	
23478-PeCDF	4130				ES 23478-PeCDF	90.6	
123478-HxCDF	6120				ES 123478-HxCDF	85.2	
123678-HxCDF	2990				ES 123678-HxCDF	84.1	
234678-HxCDF	3690				ES 234678-HxCDF	85.5	
123789-HxCDF	ND	200			ES 123789-HxCDF	89.9	
1234678-HpCDF	47000				ES 1234678-HpCDF	88.4	
1234789-HpCDF	4110				ES 1234789-HpCDF	85.4	
OCDF	148000				ES OCDF	77.1	
Totals					**Standard**	**CS/AS Recoveries**	
					CS 37Cl-2378-TCDD	86.9	
Total TCDD	5710		7400		CS 12347-PeCDD	85.5	
Total PeCDD	17000		17400		CS 12346-PeCDF	88.8	
Total HxCDD	119000		119000		CS 123469-HxCDF	83.9	
Total HpCDD	1130000		1130000		CS 1234689-HpCDF	81.8	
					AS 1368-TCDD	91.8	
Total TCDF	38000		39200		AS 1368-TCDF	99.9	
Total PeCDF	42600		42800				
Total HxCDF	79800		79800				
Total HpCDF	150000		150000				
Total PCDD/Fs	**5090000**		**5090000**				
WHO-2005 TEQs							
TEQ: ND=0	11900		12400				
TEQ: ND=DL/2	11900	272	12400				
TEQ: ND=DL	12000	543	12400				

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Sample ID: IS-2 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	SLR International Corporation	Matrix:	Solids	Lab Project ID:	A5767	Date Received:	26-Jul-2013
Project ID:	Crowley RIFS 101.00205.00030	Weight/Volume:	0.0100 Kg	Lab Sample ID	A5767_11183_DF_002	Date Extracted:	29-Jul-2013
Date Collected:	23-Jul-2013	% Solids:	53.1 %	QC Batch No:	11183	Date Analyzed:	05-Aug-2013
		Split:	-	Dilution:	-	Time Analyzed:	09:27:58

Analyte	Conc. (pg/Kg)	DL (pg/Kg)	EMPC (pg/Kg)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	854				ES 2378-TCDD	92.1	
12378-PeCDD	3220				ES 12378-PeCDD	90.6	
123478-HxCDD	6380				ES 123478-HxCDD	87.2	
123678-HxCDD	24100				ES 123678-HxCDD	85.4	
123789-HxCDD	12900				ES 123789-HxCDD	85.4	
1234678-HpCDD	803000				ES 1234678-HpCDD	91.3	
OCDD	7370000				ES OCDD	94.8	
2378-TCDF	2310				ES 2378-TCDF	94.5	
12378-PeCDF	2180			J	ES 12378-PeCDF	93.4	
23478-PeCDF	5570				ES 23478-PeCDF	92.1	
123478-HxCDF	8560				ES 123478-HxCDF	85.5	
123678-HxCDF	4940				ES 123678-HxCDF	80.4	
234678-HxCDF	7030				ES 234678-HxCDF	84.7	
123789-HxCDF	ND	214			ES 123789-HxCDF	88.6	
1234678-HpCDF	130000				ES 1234678-HpCDF	90.8	
1234789-HpCDF	10800				ES 1234789-HpCDF	87.9	
OCDF	804000				ES OCDF	89.8	
Totals					**Standard**	**CS/AS Recoveries**	
					CS 37Cl-2378-TCDD	89	
Total TCDD	9070		9500		CS 12347-PeCDD	86.2	
Total PeCDD	21400		22100		CS 12346-PeCDF	91.9	
Total HxCDD	218000		218000		CS 123469-HxCDF	83.9	
Total HpCDD	2380000		2380000		CS 1234689-HpCDF	91.6	
					AS 1368-TCDD	91	
Total TCDF	38400		39400		AS 1368-TCDF	90.2	
Total PeCDF	60700		61300				
Total HxCDF	170000		170000				
Total HpCDF	524000		524000				
Total PCDD/Fs	**11600000**		**11600000**				
WHO-2005 TEQs							
TEQ: ND=0	24300		24300				
TEQ: ND=DL/2	24300	265	24300				
TEQ: ND=DL	24300	530	24300				

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Sample ID: IS-3 — Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	SLR International Corporation	Matrix:	Solids	Lab Project ID:	A5767	Date Received:	26-Jul-2013
Project ID:	Crowley RIFS 101.00205.00030	Weight/Volume:	0.0100 Kg	Lab Sample ID	A5767_11183_DF_003	Date Extracted:	29-Jul-2013
Date Collected:	23-Jul-2013	% Solids:	41.5 %	QC Batch No:	11183	Date Analyzed:	05-Aug-2013
		Split:	-	Dilution:	-	Time Analyzed:	10:20:32

Analyte	Conc. (pg/Kg)	DL (pg/Kg)	EMPC (pg/Kg)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	EMPC		502		ES 2378-TCDD	97.8	
12378-PeCDD	2170			J	ES 12378-PeCDD	95	
123478-HxCDD	3750				ES 123478-HxCDD	91.2	
123678-HxCDD	13700				ES 123678-HxCDD	91.4	
123789-HxCDD	7390				ES 123789-HxCDD	92.2	
1234678-HpCDD	399000				ES 1234678-HpCDD	95.8	
OCDD	3390000				ES OCDD	93.7	
2378-TCDF	2030				ES 2378-TCDF	104	
12378-PeCDF	1640			J	ES 12378-PeCDF	101	
23478-PeCDF	4140				ES 23478-PeCDF	101	
123478-HxCDF	6530				ES 123478-HxCDF	90.4	
123678-HxCDF	3470				ES 123678-HxCDF	86.2	
234678-HxCDF	4560				ES 234678-HxCDF	89.3	
123789-HxCDF	ND	166			ES 123789-HxCDF	93.9	
1234678-HpCDF	63600				ES 1234678-HpCDF	92.9	
1234789-HpCDF	5090				ES 1234789-HpCDF	94.7	
OCDF	240000				ES OCDF	93.1	
Totals					**Standard**	**CS/AS Recoveries**	
					CS 37Cl-2378-TCDD	95.9	
Total TCDD	6870		7870		CS 12347-PeCDD	93.5	
Total PeCDD	17500		17500		CS 12346-PeCDF	96	
Total HxCDD	121000		121000		CS 123469-HxCDF	91.1	
Total HpCDD	1060000		1060000		CS 1234689-HpCDF	94.1	
					AS 1368-TCDD	97.3	
Total TCDF	34900		35700		AS 1368-TCDF	103	
Total PeCDF	43900		43900				
Total HxCDF	101000		101000				
Total HpCDF	224000		224000				
Total PCDD/Fs	**5240000**		**5240000**				
WHO-2005 TEQs							
TEQ: ND=0	13400		13900				
TEQ: ND=DL/2	13400	214	13900				
TEQ: ND=DL	13500	428	13900				

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Sample ID: IS-4

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	SLR International Corporation	Matrix:	Solids	Lab Project ID:	A5767	Date Received:	26-Jul-2013
Project ID:	Crowley RIFS 101.00205.00030	Weight/Volume:	0.0106 Kg	Lab Sample ID	A5767_11183_DF_004	Date Extracted:	29-Jul-2013
Date Collected:	23-Jul-2013	% Solids:	49.7 %	QC Batch No:	11183	Date Analyzed:	05-Aug-2013
		Split:	-	Dilution:	-	Time Analyzed:	11:13:03

Analyte	Conc. (pg/Kg)	DL (pg/Kg)	EMPC (pg/Kg)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	917				ES 2378-TCDD	94.4	
12378-PeCDD	EMPC		3620		ES 12378-PeCDD	96.6	
123478-HxCDD	8080				ES 123478-HxCDD	90.8	
123678-HxCDD	25300				ES 123678-HxCDD	89.5	
123789-HxCDD	13100				ES 123789-HxCDD	89	
1234678-HpCDD	823000				ES 1234678-HpCDD	96.1	
OCDD	8110000				ES OCDD	95	
2378-TCDF	4930				ES 2378-TCDF	96.5	
12378-PeCDF	4750				ES 12378-PeCDF	95.6	
23478-PeCDF	8040				ES 23478-PeCDF	96.1	
123478-HxCDF	10200				ES 123478-HxCDF	84.5	
123678-HxCDF	6000				ES 123678-HxCDF	85.4	
234678-HxCDF	7480				ES 234678-HxCDF	87.7	
123789-HxCDF	ND	224			ES 123789-HxCDF	88.1	
1234678-HpCDF	104000				ES 1234678-HpCDF	87.9	
1234789-HpCDF	8130				ES 1234789-HpCDF	89.4	
OCDF	335000				ES OCDF	88.1	
Totals					**Standard**	**CS/AS Recoveries**	
					CS 37Cl-2378-TCDD	91.1	
Total TCDD	14900		15500		CS 12347-PeCDD	94.4	
Total PeCDD	25600		29900		CS 12346-PeCDF	93.9	
Total HxCDD	256000		256000		CS 123469-HxCDF	89	
Total HpCDD	2820000		2820000		CS 1234689-HpCDF	96	
					AS 1368-TCDD	94.7	
Total TCDF	73300		74500		AS 1368-TCDF	97.3	
Total PeCDF	89400		89400				
Total HxCDF	168000		168000				
Total HpCDF	349000		349000				
Total PCDD/Fs	**12200000**		**12200000**				
WHO-2005 TEQs							
TEQ: ND=0	22900		26500				
TEQ: ND=DL/2	23000	297	26500				
TEQ: ND=DL	23100	594	26500				

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Sample ID: IS-5

Method 8290A

Client Data		Sample Data		Laboratory Data			
Name:	SLR International Corporation	Matrix:	Solids	Lab Project ID:	A5767	Date Received:	26-Jul-2013
Project ID:	Crowley RIFS 101.00205.00030	Weight/Volume:	0.0100 Kg	Lab Sample ID	A5767_11183_DF_005	Date Extracted:	29-Jul-2013
Date Collected:	24-Jul-2013	% Solids:	44.2 %	QC Batch No:	11183	Date Analyzed:	05-Aug-2013
		Split:	-	Dilution:	-	Time Analyzed:	12:05:37

Analyte	Conc. (pg/Kg)	DL (pg/Kg)	EMPC (pg/Kg)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	1120				ES 2378-TCDD	93.1	
12378-PeCDD	3190				ES 12378-PeCDD	93	
123478-HxCDD	6260				ES 123478-HxCDD	86.9	
123678-HxCDD	17200				ES 123678-HxCDD	87	
123789-HxCDD	10900				ES 123789-HxCDD	86.6	
1234678-HpCDD	489000				ES 1234678-HpCDD	88.8	
OCDD	3820000				ES OCDD	86.7	
2378-TCDF	5090				ES 2378-TCDF	95.2	
12378-PeCDF	2930				ES 12378-PeCDF	95.5	
23478-PeCDF	7450				ES 23478-PeCDF	94.2	
123478-HxCDF	11100				ES 123478-HxCDF	84.4	
123678-HxCDF	5980				ES 123678-HxCDF	80.9	
234678-HxCDF	6570				ES 234678-HxCDF	84.2	
123789-HxCDF	ND	204			ES 123789-HxCDF	89.1	
1234678-HpCDF	77000				ES 1234678-HpCDF	91	
1234789-HpCDF	6560				ES 1234789-HpCDF	88.3	
OCDF	248000				ES OCDF	82.5	
Totals					**Standard**	**CS/AS Recoveries**	
					CS 37Cl-2378-TCDD	89.9	
Total TCDD	11000		11300		CS 12347-PeCDD	90.6	
Total PeCDD	24000		24000		CS 12346-PeCDF	95.5	
Total HxCDD	161000		161000		CS 123469-HxCDF	86.6	
Total HpCDD	1260000		1260000		CS 1234689-HpCDF	86.3	
					AS 1368-TCDD	89.3	
Total TCDF	66300		67400		AS 1368-TCDF	93.7	
Total PeCDF	75400		75400				
Total HxCDF	133000		133000				
Total HpCDF	238000		238000				
Total PCDD/Fs	**6040000**		**6040000**				
WHO-2005 TEQs							
TEQ: ND=0	19900		19900				
TEQ: ND=DL/2	19900	282	19900				
TEQ: ND=DL	19900	564	19900				

SGS
Analytical Perspectives
2714 Exchange Drive
Wilmington, NC 28405 , USA
www.us.sgs.com
Tel: +1 910 794-1613; Toll-Free 866 846-8290; Fax: +1 910 794-3919

ANALYTICAL PERSPECTIVES

CHAIN-OF-CUSTODY RECORD

PROJECT ID: Crowley RIFS 101.00205.00030 P.O. No.: 101.00205.00030 SAMPLER: Amanda Mengriot (PRINTED NAME) (SIGNATURE)

RELINQUISHED BY: (SIGNATURE & PRINTED NAME)	DATE:	TIME:	RECEIVED BY: (SIGNATURE & PRINTED NAME)	DATE:	TIME:
Amanda Mengriot	7/25/13	1100			
RELINQUISHED BY: (SIGNATURE & PRINTED NAME)	DATE:	TIME:	RECEIVED BY: (SIGNATURE & PRINTED NAME)	DATE:	TIME:

PLEASE SEE NOTES ON THE BACK OF THE COC REGARDING THE SAMPLE ACCEPTANCE POLICY AND THE METHOD 8290 MS/MSD & DUP

REQUESTED TAT: 21 DAYS

SHIP TO: ANALYTICAL PERSPECTIVES
2714 EXCHANGE DRIVE
WILMINGTON, NC 28405
PH.: 910-794-1613

ATTN: YVES TONDEUR

METHOD OF SHIPMENT: Fed Ex

SHIPMENT ID:

QAPP REFERENCE: _____
SAMPLE ACCEPTANCE POLICY (ON BACK SIDE)

SAMPLE ID	DATE	TIME	SAMPLE DESCRIPTION	MS/MSD	DUP	METHOD 8290	METHOD 1613	METHOD 1668A	METHOD 1668 B	METHOD 1668 C	PAHS BY HRMS	QUANTIC	U-SVOA	WHO-2/WHO-2S		CONTAINER(S) QTY	CONTAINER(S) TYPE	MATRIX
IS-1	7/23/13	1225	4oz jar of intertidal sediment			X										1	4oz jar	SEDIMENT
IS-2	7/23/13	1300	↓			X										1	↓	↓
IS-3	7/23/13	1335	↓			X										1	↓	↓
IS-4	7/23/13	1350	↓			X										1	↓	↓
IS-5	7/24/13	1200	↓			X										1	↓	↓

SPECIAL INSTRUCTIONS/COMMENTS: (PLEASE CIRCLE OPTION BELOW)

"DF ONLY" "DF & PCB" "DF & PAH" "DF & PCB & PAH"

"TRI – OCTA" "2,3,7,8-TCDD & F ONLY" "2,3,7,8-TCDD ONLY"

PLEASE SPECIFY TEFs: (PLEASE CHECK BOXES BELOW)

☐ "ITEFS" ☐ "WHO-98" ☒ "WHO-05" ☐ "MA-TEFS" ☐ "CT-TEFS"

SEND DOCUMENTATION & RESULTS TO:

NAME: MIKE STATON
COMPANY: SLR INTERNATIONAL
ADDRESS: 22118 20th AVE SE G202
CITY: BOTHELL
STATE: WA ZIP: 98021
PH.: 425-402-8800
E-MAIL: mstaton@slrconsulting.com

BILL TO: (☒ CHECK IF SAME)

NAME:
COMPANY:
ADDRESS:
CITY:
STATE: ZIP:
PH.: