



Analytica Group, LLC-Thornton
12189 Pennsylvania Street
Thornton, CO 80241
Phone: 303-469-8868
Fax: 303-469-5254

6/18/2014

Maralex Resources, Inc.
864 20 Road
Unit A
Fruita, CO 81521
Attn: Jim Graves

Work Order #: B1405147
Date: 6/18/2014
Work ID: USA 1-14 HC
Date Received: 5/30/2014
Proj #: Soils

Sample Identification

Lab Sample Number	Client Description	Lab Sample Number	Client Description
B1405147-01	USA 1-14 H.C.		

Enclosed are the analytical results for the submitted sample(s). Please review the CASE NARRATIVE for a discussion of any data and/or quality control issues. Listings of data qualifiers, analytical codes, key dates, and QC relationships are provided at the end of the report.

Sincerely,

A handwritten signature in blue ink that reads "Carissa Cumine".

Carissa Cumine
Project Manager

"The Science of Analysis, The Art of Service"

Case Narrative

Analytica Group, LLC - Thornton

Work Order: B1405147

Samples were prepared and analyzed according to EPA or equivalent methods outlined in the following references:

Standard Method for Laboratory Determination of Water (Moisture) Content of Soil, Rock, and Soil-Aggregate Mixtures, ASTM D 2216-80, July 1980.

Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998.

Test Methods for Evaluating Solid Waste, USEPA SW-846, Third Edition, Revision 4, December 1996.

SAMPLE RECEIPT:

One (1) sample was received on 5/30/2014 11:00:00 AM at a temperature of 3.1°C at Analytica-Thornton. The sample was received in good condition and in order per chain of custody.

REVIEW FOR COMPLIANCE WITH ANALYTICA QA PLAN

A summary of our review is shown below.

All analytical results contained in this report have been reviewed under Analytica's internal quality assurance and quality control program. Any deviations in quality control parameters for specific analyses are noted in the following text. A complete quality assurance report, including laboratory control, matrix spike, and sample duplicate recoveries, is kept on file in our office and is available upon request.

All method specifications were met for the following tests, unless otherwise noted:

Test Method: Aromatic VOCs by GC/PID via method 8021B - BTEX - Soil
MS/MSD and DUP OUTLIERS:

A target was recovered outside the acceptance limits in the batch MS/MSD associated with this analysis. However, the sample spiked is not associated with this project.

Test Method: ASTM D2216 - Pmoist - Soil

Test Method: Corrosivity in Waste by pH - pH - Soil

Test Method: Specific Conductance - Cond. - Soil

Test Method: SVOC by GC/FID via method 8015B - DRO - Soil

Test Method: SW7471A - Mercury in Solid or Semisolid Waste by CVAA - Total Hg - Soil

Test Method: VOC by GC/FID via method 8015B - GRO - Soil

The following are subcontracted tests and have been represented to us as having met criteria:

Test Method: Chromium, Hexavalent (Colorimetric) - Cr(VI) - Soil

Test Method: SM3500-CrB - Chromium, Colorimetric Method - Total Cr(III) calculat - Soil

Test Method: Sodium Absorption Ratio - Soil

Test Method: SW6020 - ICPMS - Low Level Metals ALS-F - Soil

Test Method: SW8270C - Semivolatile Organics by GC/MS - SC - Soil

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147
Project: USA 1-14 HC
Client: Maralex Resources, Inc.
Client Project Number: Soils

Report Section: Client Sample Report

Client Sample Name: USA 1-14 H.C.

Matrix: Soil Collection Date: 5/28/2014 8:35:00AM

The following test was conducted by: Analytica - Thornton

Lab Sample Number:	B1405147-01B	Analysis Date:	6/6/2014 2:21:33AM
Prep Date:	06-03-2014 08:06	Instrument:	GC_E
Analytical Method ID:	SVOC by GC/FID via method 8015B - DRO	File Name:	14060514.D
Prep Method ID:	3550B	Dilution Factor:	1
Prep Batch Number:	T140603007	Percent Moisture	9.05
Report Basis:	Dry Weight Basis	Analyst Initials:	TL
Sample prep wt./vol:	9.96 g	Prep Extract Vol:	1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>		<u>run #:</u>			
Diesel Range Organics	n/a	600		mg/Kg	17	4.7		4			
<u>Surrogate</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Spike</u>	<u>% Recov</u>	<u>LCL</u>	<u>UCL</u>	<u>run #:</u>
o-Terphenyl	84-15-1	5.0		mg/Kg	1.1	0.87	5.5	90.0	50	150	4

The following test was conducted by: Analytica - Thornton

Lab Sample Number:	B1405147-01A	Analysis Date:	6/5/2014 3:04:39PM
Prep Date:	06-05-2014 11:06	Instrument:	Hank-Hg
Analytical Method ID:	SW7471A - Mercury in Solid or Semisolid Waste by CVAA - Total H	File Name:	060514s.CSV
Prep Method ID:	7471A	Dilution Factor:	10
Prep Batch Number:	T140603003	Percent Moisture	9.05
Report Basis:	Dry Weight Basis	Analyst Initials:	AC
Sample prep wt./vol:	0.62 g	Prep Extract Vol:	50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>		<u>run #:</u>
Mercury	7439-97-6	2.9		mg/Kg	0.44	0.061		1

The following test was conducted by: ALS Environmental Laboratory - F

Lab Sample Number:	B1405147-01D	Analysis Date:	
Prep Date:		Instrument:	
Analytical Method ID:	SW6020 - ICPMS - Low Level Metals ALS-F	File Name:	
Prep Method ID:		Dilution Factor:	
Prep Batch Number:	T140618029	Percent Moisture	
Report Basis:	As Received	Analyst Initials:	
Sample prep wt./vol:		Prep Extract Vol:	ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>		<u>run #:</u>
See Subcontractor Report								

The following test was conducted by: ALS Environmental Laboratory - F

Lab Sample Number:	B1405147-01D	Analysis Date:	
Prep Date:		Instrument:	
Analytical Method ID:	SW8270C - Semivolatile Organics by GC/MS - SC	File Name:	
Prep Method ID:	3550B	Dilution Factor:	
Prep Batch Number:	T140618026	Percent Moisture	
Report Basis:	As Received	Analyst Initials:	
Sample prep wt./vol:		Prep Extract Vol:	ml

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147
Project: USA 1-14 HC
Client: Maralex Resources, Inc.
Client Project Number: Soils

Report Section: Client Sample Report

Client Sample Name: USA 1-14 H.C.

Matrix: Soil Collection Date: 5/28/2014 8:35:00AM

Lab Sample Number: B1405147-01D Analysis Date:
Prep Date: Instrument:
Analytical Method ID: SW8270C - Semivolatile Organics by GC/MS - SC File Name:
Prep Method ID: 3550B Dilution Factor:
Prep Batch Number: T140618026 Percent Moisture
Report Basis: As Received Analyst Initials:
Sample prep wt./vol: Prep Extract Vol: ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>run #:</u>
See Subcontractor Report				ug/Kg			

The following test was conducted by: ALS Environmental Laboratory - F

Lab Sample Number: B1405147-01D Analysis Date:
Prep Date: Instrument:
Analytical Method ID: SW6010B - ICP - Total ICP Energy File Name:
Prep Method ID: 6010B Dilution Factor:
Prep Batch Number: T140618027 Percent Moisture
Report Basis: As Received Analyst Initials:
Sample prep wt./vol: Prep Extract Vol: ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>run #:</u>
See Subcontractor Report							

The following test was conducted by: ALS Environmental Laboratory - F

Lab Sample Number: B1405147-01D Analysis Date:
Prep Date: Instrument:
Analytical Method ID: Chromium, Hexavalent (Colorimetric) - Cr(VI) File Name:
Prep Method ID: 3060A Dilution Factor:
Prep Batch Number: T140618023 Percent Moisture
Report Basis: As Received Analyst Initials:
Sample prep wt./vol: Prep Extract Vol: ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>run #:</u>
See Subcontractor Report							

The following test was conducted by: ALS Environmental Laboratory - F

Lab Sample Number: B1405147-01D Analysis Date:
Prep Date: Instrument:
Analytical Method ID: Sodium Absorption Ratio File Name:
Prep Method ID: Dilution Factor:
Prep Batch Number: T140618022 Percent Moisture
Report Basis: As Received Analyst Initials:
Sample prep wt./vol: Prep Extract Vol: ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>run #:</u>
See Subcontractor Report				SAR			1

The following test was conducted by: Analytica - Thornton

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147
Project: USA 1-14 HC
Client: Maralex Resources, Inc.
Client Project Number: Soils

Report Section: Client Sample Report

Client Sample Name: USA 1-14 H.C.

Matrix: Soil Collection Date: 5/28/2014 8:35:00AM

Lab Sample Number:	B1405147-01C	Analysis Date:	6/2/2014 3:52:00PM
Prep Date:	06-02-2014 12:06	Instrument:	GC_B
Analytical Method ID:	Aromatic VOCs by GC/PID via method 8021B - BTEX	File Name:	14060209.D
Prep Method ID:	5030B	Dilution Factor:	1
Prep Batch Number:	T140603013	Percent Moisture	9.05
Report Basis:	Dry Weight Basis	Analyst Initials:	CK
Sample prep wt./vol:	5.00 g	Prep Extract Vol:	5.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>run #:</u>
Benzene	71-43-2	ND		ug/Kg	1.1	0.36	1
Ethylbenzene	100-41-4	ND		ug/Kg	1.6	0.51	
Toluene	108-88-3	3.6		ug/Kg	1.1	0.21	
Xylenes, Total	1330-20-7	32		ug/Kg	3.3	0.90	

<u>Surrogate</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>Spike</u>	<u>% Recov</u>	<u>LCL</u>	<u>UCL</u>	<u>run #:</u>
p-Bromofluorobenzene	460-00-4	25		ug/Kg	0.55	0.36	30	84.8	70	130	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number:	B1405147-01C	Analysis Date:	6/2/2014 3:52:00PM
Prep Date:	06-02-2014 11:06	Instrument:	GC_B
Analytical Method ID:	VOC by GC/FID via method 8015B - GRO	File Name:	14060209.D
Prep Method ID:	5030B	Dilution Factor:	1
Prep Batch Number:	T140603012	Percent Moisture	9.05
Report Basis:	Dry Weight Basis	Analyst Initials:	CK
Sample prep wt./vol:	5.00 g	Prep Extract Vol:	5.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>run #:</u>
Gasoline Range Organics	n/a	ND		ug/Kg	220	29	1

<u>Surrogate</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>Spike</u>	<u>% Recov</u>	<u>LCL</u>	<u>UCL</u>	<u>run #:</u>
p-Bromofluorobenzene	460-00-4	21		ug/Kg	3.3	1.1	30	71.0	50	150	1

The following test was conducted by: ALS Environmental Laboratory - F

Lab Sample Number:	B1405147-01A	Analysis Date:	6/11/2014 3:39:31PM
Prep Date:	06-11-2014 12:06	Instrument:	Sub Contract
Analytical Method ID:	SM3500-CrB - Chromium, Colorimetric Method - Total Cr(III) cal	File Name:	
Prep Method ID:	3500-Cr-B	Dilution Factor:	
Prep Batch Number:	T140618025	Percent Moisture	
Report Basis:	As Received	Analyst Initials:	CC
Sample prep wt./vol:	1.00 ml	Prep Extract Vol:	1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>run #:</u>
See Subcontractor Report							

The following test was conducted by: Analytica - Thornton

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147
Project: USA 1-14 HC
Client: Maralex Resources, Inc.
Client Project Number: Soils

Report Section: Client Sample Report

Client Sample Name: USA 1-14 H.C.

Matrix: Soil Collection Date: 5/28/2014 8:35:00AM

Lab Sample Number: B1405147-01A Analysis Date: 6/10/2014 2:30:00PM
Prep Date: 06-10-2014 14:06 Instrument: Probe
Analytical Method ID: Specific Conductance - Cond. File Name:
Prep Method ID: 9050A Dilution Factor: 1
Prep Batch Number: T140611002 Percent Moisture
Report Basis: As Received Analyst Initials: CRB
Sample prep wt./vol: 40.16 g Prep Extract Vol: 40.16 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>run #:</u>
Conductance		190		umhos/cm	5.0	1.0	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: B1405147-01A Analysis Date: 6/10/2014 10:30:00AM
Prep Date: 06-10-2014 10:06 Instrument: Probe
Analytical Method ID: Corrosivity in Waste by pH - pH File Name:
Prep Method ID: 9045B Dilution Factor: 1
Prep Batch Number: T140610018 Percent Moisture
Report Basis: As Received Analyst Initials: CRB
Sample prep wt./vol: 10.18 g Prep Extract Vol: 10.18 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>run #:</u>
pH		7.77		pH	0.10	0.10	1

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147
Project: USA 1-14 HC
Client: Maralex Resources, Inc.
Client Project Number: Soils
Report Section: **Method Blank Report**

Client Sample Name: MB

Matrix: Solid Collection Date: 6/3/2014 8:45:00AM

The following test was conducted by: Analytica - Thornton

Lab Sample Number:	T140603007-MB	Analysis Date:	6/5/2014 6:51:26PM
Prep Date:	06-03-2014 08:06	Instrument:	GC_E
Analytical Method ID:	SVOC by GC/FID via method 8015B - DRO	File Name:	14060505.D
Prep Method ID:	3550B	Dilution Factor:	1
Prep Batch Number:	T140603007	Percent Moisture	NA
Report Basis:	As Received	Analyst Initials:	TL
Sample prep wt./vol:	29.99 g	Prep Extract Vol:	1.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>		<u>run #:</u>
Diesel Range Organics	n/a	ND		mg/Kg	5.0	1.4		2

<u>Surrogate</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Spike</u>	<u>% Recov</u>	<u>LCL</u>	<u>UCL</u>	<u>run #:</u>
o-Terphenyl	84-15-1	1.2		mg/Kg	0.33	0.26	1.7	73.2	50	150	2

The following test was conducted by: Analytica - Thornton

Lab Sample Number:	T140603003-MB	Analysis Date:	6/5/2014 2:17:15PM
Prep Date:	06-05-2014 11:06	Instrument:	Hank-Hg
Analytical Method ID:	SW7471A - Mercury in Solid or Semisolid Waste by CVAA - Total H	File Name:	060514s.CSV
Prep Method ID:	7471A	Dilution Factor:	1
Prep Batch Number:	T140603003	Percent Moisture	NA
Report Basis:	As Received	Analyst Initials:	AC
Sample prep wt./vol:	0.60 g	Prep Extract Vol:	50.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>		<u>run #:</u>
Mercury	7439-97-6	ND		mg/Kg	0.042	0.0057		1

The following test was conducted by: Analytica - Thornton

Lab Sample Number:	T140603013-MB	Analysis Date:	6/2/2014 12:55:00PM
Prep Date:	06-02-2014 12:06	Instrument:	GC_B
Analytical Method ID:	Aromatic VOCs by GC/PID via method 8021B - BTEX	File Name:	14060204.D
Prep Method ID:	5030B	Dilution Factor:	1
Prep Batch Number:	T140603013	Percent Moisture	NA
Report Basis:	As Received	Analyst Initials:	CK
Sample prep wt./vol:	5.00 g	Prep Extract Vol:	5.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>		<u>run #:</u>
Benzene	71-43-2	ND		ug/Kg	1.0	0.33		1
Ethylbenzene	100-41-4	ND		ug/Kg	1.5	0.46		
Toluene	108-88-3	ND		ug/Kg	1.0	0.20		
Xylenes, Total	1330-20-7	ND		ug/Kg	3.0	0.82		

