

NM1-10-B

C-141

Concrete Impoundment

Date: 2015

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

JUL 29 2015

Form C-141
Revised August 8, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report☒ Final Report

Name of Company: Industrial Ecosystems, Inc.	Contact: Marcella Marquez, HSE Administrator
Address: #49 CR 3150 * Aztec, NM 87410	Telephone No.: 505-632-1782
Facility Name: JFJ Landfarm	Facility Type: SWMF
Surface Owner: JFJ Landfarm	Mineral Owner:
	Lease No.

LOCATION OF RELEASE

Unit Letter	Section 2	Township 29N	Range 12W	Feet from the	North/South Line	Feet from the	East/West Line	County San Juan
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Latitude & Longitude Drawing attached

NATURE OF RELEASE

Type of Release: Impacted soils from around and beneath the old concrete impoundment which was used to solidify incoming tank/pit bottoms & sludge	Volume of Release: unknown	Volume Recovered: 130 cubic yards
Source of Release: Cracks and slop-over from the concrete impoundment	Date and Hour of Occurrence: Unknown	Date and Hour of Discovery:
Was Immediate Notice Given? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* The concrete impoundment used by JFJ Landfarm for solidification of tank/pit bottoms and sludge was found to be in poor condition with cracks in the concrete which accounted for the impacted soils around and below the impoundment. A Closure Plan for the concrete impoundment was submitted to and approved by NMOCD.		
Describe Area Affected and Cleanup Action Taken.* The concrete and liner from the impoundment was demolished and disposed of according to the closure plan. The impacted soils from below the concrete and liner were then excavated and field screened by Souder Miller & Associates using PID and Petroflag for TPH. One five-point composite sample was collected from the north section and one from the south section of the impoundment area and submitted for laboratory analysis for TPH and BTEX. The laboratory results for the north composite were below laboratory detection limits for all analyses. The laboratory results for the south composite sample was 52 mg/kg for DRO, 330 mg/kg for MRO and below laboratory detection limits for all other analyses. These results were submitted to the NMOCD District III office and Cory Smith approved closure of the impoundment based on meeting the requirements of NMAC 19.15.29. However, IEI elected to continue excavation of the soils until non-detect laboratory samples were obtained. Virgin Soils were used to backfill the excavated area which was completed on 06/24/15.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature: <i>Marcella Marquez</i>	OIL CONSERVATION DIVISION	
Printed Name: Marcella Marquez	Approved by District Supervisor <i>Environmental Spec.</i>	
Title: Regulatory/Compliance/HR	Approval Date: 8/21/15	Expiration Date:
E-mail Address: marcella@industrialecosystems.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 07/21/15	Phone: (505) 632-1782	

* Attach Additional Sheets If Necessary

#NCS 1523340 857

(17)



NORTHWEST
CONCRETE WALL

NORTH SECTION
EXCAVATION
(25'x24'x1.5')

NORTH SC (3/24/2015)

MRO: <50
GRO: <4.9
DRO: <10
BENZENE: <0.049
TOLUENE: <0.049
ETHYLBENZENE: <0.049
TOTAL XYLENE: <0.098

SOUTH SC (5/11/2015)

MRO: <50
GRO: <4.9
DRO: <10
BENZENE: <0.049
TOLUENE: <0.049
ETHYLBENZENE: <0.049
TOTAL XYLENE: <0.098

SOUTHWEST
CONCRETE WALL

LEGEND



COMPOSITE SOIL
SAMPLE LOCATION

NOTE:
ALL SAMPLE RESULTS REPORTED IN mg/kg.

SCALE: 1" = 20'



Souder, Miller & Associates

401 West Broadway Avenue
Farmington, NM 87401-5907

Phone (505) 325-7535 Toll-Free (800) 519-0098 Fax (505) 326-0045
www.soudermiller.com

Serving the Southwest & Rocky Mountains

INDUSTRIAL ECOSYSTEMS INC.

SAN JUAN COUNTY, NEW MEXICO

CONCRETE IMPOUNDMENT CLOSURE
SOIL SAMPLING LOCATIONS

Designed AEP Drawn GJF Checked RSA

Date: May 2015

Scale: Horiz: 1" = 20'
Vert: NA

Project No: 5122921

Figure 2



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

March 30, 2015

Steve Moskal

Souder, Miller and Associates

401 W. Broadway

Farmington, NM 87401

TEL: (505) 325-5667

FAX (505) 327-1496

RE: IEI Concrete Impoundment Closure

OrderNo.: 1503B67

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 2 sample(s) on 3/25/2015 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.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman

Laboratory Manager

4901 Hawkins NE

Albuquerque, NM 87109

Analytical Report

Lab Order 1503B67

Date Reported: 3/30/2015

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Souder, Miller and Associates

Client Sample ID: North SC

Project: IEI Concrete Impoundment Closure

Collection Date: 3/24/2015 11:30:00 AM

Lab ID: 1503B67-001

Matrix: SOIL

Received Date: 3/25/2015 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/27/2015 3:58:53 PM	18350
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/27/2015 3:58:53 PM	18350
Surr: DNOP	89.5	63.5-128		%REC	1	3/27/2015 3:58:53 PM	18350
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/28/2015 1:38:25 AM	18355
Surr: BFB	92.3	80-120		%REC	1	3/28/2015 1:38:25 AM	18355
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	3/28/2015 1:38:25 AM	18355
Toluene	ND	0.049		mg/Kg	1	3/28/2015 1:38:25 AM	18355
Ethylbenzene	ND	0.049		mg/Kg	1	3/28/2015 1:38:25 AM	18355
Xylenes, Total	ND	0.098		mg/Kg	1	3/28/2015 1:38:25 AM	18355
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	3/28/2015 1:38:25 AM	18355

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	Page 1 of 5
	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 Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1503B67

Date Reported: 3/30/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: South SC

Project: IEI Concrete Impoundment Closure

Collection Date: 3/24/2015 11:37:00 AM

Lab ID: 1503B67-002

Matrix: SOIL

Received Date: 3/25/2015 7:55:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: BCN
Diesel Range Organics (DRO)	52	10		mg/Kg	1	3/27/2015 4:20:28 PM	18350
Motor Oil Range Organics (MRO)	330	50		mg/Kg	1	3/27/2015 4:20:28 PM	18350
Surr: DNOP	118	63.5-128		%REC	1	3/27/2015 4:20:28 PM	18350
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/28/2015 2:07:02 AM	18355
Surr: BFB	92.5	80-120		%REC	1	3/28/2015 2:07:02 AM	18355
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.048		mg/Kg	1	3/28/2015 2:07:02 AM	18355
Toluene	ND	0.048		mg/Kg	1	3/28/2015 2:07:02 AM	18355
Ethylbenzene	ND	0.048		mg/Kg	1	3/28/2015 2:07:02 AM	18355
Xylenes, Total	ND	0.095		mg/Kg	1	3/28/2015 2:07:02 AM	18355
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	3/28/2015 2:07:02 AM	18355

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	Page 2 of 5
	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 Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B67

30-Mar-15

Client: Souder, Miller and Associates
Project: IEI Concrete Impoundment Closure

Sample ID	MB-18350	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	18350	RunNo:	25115					
Prep Date:	3/26/2015	Analysis Date:	3/27/2015	SeqNo:	741755	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	9.4		10.00		93.8	63.5	128			

Sample ID	LCS-18350	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	18350	RunNo:	25115					
Prep Date:	3/26/2015	Analysis Date:	3/27/2015	SeqNo:	741859	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	10	50.00	0	100	67.8	130			
Surr: DNOP	5.0		5.000		99.6	63.5	128			

Sample ID	MB-18404	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	18404	RunNo:	25149					
Prep Date:	3/30/2015	Analysis Date:	3/30/2015	SeqNo:	743092	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.9		10.00		98.8	63.5	128			

Sample ID	LCS-18404	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	18404	RunNo:	25149					
Prep Date:	3/30/2015	Analysis Date:	3/30/2015	SeqNo:	743093	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		5.000		99.7	63.5	128			

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 Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B67

30-Mar-15

Client: Souder, Miller and Associates
Project: IEI Concrete Impoundment Closure

Sample ID	MB-18353		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 18353		RunNo: 25124					
Prep Date:	3/26/2015		Analysis Date: 3/27/2015		SeqNo: 742094		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	900		1000		89.7	80	120			

Sample ID	LCS-18353		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 18353		RunNo: 25124					
Prep Date:	3/26/2015		Analysis Date: 3/27/2015		SeqNo: 742095		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: BFB	1000		1000		102	80	120			

Sample ID	MB-18355		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 18355		RunNo: 25124					
Prep Date:	3/26/2015		Analysis Date: 3/27/2015		SeqNo: 742102		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	910		1000		91.2	80	120			

Sample ID	LCS-18355		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 18355		RunNo: 25124					
Prep Date:	3/26/2015		Analysis Date: 3/27/2015		SeqNo: 742103		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	97.5	64	130			
Surr: BFB	990		1000		99.2	80	120			

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 Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1503B67

30-Mar-15

Client: Souder, Miller and Associates
Project: IEI Concrete Impoundment Closure

Sample ID	MB-18353	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID: 18353			RunNo: 25124					
Prep Date:	3/26/2015	Analysis Date: 3/27/2015			SeqNo: 742117		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		102	80	120			

Sample ID	LCS-18353		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 18353		RunNo: 25124					
Prep Date:	3/26/2015		Analysis Date: 3/27/2015		SeqNo: 742118		Units: %REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.1		1.000		108	80	120			

Sample ID	MB-18355	SampType: MBLK			TestCode: EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID: 18355			RunNo: 25124					
Prep Date:	3/26/2015	Analysis Date: 3/27/2015			SeqNo: 742123		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		103	80	120			

Sample ID	LCS-18355		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 18355		RunNo: 25124					
Prep Date:	3/26/2015		Analysis Date: 3/27/2015		SeqNo: 742124		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	110	76.6	128			
Toluene	1.1	0.050	1.000	0	106	75	124			
Ethylbenzene	1.0	0.050	1.000	0	104	79.5	126			
Xylenes, Total	3.1	0.10	3.000	0	103	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

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 Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1503B67

RcptNo: 1

Received by/date:

Lm

03/25/15

Logged By:

Ashley Gallegos

3/25/2015 7:55:00 AM

Completed By:

Ashley Gallegos

3/25/2015 5:55:37 PM

Reviewed By:

JA

03/26/15

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 ☐ # of preserved bottles checked for pH: ☐ (<2 or >12 unless noted)
13. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐ Adjusted? ☐
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 ☐ 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: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding:

Client Instructions:

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.7	Good	Yes			

Chain-of-Custody Record

Client: SMA

Mailing Address: 401 W Broadway

Farmington, NM 87401

Phone #: (505) 325-7535

Email or Fax: alicia.fathers@sondermiller.com

2A/QC Package:

☒ Standard ☐ Level 4 (Full Validation)

Accreditation

☐ NELAP ☐ Other _____

☐ EDD (Type) _____

Turn-Around Time:

☒ Standard ☐ Rush

Project Name: IEI Concrete

Impoundment Closure

Project #:

5122921

Project Manager:

Stev Moshal

Sampler: ADP

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.7

Container Type and #

Preservative Type

HEAL No.

402 Soil North SC

402 Soil South SC

1503B67

-001

-002

☒ BTEX + MTBE + TMB's (8021)

☒ BTEX + MTBE + TPH (Gas only)

☒ TPH 8015B (GRO / DRO / MRO)

TPH (Method 418.1)

EDB (Method 504.1)

PAH's (8310 or 8270 SIMS)

RCRA 8 Metals

Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

8081 Pesticides / 8082 PCB's

8260B (VOA)

8270 (Semi-VOA)

Air Bubbles (Y or N)



**HALL ENVIRONMENTAL
ANALYSIS LABORATORY**

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date: 12/15/15 Time: 1346 Relinquished by: Stev Moshal Received by: Stev Moshal Date: 3/21/15 Time: 1346

Remarks:

Please copy
Stev Moshal @Sondermiller.com



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

May 18, 2015

Steve Moskal
Souder, Miller and Associates
401 W. Broadway
Farmington, NM 87401
TEL: (505) 325-5667
FAX (505) 327-1496

RE: IEI Concrete

OrderNo.: 1505479

Dear Steve Moskal:

Hall Environmental Analysis Laboratory received 1 sample(s) on 5/12/2015 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.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0190

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1505479

Date Reported: 5/18/2015

CLIENT: Souder, Miller and Associates

Client Sample ID: SC-1 S Base

Project: IEI Concrete

Collection Date: 5/11/2015 9:45:00 AM

Lab ID: 1505479-001

Matrix: SOIL

Received Date: 5/12/2015 7:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8015D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	5/13/2015 9:20:37 PM	19176
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	5/13/2015 9:20:37 PM	19176
Surr: DNOP	109	57.9-140		%REC	1	5/13/2015 9:20:37 PM	19176
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	5/15/2015 12:32:00 AM	19184
Surr: BFB	89.1	80-120		%REC	1	5/15/2015 12:32:00 AM	19184
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.049		mg/Kg	1	5/15/2015 12:32:00 AM	19184
Toluene	ND	0.049		mg/Kg	1	5/15/2015 12:32:00 AM	19184
Ethylbenzene	ND	0.049		mg/Kg	1	5/15/2015 12:32:00 AM	19184
Xylenes, Total	ND	0.097		mg/Kg	1	5/15/2015 12:32:00 AM	19184
Surr: 4-Bromofluorobenzene	97.3	80-120		%REC	1	5/15/2015 12:32:00 AM	19184

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	Page 1 of 4
	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 Not In Range	
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit	
	S	Spike Recovery outside accepted recovery limits			

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505479

18-May-15

Client: Souder, Miller and Associates

Project: IEI Concrete

Sample ID	MB-19176	SampType:	MBLK	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	19176	RunNo:	26152					
Prep Date:	5/12/2015	Analysis Date:	5/13/2015	SeqNo:	775893	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	11		10.00		106	57.9	140			

Sample ID	LCS-19176	SampType:	LCS	TestCode:	EPA Method 8015D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	19176	RunNo:	26152					
Prep Date:	5/12/2015	Analysis Date:	5/13/2015	SeqNo:	775894	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	54	10	50.00	0	108	67.8	130			
Surr: DNOP	5.6		5.000		111	57.9	140			

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
- S Spike Recovery 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 Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505479

18-May-15

Client: Souder, Miller and Associates

Project: IEI Concrete

Sample ID	MB-19184		SampType:	MBLK		TestCode:	EPA Method 8015D: Gasoline Range				
Client ID:	PBS		Batch ID:	19184		RunNo:	26208				
Prep Date:	5/12/2015		Analysis Date:	5/14/2015		SeqNo:	777553		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	930		1000		92.7	80	120				

Sample ID	LCS-19184		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 19184		RunNo: 26208					
Prep Date:	5/12/2015		Analysis Date: 5/14/2015		SeqNo: 777554		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	24	5.0	25.00	0	96.0	64	130			
Surr: BFB	1000		1000		102	80	120			

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 Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S Spike Recovery outside accepted recovery limits | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1505479

18-May-15

Client: Souder, Miller and Associates

Project: IEI Concrete

Sample ID	MB-19184	SampType:	MBLK	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	PBS	Batch ID:	19184	RunNo:	26208					
Prep Date:	5/12/2015	Analysis Date:	5/14/2015	SeqNo:	777657	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	1.1		1.000		107	80	120			

Sample ID	LCS-19184	SampType:	LCS	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	LCSS	Batch ID:	19184	RunNo:	26208					
Prep Date:	5/12/2015	Analysis Date:	5/14/2015	SeqNo:	777658	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.050	1.000	0	101	76.6	128			
Toluene	0.99	0.050	1.000	0	98.7	75	124			
Ethylbenzene	1.0	0.050	1.000	0	101	79.5	126			
Xylenes, Total	3.0	0.10	3.000	0	100	78.8	124			
Surr: 4-Bromofluorobenzene	1.2		1.000		115	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
- S Spike Recovery 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 Not In Range
- RL Reporting Detection Limit



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

Sample Log-In Check List

Client Name: SMA-FARM

Work Order Number: 1505479

RcptNo: 1

Received by/date:

[Signature]

05/12/15

Logged By: Lindsay Mangin

5/12/2015 7:00:00 AM

[Signature]

Completed By: Lindsay Mangin

5/12/2015 9:08:17 AM

[Signature]

Reviewed By:

CS

05/12/15

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: ☐ eMail ☐ Phone ☐ Fax ☐ In Person

Regarding: _____

Client Instructions: _____

17. Additional remarks:

18. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.8	Good	Yes			

Chain-of-Custody Record		Turn-Around Time:	
Client: SMA		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	
Mailing Address: 401 W Broadway		Project Name: IEI concrete	
Farmington, NM 87401		Project #: 5122921	
Phone #: 505 325-7535		Project Manager: Steven Moskal	
email or Fax#: steven.moskal@audumna.com		Sampler: J. Sprague On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
QA/QC Package:		Sample Temperature: 4	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			
Accreditation			
<input type="checkbox"/> NELAP <input type="checkbox"/> Other			
<input type="checkbox"/> EDD (Type)			

☒ Standard ☐ Rush

IEI concrete

5122921

Steven Moskal

J. Snyder

☒ Yes ☐ No

Temperature: 42.5

Preservative
Type

HEAL NÖ

1505479

- 001

BTEX + MIBK-TMDS (8021)

BTEX + MTBE + TPH (Gas only)

TPH 8015B (GRO / DRO / MRO)

TPH (Method 418.1)

EDB (Method 504.1)

PAH's (8310 or 8270 SIMS)

RCRA 8 Metals

Anions (F, Cl, NO₃, NO₂, PO₄, SO₄)

8081 Pesticides / 8082 PCB's

8260B (VOA)

0270 (SEMI-VOA)

Air Bubbles (Y or N)



HALL ENVIRONMENTAL ANALYSIS LABORATORY

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

[illegible]

Date: 5/11/15	Time: 1644	Relinquished by: Jesse E. Sprague
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Date:	Time:	Relinquished by:
5/11/15	1821	Matthew Walters

Received by:	Date	Time
Christine Waack	5/11/15	1644

Received by:  Date 05/12/15 Time 0700

Remarks:

Please copy
Jesse.Sprague@soudernillers.com