



RECEIVED
7/23/2013

*Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com*

July 02, 2013

Shawna Chubbuck
Souder, Miller and Associates
2101 San Juan Boulevard
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: Monument Global

OrderNo.: 1306605

Dear Shawna Chubbuck:

Hall Environmental Analysis Laboratory received 3 sample(s) on 6/14/2013 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

A handwritten signature in black ink, appearing to read "Andy Freeman", is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306605

Date Reported: 7/2/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: Surface #1

Project: Monument Global

Collection Date: 6/13/2013 12:15:00 PM

Lab ID: 1306605-001

Matrix: SOIL

Received Date: 6/14/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	9000	990		mg/Kg	100	6/20/2013 3:56:30 PM	7928
Motor Oil Range Organics (MRO)	5400	5000		mg/Kg	100	6/20/2013 3:56:30 PM	7928
Surr: DNOP	0	63-147	S	%REC	100	6/20/2013 3:56:30 PM	7928
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	150	23		mg/Kg	5	6/19/2013 11:16:47 AM	7950
Surr: BFB	234	80-120	S	%REC	5	6/19/2013 11:16:47 AM	7950
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.23		mg/Kg	5	6/19/2013 11:16:47 AM	7950
Toluene	1.4	0.23		mg/Kg	5	6/19/2013 11:16:47 AM	7950
Ethylbenzene	2.0	0.23		mg/Kg	5	6/19/2013 11:16:47 AM	7950
Xylenes, Total	7.2	0.47		mg/Kg	5	6/19/2013 11:16:47 AM	7950
Surr: 4-Bromofluorobenzene	108	80-120		%REC	5	6/19/2013 11:16:47 AM	7950
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	2.5		mg/Kg	1	6/25/2013 1:40:46 PM	7952
1-Methylnaphthalene	6.6	2.5		mg/Kg	1	6/25/2013 1:40:46 PM	7952
2-Methylnaphthalene	6.5	2.5		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Acenaphthylene	ND	2.5		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Acenaphthene	ND	2.5		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Fluorene	0.74	0.30		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Phenanthrene	2.3	1.5		mg/Kg	10	6/26/2013 8:54:54 AM	7952
Anthracene	ND	0.15		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Fluoranthene	0.30	0.20		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Pyrene	ND	0.25		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Benz(a)anthracene	0.11	0.10		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Chrysene	0.43	0.10		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Benzo(b)fluoranthene	ND	0.10		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Benzo(k)fluoranthene	ND	0.10		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Benzo(a)pyrene	ND	0.10		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Dibenz(a,h)anthracene	ND	0.10		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Benzo(g,h,i)perylene	ND	0.10		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Indeno(1,2,3-cd)pyrene	ND	0.10		mg/Kg	1	6/25/2013 1:40:46 PM	7952
Surr: Benzo(e)pyrene	81.0	36.7-118		%REC	1	6/25/2013 1:40:46 PM	7952
EPA METHOD 7471: MERCURY							Analyst: IDC
Mercury	ND	0.033		mg/kg	1	6/19/2013 2:11:40 PM	7989
EPA METHOD 6010B: SOIL METALS							Analyst: ELS
Arsenic	ND	2.5		mg/Kg	1	6/25/2013 9:39:57 AM	8023
Barium	200	0.50		mg/Kg	5	6/26/2013 4:53:29 PM	8023
Boron	12	2.0		mg/Kg	1	6/25/2013 9:39:57 AM	8023

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306605

Date Reported: 7/2/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: Surface #1

Project: Monument Global

Collection Date: 6/13/2013 12:15:00 PM

Lab ID: 1306605-001

Matrix: SOIL

Received Date: 6/14/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: SOIL METALS							Analyst: ELS
Cadmium	ND	0.10		mg/Kg	1	6/25/2013 9:39:57 AM	8023
Chromium	4.9	0.30		mg/Kg	1	6/25/2013 9:39:57 AM	8023
Copper	4.1	0.30		mg/Kg	1	6/26/2013 4:50:53 PM	8023
Lead	3.8	0.25		mg/Kg	1	6/25/2013 9:39:57 AM	8023
Nickel	4.2	0.50		mg/Kg	1	6/25/2013 9:39:57 AM	8023
Selenium	ND	2.5		mg/Kg	1	6/26/2013 4:50:53 PM	8023
Silver	ND	0.25		mg/Kg	1	6/25/2013 9:39:57 AM	8023
Zinc	22	2.5		mg/Kg	1	6/25/2013 9:39:57 AM	8023
SAR SOLUBLE CATIONS							Analyst: JLF
Calcium	3700	1.0		mg/L	1	6/20/2013 2:35:00 PM	R11453
Magnesium	500	1.0		mg/L	1	6/20/2013 2:35:00 PM	R11453
Sodium	12000	1.0		mg/L	1	6/20/2013 2:35:00 PM	R11453
Sodium Adsorption Ratio	47	0			1	6/20/2013 2:35:00 PM	R11453
CONDUCTANCE							Analyst: JML
Specific Conductance	8800	1.0		µmhos/cm	1	6/20/2013 4:49:00 PM	R11447
SM4500-H+B: PH							Analyst: KS
pH	7.89	1.68		pH Units	1	6/24/2013 2:28:00 PM	R11517

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 2 of 15

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306605

Date Reported: 7/2/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: Surface #2

Project: Monument Global

Collection Date: 6/13/2013 12:20:00 PM

Lab ID: 1306605-002

Matrix: SOIL

Received Date: 6/14/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS					Analyst: JME		
Diesel Range Organics (DRO)	27000	1000		mg/Kg	100	6/20/2013 4:18:32 PM	7928
Motor Oil Range Organics (MRO)	10000	5000		mg/Kg	100	6/20/2013 4:18:32 PM	7928
Surr: DNOP	0	63-147	S	%REC	100	6/20/2013 4:18:32 PM	7928
EPA METHOD 8015D: GASOLINE RANGE					Analyst: NSB		
Gasoline Range Organics (GRO)	4800	470		mg/Kg	100	6/19/2013 12:42:45 PM	7950
Surr: BFB	254	80-120	S	%REC	100	6/19/2013 12:42:45 PM	7950
EPA METHOD 8021B: VOLATILES					Analyst: NSB		
Benzene	27	4.7		mg/Kg	100	6/19/2013 12:42:45 PM	7950
Toluene	210	4.7		mg/Kg	100	6/19/2013 12:42:45 PM	7950
Ethylbenzene	100	4.7		mg/Kg	100	6/19/2013 12:42:45 PM	7950
Xylenes, Total	320	9.5		mg/Kg	100	6/19/2013 12:42:45 PM	7950
Surr: 4-Bromofluorobenzene	119	80-120		%REC	100	6/19/2013 12:42:45 PM	7950
EPA METHOD 8310: PAHS					Analyst: SCC		
Naphthalene	37	25		mg/Kg	10	6/25/2013 2:10:04 PM	7952
1-Methylnaphthalene	60	25		mg/Kg	10	6/25/2013 2:10:04 PM	7952
2-Methylnaphthalene	84	25		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Acenaphthylene	ND	25		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Acenaphthene	ND	25		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Fluorene	ND	3.0		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Phenanthrene	26	3.0		mg/Kg	20	6/26/2013 10:50:24 AM	7952
Anthracene	ND	1.5		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Fluoranthene	ND	2.0		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Pyrene	ND	2.5		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Benz(a)anthracene	ND	1.0		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Chrysene	3.0	1.0		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Benzo(b)fluoranthene	ND	1.0		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Benzo(k)fluoranthene	ND	1.0		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Benzo(a)pyrene	ND	1.0		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Dibenz(a,h)anthracene	ND	1.0		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Benzo(g,h,i)perylene	ND	1.0		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Indeno(1,2,3-cd)pyrene	ND	1.0		mg/Kg	10	6/25/2013 2:10:04 PM	7952
Surr: Benzo(e)pyrene	0	36.7-118	S	%REC	10	6/25/2013 2:10:04 PM	7952
EPA METHOD 7471: MERCURY					Analyst: IDC		
Mercury	ND	0.033		mg/kg	1	6/19/2013 2:13:25 PM	7989
EPA METHOD 6010B: SOIL METALS					Analyst: ELS		
Arsenic	ND	2.5		mg/Kg	1	6/25/2013 9:45:28 AM	8023
Barium	140	0.50		mg/Kg	5	6/26/2013 5:00:33 PM	8023
Boron	7.4	2.0		mg/Kg	1	6/25/2013 9:45:28 AM	8023

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.
	E	Value above quantitation range
	J	Analyte detected below quantitation limits
	O	RSD is greater than RSDlimit
	R	RPD outside accepted recovery limits

B	Analyte detected in the associated Method Blank
H	Holding times for preparation or analysis exceeded
ND	Not Detected at the Reporting Limit
P	Sample pH greater than 2 for VOA and TOC only.
RL	Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306605

Date Reported: 7/2/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: Surface #2

Project: Monument Global

Collection Date: 6/13/2013 12:20:00 PM

Lab ID: 1306605-002

Matrix: SOIL

Received Date: 6/14/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: SOIL METALS				Analyst: ELS			
Cadmium	ND	0.10		mg/Kg	1	6/25/2013 9:45:28 AM	8023
Chromium	2.7	0.30		mg/Kg	1	6/25/2013 9:45:28 AM	8023
Copper	2.1	0.30		mg/Kg	1	6/26/2013 4:58:01 PM	8023
Lead	3.2	0.25		mg/Kg	1	6/25/2013 9:45:28 AM	8023
Nickel	2.3	0.50		mg/Kg	1	6/25/2013 9:45:28 AM	8023
Selenium	ND	2.5		mg/Kg	1	6/26/2013 4:58:01 PM	8023
Silver	ND	0.25		mg/Kg	1	6/25/2013 9:45:28 AM	8023
Zinc	16	2.5		mg/Kg	1	6/25/2013 9:45:28 AM	8023
SAR SOLUBLE CATIONS				Analyst: JLF			
Calcium	1800	1.0		mg/L	1	6/20/2013 2:35:00 PM	R11453
Magnesium	270	1.0		mg/L	1	6/20/2013 2:35:00 PM	R11453
Sodium	6700	1.0		mg/L	1	6/20/2013 2:35:00 PM	R11453
Sodium Adsorption Ratio	39	0			1	6/20/2013 2:35:00 PM	R11453
CONDUCTANCE				Analyst: JML			
Specific Conductance	5100	1.0		µmhos/cm	1	6/20/2013 4:49:00 PM	R11447
SM4500-H+B: PH				Analyst: KS			
pH	8.08	1.68		pH Units	1	6/24/2013 2:28:00 PM	R11517

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 4 of 15

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306605

Date Reported: 7/2/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: #3 @ 12'

Project: Monument Global

Collection Date: 6/13/2013 12:25:00 PM

Lab ID: 1306605-003

Matrix: SOIL

Received Date: 6/14/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	6/20/2013 12:58:43 AM	7928
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	6/20/2013 12:58:43 AM	7928
Surr: DNOP	115	63-147		%REC	1	6/20/2013 12:58:43 AM	7928
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	6/18/2013 2:49:18 PM	7950
Surr: BFB	115	80-120		%REC	1	6/18/2013 2:49:18 PM	7950
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.046		mg/Kg	1	6/18/2013 2:49:18 PM	7950
Toluene	ND	0.046		mg/Kg	1	6/18/2013 2:49:18 PM	7950
Ethylbenzene	ND	0.046		mg/Kg	1	6/18/2013 2:49:18 PM	7950
Xylenes, Total	ND	0.093		mg/Kg	1	6/18/2013 2:49:18 PM	7950
Surr: 4-Bromofluorobenzene	106	80-120		%REC	1	6/18/2013 2:49:18 PM	7950
EPA METHOD 8310: PAHS							Analyst: SCC
Naphthalene	ND	0.25		mg/Kg	1	6/25/2013 2:39:20 PM	7952
1-Methylnaphthalene	ND	0.25		mg/Kg	1	6/25/2013 2:39:20 PM	7952
2-Methylnaphthalene	ND	0.25		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Acenaphthylene	ND	0.25		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Acenaphthene	ND	0.25		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Fluorene	ND	0.030		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Phenanthrene	ND	0.015		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Anthracene	ND	0.015		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Fluoranthene	ND	0.020		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Pyrene	ND	0.025		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Benz(a)anthracene	ND	0.010		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Chrysene	ND	0.010		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Benzo(b)fluoranthene	ND	0.010		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Benzo(k)fluoranthene	ND	0.010		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Benzo(a)pyrene	ND	0.010		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Dibenz(a,h)anthracene	ND	0.010		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Benzo(g,h,i)perylene	ND	0.010		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Indeno(1,2,3-cd)pyrene	ND	0.010		mg/Kg	1	6/25/2013 2:39:20 PM	7952
Surr: Benzo(e)pyrene	106	36.7-118		%REC	1	6/25/2013 2:39:20 PM	7952
EPA METHOD 7471: MERCURY							Analyst: IDC
Mercury	ND	0.033		mg/kg	1	6/19/2013 2:15:10 PM	7989
EPA METHOD 6010B: SOIL METALS							Analyst: JLF
Arsenic	ND	2.5		mg/Kg	1	6/26/2013 5:03:03 PM	8023
Barium	190	0.50		mg/Kg	5	6/26/2013 5:05:34 PM	8023
Boron	4.4	2.0		mg/Kg	1	6/25/2013 9:57:52 AM	8023

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1306605

Date Reported: 7/2/2013

CLIENT: Souder, Miller and Associates

Client Sample ID: #3 @ 12'

Project: Monument Global

Collection Date: 6/13/2013 12:25:00 PM

Lab ID: 1306605-003

Matrix: SOIL

Received Date: 6/14/2013 10:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 6010B: SOIL METALS					Analyst: JLF		
Cadmium	ND	0.10		mg/Kg	1	6/26/2013 5:03:03 PM	8023
Chromium	2.3	0.30		mg/Kg	1	6/26/2013 5:03:03 PM	8023
Copper	2.3	0.30		mg/Kg	1	6/26/2013 5:03:03 PM	8023
Lead	2.3	0.25		mg/Kg	1	6/26/2013 5:03:03 PM	8023
Nickel	1.9	0.50		mg/Kg	1	6/26/2013 5:03:03 PM	8023
Selenium	ND	2.5		mg/Kg	1	6/26/2013 5:03:03 PM	8023
Silver	ND	0.25		mg/Kg	1	6/25/2013 9:57:52 AM	8023
Zinc	12	2.5		mg/Kg	1	6/26/2013 5:03:03 PM	8023
SAR SOLUBLE CATIONS					Analyst: JLF		
Calcium	45	1.0		mg/L	1	6/20/2013 2:35:00 PM	R11453
Magnesium	4.2	1.0		mg/L	1	6/20/2013 2:35:00 PM	R11453
Sodium	48	1.0		mg/L	1	6/20/2013 2:35:00 PM	R11453
Sodium Adsorption Ratio	1.8	0			1	6/20/2013 2:35:00 PM	R11453
CONDUCTANCE					Analyst: JML		
Specific Conductance	210	1.0		µmhos/cm	1	6/20/2013 4:49:00 PM	R11447
SM4500-H+B: PH					Analyst: KS		
pH	8.85	1.68		pH Units	1	6/24/2013 2:28:00 PM	R11517

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	O	RSD is greater than RSDlimit	P	Sample pH greater than 2 for VOA and TOC only.
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
				Page 6 of 15



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859
Tax I.D. 62-0814289
Est. 1970

REPORT OF ANALYSIS

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

June 26, 2013

Date Received : June 19, 2013
Description :
Sample ID : 1306605-001B SURFACE 1
Collected By :
Collection Date : 06/13/13 12:15

ESC Sample # : L642273-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/23/13	1
ORP	270		mV	2580 B-2011	06/25/13	1
pH	9.1		su	9045D	06/26/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

This report shall not be reproduced, except in full, without the written approval from ESC.

Reported: 06/26/13 15:46 Printed: 06/26/13 15:47

L642273-01 (PH) - 9.1023.5c



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

June 26, 2013

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

Date Received : June 19, 2013
Description :
Sample ID : 1306605-002B SURFACE 2
Collected By :
Collection Date : 06/13/13 12:20

ESC Sample # : L642273-02

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/23/13	1
ORP	230		mV	2580 B-2011	06/25/13	1
pH	8.5		su	9045D	06/26/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 06/26/13 15:46 Printed: 06/26/13 15:47

L642273-02 (PH) - 8.5023.4c



12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

June 26, 2013

Anne Thorne
Hall Environmental Analysis Laborat
4901 Hawkins NE
Albuquerque, NM 87109

ESC Sample # : L642273-03

Date Received : June 19, 2013
Description :

Site ID :

Sample ID : 1306605-003B 3 12FT

Project # :

Collected By :
Collection Date : 06/13/13 12:25

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Chromium, Hexavalent	BDL	2.0	mg/kg	3060A/7196A	06/23/13	1
ORP	190		mV	2580 B-2011	06/25/13	1
pH	9.0		su	9045D	06/26/13	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 06/26/13 15:46 Printed: 06/26/13 15:47

L642273-03 (PH) - 9.0023.2c



YOUR LAB OF CHOICE

Hall Environmental Analysis Laboratory
Anne Thorne
4901 Hawkins NE

Albuquerque, NM 87109

Quality Assurance Report
Level II

L642273

12065 Lebanon Rd.
Mt. Juliet, TN 37122
(615) 758-5858
1-800-767-5859
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

June 26, 2013

Analyte	Result	Laboratory Blank Units % Rec	Limit	Batch	Date Analyzed
Chromium, Hexavalent	< 2	mg/kg		WG667779	06/23/13 01:20

Analyte	Units	Result	Duplicate Duplicate	RPD	Limit	Ref Samp	Batch
Chromium, Hexavalent	mg/kg	0	0	0	20	L641935-06	WG667779
Chromium, Hexavalent	mg/kg	0	0	0	20	L642273-03	WG667779
ORP	mV	300.	300.	0.333	20	L642044-04	WG668220
ORP	mV	240.	250.	2.02	20	L642448-07	WG668220
pH	su	7.70	7.70	0.259	1	L642212-01	WG668696
pH	su	8.40	8.40	0.357	1	L642318-06	WG668696

Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
Chromium, Hexavalent	mg/kg	146	130.	89.0	80-120	WG667779
ORP	mV	228	220.	96.5	95.6-104.	WG668220
pH	su	5.79	5.80	100.	98.3-101.7	WG668696

Analyte	Units	Laboratory Control Result	Sample Ref	Duplicate %Rec	Limit	RPD	Limit	Batch
Chromium, Hexavalent	mg/kg	126.	130.	86.0	80-120	3.13	20	WG667779
ORP	mV	220.	220.	96.0	95.6-104.	0	20	WG668220
pH	su	5.80	5.80	100.	98.3-101.7	0	20	WG668696

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
Chromium, Hexavalent	mg/kg	14.3	0	20	71.5*	75-125	L641935-03	WG667779

Analyte	Units	Matrix Spike MSD	Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
Chromium, Hexavalent	mg/kg	13.3	14.3	66.5*	75-125	7.25	20	L641935-03	WG667779

Batch number / Run number / Sample number cross reference

WG667779: R2720501: L642273-01 02 03
WG668220: R2721960: L642273-01 02 03
WG668696: R2723480: L642273-01 02 03

* * Calculations are performed prior to rounding of reported values.

* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306605

02-Jul-13

Client: Souder, Miller and Associates

Project: Monument Global

Sample ID	MB-7928		SampType: MBLK		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS		Batch ID: 7928		RunNo: 11331					
Prep Date:	6/14/2013		Analysis Date: 6/17/2013		SeqNo: 320775		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	7.1		10.00		70.6	63	147			

Sample ID	LCS-7928		SampType: LCS		TestCode: EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS		Batch ID: 7928		RunNo: 11331					
Prep Date:	6/14/2013		Analysis Date: 6/17/2013		SeqNo: 320776		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	42	10	50.00	0	83.7	77.1	128			
Surr: DNOP	3.2		5.000		63.2	63	147			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306605

02-Jul-13

Client: Souder, Miller and Associates

Project: Monument Global

Sample ID	MB-7950		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 7950		RunNo: 11374					
Prep Date:	6/17/2013		Analysis Date: 6/18/2013		SeqNo: 321775		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	960		1000		95.8	80	120			

Sample ID	LCS-7950		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 7950		RunNo: 11374					
Prep Date:	6/17/2013		Analysis Date: 6/18/2013		SeqNo: 321782		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	26	5.0	25.00	0	103	62.6	136			
Surr: BFB	1000		1000		103	80	120			

Qualifiers:

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E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306605

02-Jul-13

Client: Souder, Miller and Associates

Project: Monument Global

Sample ID	MB-7950		SampType:	MBLK		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	PBS		Batch ID:	7950		RunNo:	11374			
Prep Date:	6/17/2013		Analysis Date:	6/18/2013		SeqNo:	321840		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	LCS-7950		SampType:	LCS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	LCSS		Batch ID:	7950		RunNo:	11374			
Prep Date:	6/17/2013		Analysis Date:	6/18/2013		SeqNo:	321844		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.050	1.000	0	109	80	120			
Toluene	1.1	0.050	1.000	0	108	80	120			
Ethylbenzene	1.1	0.050	1.000	0	107	80	120			
Xylenes, Total	3.3	0.10	3.000	0	109	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		106	80	120			

Sample ID	1306605-001AMS		SampType:	MS		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	Surface #1		Batch ID:	7950		RunNo:	11425			
Prep Date:	6/17/2013		Analysis Date:	6/19/2013		SeqNo:	323060		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.24	0.9407	0.07302	110	67.3	145			
Toluene	3.2	0.24	0.9407	1.422	188	66.8	144			S
Ethylbenzene	3.9	0.24	0.9407	1.982	209	61.9	153			S
Xylenes, Total	14	0.47	2.822	7.154	228	65.8	149			S
Surr: 4-Bromofluorobenzene	5.5		4.704		117	80	120			

Sample ID	1306605-001AMSD		SampType:	MSD		TestCode:	EPA Method 8021B: Volatiles			
Client ID:	Surface #1		Batch ID:	7950		RunNo:	11425			
Prep Date:	6/17/2013		Analysis Date:	6/19/2013		SeqNo:	323061		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.1	0.23	0.9398	0.07302	106	67.3	145	3.75	20	
Toluene	3.2	0.23	0.9398	1.422	185	66.8	144	0.958	20	S
Ethylbenzene	4.0	0.23	0.9398	1.982	216	61.9	153	1.75	20	S
Xylenes, Total	14	0.47	2.820	7.154	238	65.8	149	2.02	20	S
Surr: 4-Bromofluorobenzene	5.7		4.699		120	80	120	0	0	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306605

02-Jul-13

Client: Souder, Miller and Associates

Project: Monument Global

Sample ID	MB-7952		SampType:	MBLK		TestCode:	EPA Method 8310: PAHs			
Client ID:	PBS		Batch ID:	7952		RunNo:	11451			
Prep Date:	6/17/2013		Analysis Date:	6/21/2013		SeqNo:	324861		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	ND	0.25								
1-Methylnaphthalene	ND	0.25								
2-Methylnaphthalene	ND	0.25								
Acenaphthylene	ND	0.25								
Acenaphthene	ND	0.25								
Fluorene	ND	0.030								
Phenanthrene	ND	0.015								
Anthracene	ND	0.015								
Fluoranthene	ND	0.020								
Pyrene	ND	0.025								
Benz(a)anthracene	ND	0.010								
Chrysene	ND	0.010								
Benzo(b)fluoranthene	ND	0.010								
Benzo(k)fluoranthene	ND	0.010								
Benzo(a)pyrene	ND	0.010								
Dibenz(a,h)anthracene	ND	0.010								
Benzo(g,h,i)perylene	ND	0.010								
Indeno(1,2,3-cd)pyrene	ND	0.010								
Surr: Benzo(e)pyrene	0.58		0.5000		116	36.7	118			

Sample ID	LCS-7952		SampType:	LCS		TestCode:	EPA Method 8310: PAHs			
Client ID:	LCSS		Batch ID:	7952		RunNo:	11451			
Prep Date:	6/17/2013		Analysis Date:	6/21/2013		SeqNo:	324863		Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.4	0.25	2.000	0	70.8	43.1	92.9			
1-Methylnaphthalene	1.1	0.25	2.000	0	56.5	44.9	94.8			
2-Methylnaphthalene	1.1	0.25	2.000	0	52.7	44.5	95.4			
Acenaphthylene	1.5	0.25	2.000	0	74.2	44.7	96			
Acenaphthene	1.2	0.25	2.000	0	57.6	47.5	97.2			
Fluorene	0.12	0.030	0.2000	0	58.2	36	84.9			
Phenanthrene	0.081	0.015	0.1006	0	80.5	42.6	92.6			
Anthracene	0.074	0.015	0.1006	0	74.1	44.4	89.9			
Fluoranthene	0.15	0.020	0.2006	0	76.3	39.3	102			
Pyrene	0.091	0.025	0.2000	0	45.5	25.3	96.9			
Benz(a)anthracene	0.017	0.010	0.02000	0	83.8	50.2	98.7			
Chrysene	0.071	0.010	0.1006	0	70.3	43.5	89.5			
Benzo(b)fluoranthene	0.021	0.010	0.02500	0	84.0	58.2	106			
Benzo(k)fluoranthene	0.011	0.010	0.01250	0	86.0	48.7	109			
Benzo(a)pyrene	ND	0.010	0.01250	0	66.0	40.3	113			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306605

02-Jul-13

Client: Souder, Miller and Associates

Project: Monument Global

Sample ID LCS-7952	SampType: LCS			TestCode: EPA Method 8310: PAHs						
Client ID: LCSS	Batch ID: 7952			RunNo: 11451						
Prep Date: 6/17/2013	Analysis Date: 6/21/2013			SeqNo: 324863		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dibenz(a,h)anthracene	0.019	0.010	0.02500	0	77.0	47.7	106			
Benzo(g,h,i)perylene	0.021	0.010	0.02500	0	83.0	48.3	106			
Indeno(1,2,3-cd)pyrene	0.038	0.010	0.05002	0	75.0	43.5	101			
Surr: Benzo(e)pyrene	0.54		0.5000		107	36.7	118			

Sample ID 1306605-003AMS	SampType: MS			TestCode: EPA Method 8310: PAHs						
Client ID: #3 @ 12'	Batch ID: 7952			RunNo: 11548						
Prep Date: 6/17/2013	Analysis Date: 6/25/2013			SeqNo: 327180		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.4	0.25	1.999	0	68.5	34.9	90.8			
1-Methylnaphthalene	1.5	0.25	1.999	0	73.3	36.4	91.9			
2-Methylnaphthalene	1.5	0.25	1.999	0	76.3	36.2	91.7			
Acenaphthylene	1.5	0.25	1.999	0	73.3	18.6	120			
Acenaphthene	1.5	0.25	1.999	0	74.9	33	100			
Fluorene	0.16	0.030	0.1999	0	78.1	37.5	77			S
Phenanthrene	0.096	0.015	0.1005	0.01102	84.7	32.2	104			
Anthracene	0.066	0.015	0.1005	0	66.1	25.2	112			
Fluoranthene	0.16	0.020	0.2005	0	78.4	24.6	106			
Pyrene	0.19	0.025	0.1999	0	92.8	12.2	99.3			
Benz(a)anthracene	0.015	0.010	0.01999	0	77.5	29.3	122			
Chrysene	0.071	0.010	0.1005	0.004256	66.6	40.9	93.5			
Benzo(b)fluoranthene	0.022	0.010	0.02499	0.001002	84.0	42.2	125			
Benzo(k)fluoranthene	ND	0.010	0.01249	0	74.0	14.8	130			
Benzo(a)pyrene	ND	0.010	0.01249	0	72.0	13.2	134			
Dibenz(a,h)anthracene	0.018	0.010	0.02499	0	72.0	14.9	116			
Benzo(g,h,i)perylene	0.019	0.010	0.02499	0	76.0	15.7	113			
Indeno(1,2,3-cd)pyrene	0.036	0.010	0.05000	0	71.5	16.3	115			
Surr: Benzo(e)pyrene	0.60		0.4998		119	36.7	118			S

Sample ID 1306605-003AMSD	SampType: MSD			TestCode: EPA Method 8310: PAHs						
Client ID: #3 @ 12'	Batch ID: 7952			RunNo: 11548						
Prep Date: 6/17/2013	Analysis Date: 6/25/2013			SeqNo: 327186		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Naphthalene	1.5	0.25	1.990	0	73.1	34.9	90.8	6.15	20	
1-Methylnaphthalene	1.5	0.25	1.990	0	77.5	36.4	91.9	5.09	20	
2-Methylnaphthalene	1.6	0.25	1.990	0	80.6	36.2	91.7	5.13	20	
Acenaphthylene	1.5	0.25	1.990	0	74.2	18.6	120	0.856	20	
Acenaphthene	1.6	0.25	1.990	0	79.9	33	100	6.00	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- E Value above quantitation range
- J Analyte detected below quantitation limits
- O RSD is greater than RSDlimit
- R RPD outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- P Sample pH greater than 2 for VOA and TOC only.
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306605

02-Jul-13

Client: Souder, Miller and Associates

Project: Monument Global

Sample ID	1306605-003AMSD	SampType: MSD		TestCode: EPA Method 8310: PAHs						
Client ID:	#3 @ 12'	Batch ID: 7952		RunNo: 11548						
Prep Date:	6/17/2013	Analysis Date: 6/25/2013		SeqNo: 327186		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluorene	0.17	0.030	0.1990	0	84.5	37.5	77	7.39	20	S
Phenanthrene	0.10	0.015	0.1001	0.01102	90.4	32.2	104	5.35	20	
Anthracene	0.079	0.015	0.1001	0	78.8	25.2	112	17.1	20	
Fluoranthene	0.17	0.020	0.1996	0	85.5	24.6	106	8.22	20	
Pyrene	0.21	0.025	0.1990	0	104	12.2	99.3	11.3	20	S
Benz(a)anthracene	0.017	0.010	0.01990	0	86.2	29.3	122	10.2	20	
Chrysene	0.078	0.010	0.1001	0.004256	73.8	40.9	93.5	9.24	20	
Benzo(b)fluoranthene	0.024	0.010	0.02488	0.001002	91.0	42.2	125	7.20	20	
Benzo(k)fluoranthene	0.010	0.010	0.01244	0	84.0	14.8	130	12.2	20	
Benzo(a)pyrene	0.010	0.010	0.01244	0	80.0	13.2	134	10.1	20	
Dibenz(a,h)anthracene	0.020	0.010	0.02488	0	80.0	14.9	116	10.1	20	
Benzo(g,h,i)perylene	0.022	0.010	0.02488	0	87.0	15.7	113	13.1	20	
Indeno(1,2,3-cd)pyrene	0.040	0.010	0.04977	0	80.5	16.3	115	11.4	20	
Surr: Benzo(e)pyrene	0.66		0.4975		133	36.7	118	0	20	S

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306605

02-Jul-13

Client: Souder, Miller and Associates

Project: Monument Global

Sample ID	1306605-003ADUP	SampType:	DUP	TestCode:	CONDUCTANCE					
Client ID:	#3 @ 12'	Batch ID:	R11447	RunNo:	11447					
Prep Date:		Analysis Date:	6/20/2013	SeqNo:	323588	Units:	µmhos/cm			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Specific Conductance	200	1.0						2.57	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306605

02-Jul-13

Client: Souder, Miller and Associates

Project: Monument Global

Sample ID	MB-7989		SampType: MBLK		TestCode: EPA Method 7471: Mercury					
Client ID:	PBS		Batch ID: 7989		RunNo: 11408					
Prep Date:	6/19/2013		Analysis Date: 6/19/2013		SeqNo: 322444		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	ND	0.033								

Sample ID	LCS-7989		SampType: LCS		TestCode: EPA Method 7471: Mercury					
Client ID:	LCSS		Batch ID: 7989		RunNo: 11408					
Prep Date:	6/19/2013		Analysis Date: 6/19/2013		SeqNo: 322445		Units: mg/kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.17	0.033	0.1667	0	104	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1306605

02-Jul-13

Client: Souder, Miller and Associates

Project: Monument Global

Sample ID	MB-8023		SampType: MBLK		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS		Batch ID: 8023		RunNo: 11470					
Prep Date:	6/20/2013		Analysis Date: 6/21/2013		SeqNo: 324435		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	ND	2.5								
Lead	ND	0.25								

Sample ID	LCS-8023		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 8023		RunNo: 11470					
Prep Date:	6/20/2013		Analysis Date: 6/21/2013		SeqNo: 324436		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	26	2.5	25.00	0	105	80	120			
Lead	26	0.25	25.00	0	102	80	120			

Sample ID	MB-8023	SampType: MBLK			TestCode: EPA Method 6010B: Soil Metals					
Client ID:	PBS	Batch ID: 8023			RunNo: 11547					
Prep Date:	6/20/2013	Analysis Date: 6/25/2013			SeqNo: 327036		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	ND	0.10								
Boron	ND	2.0								
Cadmium	ND	0.10								
Chromium	ND	0.30								
Nickel	ND	0.50								
Silver	ND	0.25								
Zinc	ND	2.5								

Sample ID	LCS-8023		SampType: LCS		TestCode: EPA Method 6010B: Soil Metals					
Client ID:	LCSS		Batch ID: 8023		RunNo: 11547					
Prep Date:	6/20/2013		Analysis Date: 6/25/2013		SeqNo: 327037		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	25	0.10	25.00	0	100	80	120			
Boron	25	2.0	25.00	0	101	80	120			
Cadmium	25	0.10	25.00	0	99.4	80	120			
Chromium	25	0.30	25.00	0	99.3	80	120			
Nickel	24	0.50	25.00	0	96.7	80	120			
Silver	5.3	0.25	5.000	0	106	80	120			
Zinc	25	2.5	25.00	0	100	80	120			

Qualifiers:

* Value exceeds Maximum Contaminant Level.
E Value above quantitation range
J Analyte detected below quantitation limits
O RSD is greater than RSDlimit
R RPD outside accepted recovery limits

B Analyte detected in the associated Method Blank
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
P Sample pH greater than 2 for VOA and TOC only.
RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87106
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1306605

RcptNo: 1

Received by/date:

NS *06/14/13*

Logged By: Lindsay Mangin

6/14/2013 10:00:00 AM

Lindsay Mangin

Completed By: Lindsay Mangin

6/14/2013 1:54:53 PM

Lindsay Mangin

Reviewed By:

[Signature]

06/17/2013

Chain of Custody

1. Custody seals intact on sample bottles? Yes ☐ No ☐ Not Present ☒
2. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
3. How was the sample delivered? Courier

Log In

4. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
5. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐
6. Sample(s) in proper container(s)? Yes ☒ No ☐
7. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐
8. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐
9. Was preservative added to bottles? Yes ☐ No ☒ NA ☐
10. VOA vials have zero headspace? Yes ☐ No ☐ No VOA Vials ☒
11. Were any sample containers received broken? Yes ☐ No ☒
12. Does paperwork match bottle labels?
(Note discrepancies on chain of custody) Yes ☒ No ☐
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
14. Is it clear what analyses were requested? Yes ☒ No ☐
15. Were all holding times able to be met?
(If no, notify customer for authorization.) Yes ☒ No ☐

of preserved
bottles checked
for pH: _____
(<2 or >12 unless noted)
Adjusted? _____
Checked by: _____

Special Handling (if applicable)

16. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:		Date:	
By Whom:		Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:			
Client Instructions:			

17. Additional remarks:

18. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.0	Good	Yes			

Table 910-1
CONCENTRATION LEVELS¹

Contaminant of Concern	Concentrations
Organic Compounds in Soil	
TPH (total volatile and extractable petroleum hydrocarbons)	500 mg/kg
Benzene	0.17 mg/kg ²
Toluene	85 mg/kg ²
Ethylbenzene	100 mg/kg ²
Xylenes (total)	175 mg/kg ²
Acenaphthene	1,000 mg/kg ²
Anthracene	1,000 mg/kg ²
Benzo(A)anthracene	0.22 mg/kg ²
Benzo(B)fluoranthene	0.22 mg/kg ²
Benzo(K)fluoranthene	2.2 mg/kg ²
Benzo(A)pyrene	0.022 mg/kg ²
Chrysene	22 mg/kg ²
Dibenzo(A,H)anthracene	0.022 mg/kg ²
Fluoranthene	1,000 mg/kg ²
Fluorene	1,000 mg/kg ²
Indeno(1,2,3,C,D)pyrene	0.22 mg/kg ²
Napthalene	23 mg/kg ²
Pyrene	1,000 mg/kg ²
Organic Compounds in Ground Water	
Benzene	5 µg/l ³
Toluene	560 to 1,000 µg/l ³
Ethylbenzene	700 µg/l ³
Xylenes (Total)	1,400 to 10,000 µg/l ^{3,4}
Inorganics in Soils	
Electrical Conductivity (EC)	<4 mmhos/cm or 2x background
Sodium Adsorption Ratio (SAR)	<12 ⁵
pH	6-9
Inorganics in Ground Water	
Total Dissolved Solids (TDS)	<1.25 x background ³
Chlorides	<1.25 x background ³
Sulfates	<1.25 x background ³
Metals in Soils	
Arsenic	0.39 mg/kg ²
Barium (LDNR True Total Barium)	15,000 mg/kg ²
Boron (Hot Water Soluble)	2 mg/l ³
Cadmium	70 mg/kg ^{2,6}
Chromium (III)	120,000 mg/kg ²
Chromium (VI)	23 mg/kg ^{2,6}
Copper	3,100 mg/kg ²
Lead (Inorganic)	400 mg/kg ²
Mercury	23 mg/kg ²
Nickel (soluble salts)	1,600 mg/kg ^{2,6}
Selenium	390 mg/kg ^{2,4}
Silver	390 mg/kg ²
Zinc	23,000 mg/kg ^{2,6}
Liquid Hydrocarbons in Soils and Ground Water	
Liquid hydrocarbons including condensate and oil	Below detection level

Soils
for
Keith Fox
@
Ecosphere

Soils per
COGCC
910-1

plus
chlorides
+
sulfates

COGCC recommends that the latest version of EPA SW 846 analytical methods be used where possible and that analyses of samples be performed by laboratories that maintain state or national accreditation programs.

¹ Consideration shall be given to background levels in native soils and ground water.

² Concentrations taken from CDPHE-HMWMD Table 1 Colorado Soil Evaluation Values (December 2007).

³ Concentrations taken from CDPHE-WQCC Regulation 41 - The Basic Standards for Ground Water.

⁴ For this range of standards, the first number in the range is a strictly health-based value, based on the WQCC's established methodology for human health-based standards. The second number in the range is a maximum contaminant level (MCL), established under the Federal Safe Drinking Water Act which has been

Colorado Oil and Gas Conservation Commission Table 910-1 Pit Closure/Produced Water (910 Limits)

Volatile Organics

Compound	CAS No.
Benzene	71-43-2
Ethylbenzene	100-41-4
Toluene	108-88-3
Xylenes (total)	1330-20-7

Aq & Soil

Petroleum Hydrocarbons

Compound	CAS No.
Gasoline Range Organics	-
Diesel Range Organics	-

Soil only

Semi-Volatile Organics - PAHs

Compound	CAS No.
Acenaphthene	83-32-9
Anthracene	120-12-7
Benzo(a)anthracene	56-55-3
Benzo(a)pyrene	50-32-8
Benzo(b)fluoranthene	205-99-2
Benzo(k)fluoranthene	207-08-9
Chrysene	218-01-9
Dibenzo(a,h)anthracene	53-70-3
Fluoranthene	206-44-0
Fluorene	86-73-7
Indeno(1,2,3-cd)pyrene	193-39-5
Naphthalene	91-20-3
Pyrene	129-00-0

Soil only

Metals & Inorganics

Element	CAS No.
Arsenic	7440-38-2
Barium	7440-39-3
Cadmium	7440-43-9
Chromium (III)	7440-47-3
Chromium (VI)	18540-29-9
Copper	7440-50-8
Lead	7439-92-1
Mercury	7439-97-6
Nickel	7440-02-0
Selenium	7782-49-2
Silver	7440-22-4
Zinc	7440-66-6

Soil only

Electrical Conductivity - Soil only

Sodium Adsorption Ratio - Soil only

pH - Soil only

Total Dissolved Solids - Water only

Chlorides - Water only 16887-00-6

Sulfates - Water only 14808-79-8