<u>Surrogate</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>PQL</u>	<u>MDL</u>	<u>Spike</u>	<u>% Recov</u>	<u>LCL</u>	<u>UCL</u>	<u>run #:</u>
p-Bromofluorobenzene	460-00-4	28		ug/Kg	0.50	0.33	27	103	70	130	1

The following test was conducted by: Analytica - Thornton

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147
Project: USA 1-14 HC
Client: Maralex Resources, Inc.
Client Project Number: Soils

Report Section: Method Blank Report

Client Sample Name: **MB**

Matrix: Solid Collection Date: 6/2/2014 11:16:00AM

Lab Sample Number: T140603012-MB Analysis Date: 6/2/2014 12:55:00PM
Prep Date: 06-02-2014 11:06 Instrument: GC_B
Analytical Method ID: VOC by GC/FID via method 8015B - GRO File Name: 14060204.D
Prep Method ID: 5030B Dilution Factor: 1
Prep Batch Number: T140603012 Percent Moisture: NA
Report Basis: As Received Analyst Initials: CK
Sample prep wt./vol: 5.00 g Prep Extract Vol: 5.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>				<u>run #:</u>	
Gasoline Range Organics	n/a	ND		ug/Kg	200	26				1	
<u>Surrogate</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>	<u>Spike</u>	<u>% Recov</u>	<u>LCL</u>	<u>UCL</u>	<u>run #:</u>
p-Bromofluorobenzene	460-00-4	27		ug/Kg	3.0	1.0	27	99.6	50	150	1

The following test was conducted by: Analytica - Thornton

Lab Sample Number: T140611002-MB Analysis Date: 6/10/2014 2:30:00PM
Prep Date: 06-10-2014 14:06 Instrument: Probe
Analytical Method ID: Specific Conductance - Cond. File Name:
Prep Method ID: 9050A Dilution Factor: 1
Prep Batch Number: T140611002 Percent Moisture: NA
Report Basis: As Received Analyst Initials: CRB
Sample prep wt./vol: 100.00 g Prep Extract Vol: 100.00 ml

<u>Analyte</u>	<u>CASNo</u>	<u>Result</u>	<u>Flags</u>	<u>Units</u>	<u>POL</u>	<u>MDL</u>				<u>run #:</u>
Conductance		ND		umhos/cm	5.0	1.0				1

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147
Project: USA 1-14 HC
Client: Maralex Resources, Inc.
Client Project Number: Soils

Tests Run at: Analytica Environmental Laboratories - Thornton, Colorado
Workorder (SDG): B1405147
Project: USA 1-14 HC
Project Number:
Prep Batch: **T140603007**

QUALITY CONTROL REPORT

LCS REPORT

Analysis: SVOC by GC/FID via method 8015B - DRO MB: T140603007-MB
Prep Date: 6/3/2014
MB Anal. Date: 6/5/2014 6:51:26PM Units: mg/Kg
LCS Anal. Date: 6/5/2014 7:41:21PM Matrix: Solid

<u>Analyte Name</u>	<u>SampResult</u>	<u>LCSRes.</u>	<u>SPLev</u>	<u>Recov.</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Diesel Range Organics	ND	53.1	66.7	79.6	75 - 125		

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147

Project: USA 1-14 HC

Client: Maralex Resources, Inc.

Client Project Number: Soils

Tests Run at: Analytica Environmental Laboratories - Thornton, Colorado

Workorder (SDG): B1405147

Project: USA 1-14 HC

Project Number:

QUALITY CONTROL REPORT

Prep Batch: T140603003

LCS REPORT

Analysis: SW7471A - Mercury in Solid or Semisolid Waste by CVAA - Tot MB: T140603003-MB

Prep Date: 6/5/2014

MB Anal. Date: 6/5/2014 2:17:15PM

Units: mg/Kg

LCS Anal. Date: 6/5/2014 2:21:09PM

Matrix: Solid

<u>Analyte Name</u>	<u>SampResult</u>	<u>LCSRes.</u>	<u>SPLev</u>	<u>Recov.</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Mercury	ND	0.395	0.417	94.8	70 - 130		

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147
Project: USA 1-14 HC
Client: Maralex Resources, Inc.
Client Project Number: Soils

Tests Run at: Analytica Environmental Laboratories - Thornton, Colorado
Workorder (SDG): B1405147
Project: USA 1-14 HC
Project Number: **QUALITY CONTROL REPORT**
Prep Batch: **T140603012**

LCS REPORT

Analysis: VOC by GC/FID via method 8015B - GRO MB: T140603012-MB
Prep Date: 6/2/2014
MB Anal. Date: 6/2/2014 12:55:00PM Units: ug/Kg
LCS Anal. Date: 6/2/2014 1:28:00PM Matrix: Solid

<u>Analyte Name</u>	<u>SampResult</u>	<u>LCSRes.</u>	<u>SPLev</u>	<u>Recov.</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Gasoline Range Organics	ND	528	500	105.6	60 - 118		

MS/MSD REPORT

Analysis: VOC by GC/FID via method 8015B - GRO Parent: B1405147-01C
Prep Date: 6/2/2014
Samp. Anal. Date: 6/2/2014 3:52:00PM Units: ug/Kg
MS Anal. Date: 6/2/2014 4:26:00PM MSD Anal. Date: 6/2/2014 4:59:00PM Matrix: Soil

<u>Analyte Name</u>	<u>SampResult</u>	<u>MSRes.</u>	<u>MSDRes</u>	<u>SPLev</u>	<u>SPDLev</u>	<u>Recov.</u>	<u>MSD Rec.</u>	<u>RPD</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Gasoline Range Organics	ND	438	381	550	550	79.7	69.3	13.9	50 - 138	20	

Prep Batch: **T140603013**

LCS REPORT

Analysis: Aromatic VOCs by GC/PID via method 8021B - BTEX MB: T140603013-MB
Prep Date: 6/2/2014
MB Anal. Date: 6/2/2014 12:55:00PM Units: ug/Kg
LCS Anal. Date: 6/2/2014 2:02:00PM Matrix: Solid

<u>Analyte Name</u>	<u>SampResult</u>	<u>LCSRes.</u>	<u>SPLev</u>	<u>Recov.</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Benzene	ND	9.58	10.0	95.8	70 - 130		
Toluene	ND	9.43	10.0	94.3	70 - 130		
Ethylbenzene	ND	9.82	10.0	98.2	70 - 130		
Xylenes, Total	ND	29.0	30.0	96.7	70 - 130		

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147

Project: USA 1-14 HC

Client: Maralex Resources, Inc.

Client Project Number: Soils

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147

Project: USA 1-14 HC

Client: Maralex Resources, Inc.

Client Project Number: Soils

Tests Run at: Analytica Environmental Laboratories - Thornton, Colorado

Workorder (SDG): B1405147

Project: USA 1-14 HC

Project Number:

QUALITY CONTROL REPORT

Prep Batch: T140610018

SAMPLE DUPLICATE REPORT

Analysis: Corrosivity in Waste by pH - pH

Base Sample: B1405147-01A

Prep Date: 6/10/2014

Samp. Anal. Date: 6/10/2014 10:30:00AM

Units: pH

DUP Anal. Date: 6/10/2014 10:30:00AM

Matrix: Soil

<u>Analyte Name</u>	<u>SampResult</u>	<u>DUPRes.</u>	<u>RPD</u>	<u>RPDLim</u>	<u>Flag</u>
pH	7.77	7.85	1.0	35	

Prep Batch: T140611002

LCS REPORT

Analysis: Specific Conductance - Cond.

MB: T140611002-MB

Prep Date: 6/10/2014

MB Anal. Date: 6/10/2014 2:30:00PM

Units: umhos/cm

LCS Anal. Date: 6/10/2014 2:30:00PM

Matrix: Solid

<u>Analyte Name</u>	<u>SampResult</u>	<u>LCSRes.</u>	<u>SPLev</u>	<u>Recov.</u>	<u>Recov Lim</u>	<u>RPDLim</u>	<u>Flag</u>
Conductance	ND	154	150	102.7	80 - 120		

FOOTNOTES TO QC REPORT

Note 1: Results are shown to three significant figures to avoid rounding errors in calculations.

Note 2: If the sample concentration is greater than 4 times the spike level, a recovery is not meaningful, and the result should be used as a replicate. In such cases the spike is not as high as expected random measurement variability of the sample result itself.

Note 3: For sample duplicates, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample and duplicate results are not five times the PQL or greater, then the RPD is not expected to fall within the window shown and the comparison should be made on the basis of the absolute difference. Analytica uses the criterion that the absolute difference should be less than the PQL for water or less than 2XPQL for other matrices.

Note 4: For serial dilutions, if the result is less than the PQL, the duplicate RPD is not applicable. If the sample result is not 50 times the MDL or greater, then the fact that the RPD does not meet the 10% criterion has little significance. Otherwise it indicates that a matrix bias may exist at the analytical step.

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147

Project: USA 1-14 HC

Client: Maralex Resources, Inc.

Client Project Number: Soils

SURROGATE RECOVERY SUMMARY REPORT

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147

Project: USA 1-14 HC

Client: Maralex Resources, Inc.

Client Project Number: Soils

Test Method: SVOC by GC/FID via method 8015B - DRO

Lab Sample #: B1405117-02A Dilution: 1
 Analysis Date: 6/4/2014 2:49:24PM Client Sample: **Batch QC**
 Batch Number: T140603007 Data File: 14060409.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	78	50	150		Rrun

Lab Sample #: B1405117-02A Dilution: 10
 Analysis Date: 6/4/2014 3:41:06PM Client Sample: **Batch QC**
 Batch Number: T140603007 Data File: 14060410.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	64	50	150	DILUTED OUT	Confirm

Lab Sample #: B1405147-01B Dilution: 1
 Analysis Date: 6/5/2014 2:42:52AM Client Sample: **USA 1-14 H.C.**
 Batch Number: T140603007 Data File: 14060423.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	91	50	150		Rrun

Lab Sample #: B1405147-01B Dilution: 10
 Analysis Date: 6/5/2014 3:33:09AM Client Sample: **USA 1-14 H.C.**
 Batch Number: T140603007 Data File: 14060424.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	76	50	150	DILUTED OUT	Confirm

Lab Sample #: B1405147-01B Dilution: 20
 Analysis Date: 6/5/2014 4:23:36AM Client Sample: **USA 1-14 H.C.**
 Batch Number: T140603007 Data File: 14060425.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	90	50	150	DILUTED OUT	Rrun

Lab Sample #: B1405117-02A Dilution: 1
 Analysis Date: 6/5/2014 10:10:36PM Client Sample: **Batch QC**
 Batch Number: T140603007 Data File: 14060509.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	101	50	150		Complete

Lab Sample #: B1405147-01B Dilution: 1
 Analysis Date: 6/6/2014 2:21:33AM Client Sample: **USA 1-14 H.C.**
 Batch Number: T140603007 Data File: 14060514.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	90	50	150		Complete

Lab Sample #: T140603007-MB Dilution: 1
 Analysis Date: 6/4/2014 11:24:14AM Client Sample: **MB**
 Batch Number: T140603007 Data File: 14060405.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	69	60	120		Rrun

Lab Sample #: T140603007-MB Dilution: 1
 Analysis Date: 6/5/2014 6:51:26PM Client Sample: **MB**
 Batch Number: T140603007 Data File: 14060505.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl					

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147

Project: USA 1-14 HC

Client: Maralex Resources, Inc.

Client Project Number: Soils

Test Method: SVOC by GC/FID via method 8015B - DRO

Lab Sample #:	T140603007-MB	Dilution:	1
Analysis Date:	6/5/2014 6:51:26PM	Client Sample:	MB
Batch Number:	T140603007	Data File:	14060505.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	73	60	120		Complete

Lab Sample #:	T140603007-LCS	Dilution:	1
Analysis Date:	6/4/2014 12:15:05PM	Client Sample:	LCS
Batch Number:	T140603007	Data File:	14060406.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	90	60	120		Rrun

Lab Sample #:	T140603007-LCS	Dilution:	1
Analysis Date:	6/5/2014 7:41:21PM	Client Sample:	LCS
Batch Number:	T140603007	Data File:	14060506.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	81	60	120		Complete

Lab Sample #:	B1405117-02A-MS	Dilution:	1
Analysis Date:	6/4/2014 4:33:08PM	Client Sample:	MS
Batch Number:	T140603007	Data File:	14060411.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	90	50	150		Rrun

Lab Sample #:	B1405117-02A-MS	Dilution:	10
Analysis Date:	6/4/2014 5:25:28PM	Client Sample:	MS
Batch Number:	T140603007	Data File:	14060412.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	83	50	150	DILUTED OUT	Confirm

Lab Sample #:	B1405117-02A-MS	Dilution:	1
Analysis Date:	6/5/2014 11:00:40PM	Client Sample:	MS
Batch Number:	T140603007	Data File:	14060510.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	92	50	150		Complete

Lab Sample #:	B1405117-02A-MSD	Dilution:	1
Analysis Date:	6/4/2014 6:17:58PM	Client Sample:	MSD
Batch Number:	T140603007	Data File:	14060413.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	88	50	150		Rrun

Lab Sample #:	B1405117-02A-MSD	Dilution:	10
Analysis Date:	6/4/2014 7:09:49PM	Client Sample:	MSD
Batch Number:	T140603007	Data File:	14060414.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	72	50	150	DILUTED OUT	Confirm

Lab Sample #:	B1405117-02A-MSD	Dilution:	1
Analysis Date:	6/5/2014 11:50:53PM	Client Sample:	MSD
Batch Number:	T140603007	Data File:	14060511.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl					

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147

Project: USA 1-14 HC

Client: Maralex Resources, Inc.

Client Project Number: Soils

Test Method: SVOC by GC/FID via method 8015B - DRO

Lab Sample #: B1405117-02A-MSD Dilution: 1
Analysis Date: 6/5/2014 11:50:53PM Client Sample: **MSD**
Batch Number: T140603007 Data File: 14060511.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
o-Terphenyl	84	50	150		Complete

Test Method: Aromatic VOCs by GC/PID via method 8021B - BTEX

Lab Sample #: B1405147-01C Dilution: 1
Analysis Date: 6/2/2014 3:52:00PM Client Sample: **USA 1-14 H.C.**
Batch Number: T140603013 Data File: 14060209.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenzene	85	70	130		Complete

Lab Sample #: B1405150-01C Dilution: 1
Analysis Date: 6/2/2014 6:05:00PM Client Sample: **Batch OC**
Batch Number: T140603013 Data File: 14060213.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenzene	104	70	130		Complete

Lab Sample #: T140603013-MB Dilution: 1
Analysis Date: 6/2/2014 12:55:00PM Client Sample: **MB**
Batch Number: T140603013 Data File: 14060204.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenzene	103	70	130		Complete

Lab Sample #: T140603013-LCS Dilution: 1
Analysis Date: 6/2/2014 2:02:00PM Client Sample: **LCS**
Batch Number: T140603013 Data File: 14060206.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenzene	102	70	130		Complete

Lab Sample #: B1405150-01C-MS Dilution: 1
Analysis Date: 6/2/2014 6:39:00PM Client Sample: **MS**
Batch Number: T140603013 Data File: 14060214.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenzene	93	70	130		Complete

Lab Sample #: B1405150-01C-MSD Dilution: 1
Analysis Date: 6/2/2014 7:12:00PM Client Sample: **MSD**
Batch Number: T140603013 Data File: 14060215.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenzene	94	70	130		Complete

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147

Project: USA 1-14 HC

Client: Maralex Resources, Inc.

Client Project Number: Soils

Test Method: VOC by GC/FID via method 8015B - GRO

Lab Sample #: B1405147-01C Dilution: 1
Analysis Date: 6/2/2014 3:52:00PM Client Sample: USA 1-14 H.C.
Batch Number: T140603012 Data File: 14060209.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenzene	71	50	150		Complete

Lab Sample #: T140603012-MB Dilution: 1
Analysis Date: 6/2/2014 12:55:00PM Client Sample: MB
Batch Number: T140603012 Data File: 14060204.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenzene	100	63	130		Complete

Lab Sample #: T140603012-LCS Dilution: 1
Analysis Date: 6/2/2014 1:28:00PM Client Sample: LCS
Batch Number: T140603012 Data File: 14060205.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenzene	104	63	130		Complete

Lab Sample #: B1405147-01C-MS Dilution: 1
Analysis Date: 6/2/2014 4:26:00PM Client Sample: MS
Batch Number: T140603012 Data File: 14060210.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenzene	82	50	150		Complete

Lab Sample #: B1405147-01C-MSD Dilution: 1
Analysis Date: 6/2/2014 4:59:00PM Client Sample: MSD
Batch Number: T140603012 Data File: 14060211.D

<u>AnalyteName</u>	<u>SSRecov</u>	<u>LCL</u>	<u>UCL</u>	<u>SSFlag</u>	<u>Result Status</u>
p-Bromofluorobenzene	75	50	150		Complete

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147
Project: USA 1-14 HC
Client: Maralex Resources, Inc.
Client Project Number: Soils

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: 160,660 Lab Project Number: B1405147

Prep Date: 6/5/2014

Lab Method Blank Id: T140603003-MB
Prep Batch ID: T140603003
Method: SW7471A - Mercury in Solid or Semisolid Waste by CVAA - Tot

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
B1405146-01A	Batch QC	060514s.CSV	6/5/2014 2:29:01PM
B1405147-01A	USA 1-14 H.C.	060514s.CSV	6/5/2014 3:04:39PM
T140603003-LCS	LCS	060514s.CSV	6/5/2014 2:21:09PM
B1405146-01A-DUP	DUP	060514s.CSV	6/5/2014 2:31:02PM
B1405146-01A-MS	MS	060514s.CSV	6/5/2014 2:32:59PM
B1405146-01A-MSD	MSD	060514s.CSV	6/5/2014 2:34:56PM

Prep Date: 6/3/2014

Lab Method Blank Id: T140603007-MB
Prep Batch ID: T140603007
Method: SVOC by GC/FID via method 8015B - DRO

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
T140603007-LCS	LCS	14060506.D	6/5/2014 7:41:21PM
B1405117-02A	Batch QC	14060509.D	6/5/2014 10:10:36PM
B1405117-02A-MS	MS	14060510.D	6/5/2014 11:00:40PM
B1405117-02A-MSD	MSD	14060511.D	6/5/2014 11:50:53PM
B1405147-01B	USA 1-14 H.C.	14060514.D	6/6/2014 2:21:33AM

Prep Date: 6/2/2014

Lab Method Blank Id: T140603011-MB
Prep Batch ID: T140603011
Method: ASTM D2216 - Pmoist

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
B1405117-01A	Batch QC		6/3/2014 11:40:02AM
B1405147-01B	USA 1-14 H.C.		6/3/2014 11:40:02AM
B1405117-01A-DUP	DUP		6/3/2014 11:40:02AM

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147
Project: USA 1-14 HC
Client: Maralex Resources, Inc.
Client Project Number: Soils

QC BATCH ASSOCIATIONS - BY METHOD BLANK

Lab Project ID: 160,660 Lab Project Number: B1405147

Prep Date: 6/2/2014

Lab Method Blank Id: T140603012-MB
Prep Batch ID: T140603012
Method: VOC by GC/FID via method 8015B - GRO

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
T140603012-LCS	LCS	14060205.D	6/2/2014 1:28:00PM
B1405147-01C	USA 1-14 H.C.	14060209.D	6/2/2014 3:52:00PM
B1405147-01C-MS	MS	14060210.D	6/2/2014 4:26:00PM
B1405147-01C-MSD	MSD	14060211.D	6/2/2014 4:59:00PM

Prep Date: 6/2/2014

Lab Method Blank Id: T140603013-MB
Prep Batch ID: T140603013
Method: Aromatic VOCs by GC/PID via method 8021B - BTEX

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
T140603013-LCS	LCS	14060206.D	6/2/2014 2:02:00PM
B1405147-01C	USA 1-14 H.C.	14060209.D	6/2/2014 3:52:00PM
B1405150-01C	Batch QC	14060213.D	6/2/2014 6:05:00PM
B1405150-01C-MS	MS	14060214.D	6/2/2014 6:39:00PM
B1405150-01C-MSD	MSD	14060215.D	6/2/2014 7:12:00PM

Prep Date: 6/10/2014

Lab Method Blank Id: T140611002-MB
Prep Batch ID: T140611002
Method: Specific Conductance - Cond.

This Method blank and sample preparation batch are associated with the following samples, spikes, and duplicates:

<u>SampleNum</u>	<u>ClientSampleName</u>	<u>DataFile</u>	<u>AnalysisDate</u>
B1405146-01A	Batch QC		6/10/2014 2:30:00PM
B1405147-01A	USA 1-14 H.C.		6/10/2014 2:30:00PM
T140611002-LCS	LCS		6/10/2014 2:30:00PM
B1405146-01A-DUP	DUP		6/10/2014 2:30:00PM

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147
Project: USA 1-14 HC
Client: Maralex Resources, Inc.
Client Project Number: Soils

DATA FLAGS AND DEFINITIONS

The PQL is the Method Quantitation Limit as defined by USACE.

Reporting Limit: Limit below which results are shown as "ND". This may be the PQL, MDL, or a value between. See the report conventions below.

Result Field:

ND = Not Detected at or above the Reporting Limit

NA = Analyte not applicable (see Case Narrative for discussion)

Qualifier Fields:

LOW = Recovery is below Lower Control Limit

HIGH = Recovery, RPD, or other parameter is above Upper Control Limit

E = Reported concentration is above the instrument calibration upper range

Organic Analysis Flags:

B = Analyte was detected in the laboratory method blank

J = Analyte was detected above MDL or Reporting Limit but below the Quant Limit (PQL)

Inorganic Analysis Flags:

J = Analyte was detected above the Reporting Limit but below the Quant Limit (PQL)

W = Post digestion spike did not meet criteria

S = Reported value determined by the Method of Standard Additions (MSA)

Several ways of defining the limit of detection and quantitation are prevalent in the laboratory industry and may appear in Analytica reports. These include the following:

MRL = "minimum reporting level", from the EPA Safe Drinking Water program (SDW)

PQL = "practical quantitation limit", from SW-846

EQL = "estimated quantitation limit", from SW-846

LOQ = "limit of quantitation", from a number of authoritative sources

In Analytica's work, all of these terms have the same meaning, equivalent to the EPA definition of the MRL. This reporting level is supported by a satisfactory calibration data point which is at that level or lower, and also is supported by a method detection limit (MDL) determined by the procedure in 40CFR. The MDL is lower than the MRL and represents an estimate of the level where positive detections have a 99% probability of being real, but where quantitation accuracy is unknown.

The MRL as defined by Analytica is the lowest demonstrated point of known quantitation accuracy.

The MRL should not be confused with the MCL, which is the EPA-defined "maximum contaminant level" allowed for certain regulated targets under specific regulations, such as the National Primary Drinking Water Regulations. Normally, the MRL is set at a level which is much lower than the MCL in order to ensure that levels are well below those limits. Not all target analytes have MCL levels established.

Other Flags may be applied. See Case Narrative for Description

Detailed Analytical Report

Analytica Group, LLC - Thornton

Workorder (SDG): B1405147

Project: USA 1-14 HC

Client: Maralex Resources, Inc.

Client Project Number: Soils

REPORTING CONVENTIONS FOR THIS REPORT

B1405147

<u>TestPkgName</u>	<u>Basis</u>	<u># Sig Figs</u>	<u>Reporting Limit</u>
3500-Cr-B/3500-Cr-B (Solid) - Total Cr(III) calculat	As Received	2	Report to PQL
6010B/6010B (Solid) - Total ICP Energy	Dry Weight Basis	2	Report to PQL
6020A (Solid) - Low Level Metals ALS-F	Dry Weight Basis	3	Report to PQL
7196_A/3060A (Solid) - Cr(VI)	Dry Weight Basis	2	Report to PQL
7471A/7471A (Solid) - Total Hg	Dry Weight Basis	2	Report to PQL
8015/5030B (Solid) - GRO	Dry Weight Basis	2	Report to PQL
8015B/3550B (Solid) - DRO	Dry Weight Basis	2	Report to PQL
8021/5030B (Solid) - BTEX	Dry Weight Basis	2	Report to PQL
8270C/3550B (Solid) - SC	Dry Weight Basis	2	Report to MDL, J qual below PQL
9045B/9045B (Solid) - pH	As Received	3	Report to PQL
9050A/9050A (Solid) - Cond.	As Received	2	Report to PQL
ASTMD2216/ASTMD2216 (Solid) - Pmoist	As Received	3	Report to MDL, J qual below PQL
SAR (Solid)	As Received	2	Report to PQL

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1406037

GC/MS Semivolatiles:

The sample was analyzed using GC/MS following the current revision of SOP 506 based on SW-846 Method 8270D. The samples were analyzed using selective ion monitoring (SIM), in order to achieve lower reporting limits.

All acceptance criteria were met with the following exception:

All internal standard recoveries were within acceptance criteria with the exception of perylene-d₁₂ which was low. Analysis of the sample at a dilution showed all internal standard recoveries passing. This suggests that the outliers were due to matrix effects. No further action was taken.

Metals:

The sample was analyzed following SW-846, 3rd Edition procedures. Analysis by ICPMS followed method 6020A and the current revision of SOP 827.

All acceptance criteria were met.

Inorganics:

The samples were analyzed following SW-846 and USDA Handbook 60 Chapter 6 procedures for the current revisions of the following SOPs and methods:

<u>Analyte</u>	<u>Method</u>	<u>SOP #</u>
Hexavalent chromium	7196A	1122
Paste pH	USDA60	810 Draft
Electrical conductivity	USDA60	810 Draft
Sodium Adsorption Ratio	USDA60	810 Draft

Chromium III is a calculated value derived from the subtraction of hexavalent chromium from total chromium.

All acceptance criteria were met.

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1406037

Client Name: Analytica Environmental Laboratories

Client Project Name: USA 1-14 H.C.

Client Project Number:

Client PO Number: T14961

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
B1405147-01D	1406037-1		SOIL	28-May-14	8:35
B1405147-01D	1406037-2		SatExtract	28-May-14	8:35

ANALYTICA CHAIN OF CUSTODY FOR EXTERNAL LAB ANALYSIS

COC Number: 160660-2

Analytica Group, LLC-Thornton
 12189 Pennsylvania Street
 Thornton, CO 80241
 Report to: Carissa Cumine
 phone: 303-469-8868

PO Number: T14961

Requested Turnaround: Standard

Testing Laboratory: ALS

1406037

~~Energy Laboratories
 1120 South 27th St.
 Billings, MT 59101-0916
 phone: 800-735-4489 x6269~~

Report on dry weight basis.

Client Identifier: USA I-14 H.C.

Analytica ID	Test Method	Method Description	Sample Date	Matrix	Comments
B1405147-01D	SAR	SAR (Solid)	5/28/2014 8:35	Soil	
B1405147-01D	6020A	6020A (Solid) - Low Level Metals - Sol	5/28/2014 8:35	Soil	<u>Low Level As</u>
B1405147-01D	7196_A	7196_A/3060A (Solid) - Cr(VI)	5/28/2014 8:35	Soil	
B1405147-01D	6010B	6010B/6010B (Solid) - Total ICP Energy	5/28/2014 8:35	Soil	<u>Ba, B, Cd, Cr, Cu, Pb, Ni, Se, As, Zn</u>
B1405147-01D	8270C	8270C/3550B (Solid) - SC	5/28/2014 8:35	Soil	<u>PAHs by SIM</u>

See attached sheet for 8270 targets

<u>Analytica Relinquished by:</u>	<u>Date/Time:</u>	<u>Received by:</u>	<u>Date/Time:</u>
	<u>6/2/14</u> <u>16:00</u>		<u>6/2/14</u> <u>9:30</u>
<u>Relinquished by:</u>	<u>Date/Time:</u>	<u>Received by:</u>	<u>Date/Time:</u>



ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: Analytica
Project Manager: JE

Workorder No: 1406037
Initials: JE Date: 6/3/14

1. Does this project require any special handling in addition to standard ALS procedures?		YES	<input checked="" type="radio"/> NO
2. Are custody seals on shipping containers intact?	NONE	<input checked="" type="radio"/> YES	NO
3. Are Custody seals on sample containers intact?	<input checked="" type="radio"/> NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		<input checked="" type="radio"/> YES	NO
5. Are the COC and bottle labels complete and legible?		<input checked="" type="radio"/> YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		<input checked="" type="radio"/> YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	<input checked="" type="radio"/> YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	<input checked="" type="radio"/> N/A	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	<input checked="" type="radio"/> N/A	YES	NO
10. Is there sufficient sample for the requested analyses?		<input checked="" type="radio"/> YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		<input checked="" type="radio"/> YES	NO
12. Are all samples within holding times for the requested analyses?		<input checked="" type="radio"/> YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ___ < green pea ___ > green pea	<input checked="" type="radio"/> N/A	YES	NO
15. Do any water samples contain sediment? Amount of sediment: ___ dusting ___ moderate ___ heavy	Amount <input checked="" type="radio"/> N/A	YES	NO
16. Were the samples shipped on ice?		<input checked="" type="radio"/> YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 #4	RAD ONLY	<input checked="" type="radio"/> YES	NO
Cooler #: <u>1</u>			
Temperature (°C): <u>2.4</u>			
No. of custody seals on cooler: <u>1</u>			
External µR/hr reading: <u>15</u>			
Background µR/hr reading: <u>13</u>			
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? YES / NO / NA (If no, see Form 008.)			

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? YES / NO / NA Contact: _____ Date/Time: _____

Project Manager Signature / Date: JE 6/4/14

SHIP DATE: 02 JUN 14
ACTWGT: 41.5 LB
CAD: 584910/CAFE2704

BILL SENDER

RECEIVING
ENVIRONMENTAL LABORATORY
SUMMER DRIVE

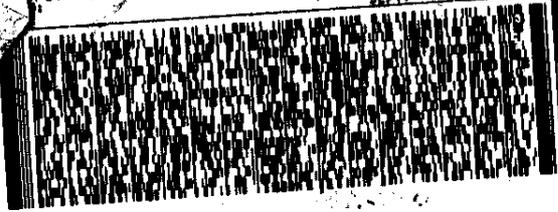
FORT COLLINS CO 80524

70) 450-1611

REF:

DEPT:

(US)



Fedex
Ground



TRK# 5982 7405 7102

80524

9622 0019 0 (000 185 1616) 3 00 5982 7405 7102



Part # 156148-434 RT 08/12

51803/0283/6503

15313180000126

ALS Environmental -- FC

SAMPLE SUMMARY REPORT

Client: Analytica Environmental Laboratories
Project: USA 1-14 H.C.
Sample ID: B1405147-01D
Legal Location:
Collection Date: 5/28/2014 08:35

Date: 13-Jun-14
Work Order: 1406037
Lab ID: 1406037-1
Matrix: SOIL
Percent Moisture: 11.3

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
GC/MS SEMI-VOLATILES			SW8270SIMP		Prep Date: 6/5/2014	PrepBy: BCH
NAPHTHALENE	9		3.7	UG/KG	1	6/9/2014 22:03
ACENAPHTHENE	ND		3.7	UG/KG	1	6/9/2014 22:03
FLUORENE	1.6	J	3.7	UG/KG	1	6/9/2014 22:03
ANTHRACENE	1.5	J	3.7	UG/KG	1	6/9/2014 22:03
FLUORANTHENE	ND		3.7	UG/KG	1	6/9/2014 22:03
PYRENE	1.6	J	3.7	UG/KG	1	6/9/2014 22:03
BENZO(A)ANTHRACENE	2.6	J	3.7	UG/KG	1	6/9/2014 22:03
CHRYSENE	1.7	J	3.7	UG/KG	1	6/9/2014 22:03
BENZO(B)FLUORANTHENE	10		3.7	UG/KG	1	6/9/2014 22:03
BENZO(K)FLUORANTHENE	9.4		3.7	UG/KG	1	6/9/2014 22:03
BENZO(A)PYRENE	13		3.7	UG/KG	1	6/9/2014 22:03
INDENO(1,2,3-CD)PYRENE	1.2	J	3.7	UG/KG	1	6/9/2014 22:03
DIBENZO(A,H)ANTHRACENE	ND		3.7	UG/KG	1	6/9/2014 22:03
Surr: NITROBENZENE-D5	102		28-113	%REC	1	6/9/2014 22:03
Surr: 2-FLUOROBIPHENYL	91		41-106	%REC	1	6/9/2014 22:03
Surr: TERPHENYL-D14	125		25-147	%REC	1	6/9/2014 22:03
HEXAVALENT CHROMIUM			SW7196		Prep Date: 6/11/2014	PrepBy: AJD
CHROMIUM VI	ND		0.11	MG/KG	1	6/11/2014
ICPMS METALS			SW6020		Prep Date: 6/5/2014	PrepBy: NAQ
SILVER	62		11	UG/KG	10	6/6/2014 14:35
ARSENIC	11000		220	UG/KG	10	6/6/2014 14:35
BORON	6700		5500	UG/KG	10	6/6/2014 14:35
BARIUM	350000		110	UG/KG	10	6/6/2014 14:35
CADMIUM	400		33	UG/KG	10	6/6/2014 14:35
CHROMIUM	20000		1100	UG/KG	10	6/6/2014 14:35
COPPER	66000		1100	UG/KG	10	6/6/2014 14:35
NICKEL	16000		550	UG/KG	10	6/6/2014 14:35
LEAD	290000		55	UG/KG	10	6/6/2014 14:35
SELENIUM	1100		110	UG/KG	10	6/6/2014 14:35
ZINC	110000		2200	UG/KG	10	6/6/2014 14:35
SODIUM ADSORPTION RATIO			USDA60		Prep Date: 6/10/2014	PrepBy: KMP
PASTE PH	7.5		0.1	pH	1	6/10/2014
TRIVALENT CHROMIUM (FROM TOTAL CR - CR+6)			CRIII		Prep Date: 6/11/2014	PrepBy: AJD
CHROMIUM III	20		0.011	MG/KG	1	6/11/2014

ALS Environmental -- FC

SAMPLE SUMMARY REPORT

Client: Analytica Environmental Laboratories
Project: USA 1-14 H.C.
Sample ID: B1405147-01D
Legal Location:
Collection Date: 5/28/2014 08:35

Date: 13-Jun-14
Work Order: 1406037
Lab ID: 1406037-2
Matrix: SATEXTRACT
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
ICP METALS			SW6010		Prep Date: 6/6/2014	PrepBy: NAQ
CALCIUM	93		10	MG/L	10	6/10/2014 13:01
MAGNESIUM	14		10	MG/L	10	6/10/2014 13:01
SODIUM	22		10	MG/L	10	6/10/2014 13:01
SODIUM ADSORPTION RATIO			USDA60		Prep Date: 6/10/2014	PrepBy: KMP
ELECTRICAL CONDUCTIVITY @ SATURATION	700		1	umhos/cm	10	6/10/2014
SODIUM ADSORPTION RATIO	0.55		0.54	NU	10	6/10/2014 13:01

ALS Environmental -- FC

SAMPLE SUMMARY REPORT

Client: Analytica Environmental Laboratories
Project: USA 1-14 H.C.
Sample ID: B1405147-01D
Legal Location:
Collection Date: 5/28/2014 08:35

Date: 13-Jun-14
Work Order: 1406037
Lab ID: 1406037-2
Matrix: SATEXTRACT
Percent Moisture:

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
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Explanation of Qualifiers

Radiochemistry:

- | | |
|---|---|
| U or ND - Result is less than the sample specific MDC. | M3 - The requested MDC was not met, but the reported activity is greater than the reported MDC. |
| Y1 - Chemical Yield is in control at 100-110%. Quantitative yield is assumed. | L - LCS Recovery below lower control limit. |
| Y2 - Chemical Yield outside default limits. | H - LCS Recovery above upper control limit. |
| W - DER is greater than Warning Limit of 1.42 | P - LCS, Matrix Spike Recovery within control limits. |
| * - Aliquot Basis is 'As Received' while the Report Basis is 'Dry Weight'. | N - Matrix Spike Recovery outside control limits |
| # - Aliquot Basis is 'Dry Weight' while the Report Basis is 'As Received'. | NC - Not Calculated for duplicate results less than 5 times MDC |
| G - Sample density differs by more than 15% of LCS density. | B - Analyte concentration greater than MDC. |
| D - DER is greater than Control Limit | B3 - Analyte concentration greater than MDC but less than Requested MDC. |
| M - Requested MDC not met. | |
| LT - Result is less than requested MDC but greater than achieved MDC. | |

Inorganics:

- B - Result is less than the requested reporting limit but greater than the instrument method detection limit (MDL).
- U or ND - Indicates that the compound was analyzed for but not detected.
- E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
- M - Duplicate injection precision was not met.
- N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
- Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
- * - Duplicate analysis (relative percent difference) not within control limits.
- S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.

Organics:

- U or ND - Indicates that the compound was analyzed for but not detected.
- B - Analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user.
- E - Analyte concentration exceeds the upper level of the calibration range.
- J - Estimated value. The result is less than the reporting limit but greater than the instrument method detection limit (MDL).
- A - A tentatively identified compound is a suspected aldol-condensation product.
- X - The analyte was diluted below an accurate quantitation level.
- * - The spike recovery is equal to or outside the control criteria used.
- + - The relative percent difference (RPD) equals or exceeds the control criteria.
- G - A pattern resembling gasoline was detected in this sample.
- D - A pattern resembling diesel was detected in this sample.
- M - A pattern resembling motor oil was detected in this sample.
- C - A pattern resembling crude oil was detected in this sample.
- 4 - A pattern resembling JP-4 was detected in this sample.
- 5 - A pattern resembling JP-5 was detected in this sample.
- H - Indicates that the fuel pattern was in the heavier end of the retention time window for the analyte of interest.
- L - Indicates that the fuel pattern was in the lighter end of the retention time window for the analyte of interest.
- Z - This flag indicates that a significant fraction of the reported result did not resemble the patterns of any of the following petroleum hydrocarbon products:
 - gasoline
 - JP-8
 - diesel
 - mineral spirits
 - motor oil
 - Stoddard solvent
 - bunker C

ALS Environmental -- FC

Date: 6/13/2014 4:02:

Client: Analytica Environmental Laboratories
 Work Order: 1406037
 Project: USA 1-14 H.C.

QC BATCH REPORT

Batch ID: IP140605-3-1 Instrument ID ICPMS2 Method: SW6020

LCS Sample ID: IP140605-3 Units: UG/KG Analysis Date: 6/6/2014 14:29
 Client ID: Run ID: IM140606-11A1 Prep Date: 6/5/2014 DF: 10

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD	RPD Limit	Qual
ARSENIC	9760	200	10000		98	80-120			20	
BARIUM	9720	100	10000		97	80-120			20	
BORON	91800	5000	100000		92	80-120			20	
CADMIUM	3060	30	3000		102	80-120			20	
CHROMIUM	49400	1000	50000		99	80-120			20	
COPPER	99100	1000	100000		99	80-120			20	
LEAD	5220	50	5000		104	80-120			20	
NICKEL	51000	500	50000		102	80-120			20	
SELENIUM	9830	100	10000		98	80-120			20	
SILVER	1030	10	1000		103	80-120			20	
ZINC	208000	2000	200000		104	80-120			20	

MB Sample ID: IP140605-3 Units: UG/KG Analysis Date: 6/6/2014 14:26
 Client ID: Run ID: IM140606-11A1 Prep Date: 6/5/2014 DF: 10

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD	RPD Limit	Qual
ARSENIC	ND	200								
BARIUM	ND	100								
BORON	ND	5000								
CADMIUM	ND	30								
CHROMIUM	ND	1000								
COPPER	ND	1000								
LEAD	ND	50								
NICKEL	ND	500								
SELENIUM	ND	100								
SILVER	ND	10								
ZINC	ND	2000								

The following samples were analyzed in this batch:

Client: Analytica Environmental Laboratories
 Work Order: 1406037
 Project: USA 1-14 H.C.

QC BATCH REPORT

Batch ID: EX140605-1-1 Instrument ID HPSV1 Method: SW8270SIMPAH

LCS Sample ID: EX140605-1 Units: UG/KG Analysis Date: 6/9/2014 16:01

Client ID: Run ID: SV140609-4 Prep Date: 6/5/2014 DF: 1

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD	RPD Limit	Qual
NAPHTHALENE	62.2	3.33	66.7		93	40-107			30	
ACENAPHTHENE	60.6	3.33	66.7		91	46-108			30	
FLUORENE	65	3.33	66.7		97	49-108			30	
ANTHRACENE	64.3	3.33	66.7		96	53-107			30	
FLUORANTHENE	64.2	3.33	66.7		96	54-114			30	
PYRENE	58.1	3.33	66.7		87	46-123			30	
BENZO(A)ANTHRACENE	56.2	3.33	66.7		84	52-111			30	
CHRYSENE	55.4	3.33	66.7		83	53-112			30	
BENZO(B)FLUORANTHENE	54.1	3.33	66.7		81	45-114			30	
BENZO(K)FLUORANTHENE	53.4	3.33	66.7		80	45-123			30	
BENZO(A)PYRENE	51.1	3.33	66.7		77	50-111			30	
INDENO(1,2,3-CD)PYRENE	47.8	3.33	66.7		72	38-121			30	
DIBENZO(A,H)ANTHRACENE	49.2	3.33	66.7		74	41-125			30	
Surr: NITROBENZENE-D5	73.4		66.7		110	28-113				
Surr: 2-FLUOROBIPHENYL	64.3		66.7		96	41-106				
Surr: TERPHENYL-D14	53		66.7		80	25-147				

MB Sample ID: EX140605-1 Units: UG/KG Analysis Date: 6/9/2014 15:44

Client ID: Run ID: SV140609-4 Prep Date: 6/5/2014 DF: 1

Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD	RPD Limit	Qual
NAPHTHALENE	ND	3.3								
ACENAPHTHENE	ND	3.3								
FLUORENE	ND	3.3								
ANTHRACENE	ND	3.3								
FLUORANTHENE	ND	3.3								
PYRENE	ND	3.3								
BENZO(A)ANTHRACENE	ND	3.3								
CHRYSENE	ND	3.3								
BENZO(B)FLUORANTHENE	ND	3.3								
BENZO(K)FLUORANTHENE	ND	3.3								
BENZO(A)PYRENE	ND	3.3								
INDENO(1,2,3-CD)PYRENE	ND	3.3								
DIBENZO(A,H)ANTHRACENE	ND	3.3								
Surr: NITROBENZENE-D5	66.6		66.7		100	28-113				
Surr: 2-FLUOROBIPHENYL	58.1		66.7		87	41-106				
Surr: TERPHENYL-D14	52.7		66.7		79	25-147				

The following samples were analyzed in this batch:

Client: Analytica Environmental Laboratories
Work Order: 1406037
Project: USA 1-14 H.C.

QC BATCH REPORT

Batch ID: **WC140611-1-1** Instrument ID **Spec** Method: **SW7196**

LCS		Sample ID: WC140611-1			Units: MG/KG			Analysis Date: 6/11/2014		
Client ID:		Run ID: CR140611-1A1			Prep Date: 6/11/2014			DF: 1		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD	RPD Limit	Qual
CHROMIUM VI	2.87	0.1	3		96	80-120			20	

MB		Sample ID: WC140611-1			Units: MG/KG			Analysis Date: 6/11/2014		
Client ID:		Run ID: CR140611-1A1			Prep Date: 6/11/2014			DF: 1		
Analyte	Result	ReportLimit	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD	RPD Limit	Qual
CHROMIUM VI	ND	0.1								

The following samples were analyzed in this batch: 1406037-1



12189 Pennsylvania St
Thornton, CO 80241
(303) 469-8968
(303) 469-5254 fax

4307 Arctic Boulevard
Anchorage, AK 99503
(907) 258-2155
(907) 258-6634 fax

475 Hall St.
Fairbanks, AK 99701
(907) 456-3116
(907) 456-3125 fax

1203 W. Parks Hwy
Wasilla, AK 99654
(907) 373-5440

Analytica Chain of Custody Form

Chain of Custody No: **084600**

Client Name & Address:

ESI

Report to: **Heydenbeck**

Phone No: **(950) 948-8978**

Fax No:

E-mail: **ESI.Craig@supris.net**

Special Instructions/Comments:

Public Water System (PWS) ID#:

Maralex USA 1-14 Hc

Turnaround Time for Results (TAT)

Standard Routine Expedited Non-Routine
(< 10 days, prior authorization required)
(Please specify due date below; add'l charges may apply)

Requested Due Date for Results:

P.O. or Contract No:

Section to be Completed by Analytica

Quote ID: LGN: **01405147**

Account #:

Check Credit Card

Invoice to Name & Address:

Maralex Jim Graves

Requested Analysis/Method

Kit Prep/Shipping Charge: \$

Client Sample Identification / Location

USA 1-14 H.C.

Date Sampled: **5/28/14 8:35 S**

Matrix (S-DW-WW-Other): **S**

No. of Containers: **6**

Lot #: **109090-1**

Pres:

Lot #: Pres:

Field Preserved

Field Filtered

MS/MSD ?

Relinquished by:

Heydenbeck

Date: **5/28/14 17:10**

Time: **17:10**

Received by:

Maralex

Date: **5/30/14**

Time: **11:00**

Relinquished by:

Heydenbeck

Date:

Time:

Received by:

Date:

Date:

Time:

Name of Sampler: (printed)

Heydenbeck

Section to be completed by Analytica

Initiated by: **THO**

Temp/Loc: **3.1**

Thermo ID#:

Shipped Via: