

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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

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

Form C-141
Revised April 3, 2017

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 NM&O Operating Company	Contact Cauy Davis or Larry Sweet
Address 15 East 5 th Street Ste 3000 Tulsa Ok 74103	Telephone No. 5053206502 or 9185843802
Facility Name Rucker Lake No 2 SWD	Facility Type Salt Water Disposal
Surface Owner Larry Hatley	Mineral Owner NM&O Operating Co
API No. 30-039-23231	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	24	25N	2W	1450	South	1520	West	Rio Arriba

Latitude 36.3801422 Longitude -107.0053711

NATURE OF RELEASE

Type of Release Oil/Condensate	Volume of Release 80bbls Approximately	Volume Recovered 40bbls
Source of Release Tank	Date and Hour of Occurrence 4/14/13	Date and Hour of Discovery 4/15/13
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? NMOCD & Larry Sweet	
By Whom? Bryan C Davis	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.*

NMOCD

MAR 08 2018

DISTRICT III

Describe Cause of Problem and Remedial Action Taken.*

Tank Bottom rusted through, mostly cleaned 2 years prior except directly under the tank. Permission granted from OCD to complete once the tank was removed.

Describe Area Affected and Cleanup Action Taken.*

Directly under tank cleanup. See attached lab results

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>Bryan Davis</i>	OIL CONSERVATION DIVISION	
Printed Name: Bryan Davis	Approved by Environmental Specialist: <i>[Signature]</i>	
Title: Contractor	Approval Date: 6/13/18	Expiration Date:
E-mail Address: kd7945@gmail.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 3/8/18	Phone: 5053206502	

* Attach Additional Sheets If Necessary

NCS 15230 32530

(24)



**HALL
ENVIRONMENTAL
ANALYSIS
LABORATORY**

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

August 28, 2015

Dixon Sandoval
Dixon Sandoval
P.O. Box 770
Dulce, NM 87582
TEL: (505) 360-2030
FAX

RE: Rucker Lake No. 2. North Lindrith 23-1 5pt Composite

OrderNo.: 1508A80

Dear Dixon Sandoval:

Hall Environmental Analysis Laboratory received 3 sample(s) on 8/21/2015 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 1508A80

Date Reported: 8/28/2015

CLIENT: Dixon Sandoval

Client Sample ID: Rucker Lake #2 Site 1

Project: Rucker Lake No. 2, North Lindrith 23-1 5

Collection Date: 8/19/2015 12:05:00 PM

Lab ID: 1508A80-001

Matrix: SOIL

Received Date: 8/21/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	10	7.5		mg/Kg	5	8/27/2015 10:58:15 AM	21013
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	1200	99		mg/Kg	10	8/25/2015 3:44:42 PM	20948
Motor Oil Range Organics (MRO)	1400	490		mg/Kg	10	8/25/2015 3:44:42 PM	20948
Surr: DNOP	0	57.9-140	S	%REC	10	8/25/2015 3:44:42 PM	20948
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	8/25/2015 11:50:24 AM	20933
Surr: BFB	96.4	75.4-113		%REC	1	8/25/2015 11:50:24 AM	20933
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.094		mg/Kg	1	8/25/2015 11:50:24 AM	20933
Benzene	ND	0.047		mg/Kg	1	8/25/2015 11:50:24 AM	20933
Toluene	ND	0.047		mg/Kg	1	8/25/2015 11:50:24 AM	20933
Ethylbenzene	ND	0.047		mg/Kg	1	8/25/2015 11:50:24 AM	20933
Xylenes, Total	ND	0.094		mg/Kg	1	8/25/2015 11:50:24 AM	20933
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	8/25/2015 11:50:24 AM	20933

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 8
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range	
	R RPD outside accepted recovery limits	RL Reporting Detection Limit	
	S % Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**

Lab Order 1508A80

Date Reported: 8/28/2015

CLIENT: Dixon Sandoval

Client Sample ID: Rucker Lake #2 Site 2

Project: Rucker Lake No. 2, North Lindrith 23-1 5

Collection Date: 8/19/2015 12:10:00 PM

Lab ID: 1508A80-002

Matrix: SOIL

Received Date: 8/21/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	7.5		mg/Kg	5	8/27/2015 12:12:43 PM	21013
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	12	9.8		mg/Kg	1	8/25/2015 4:39:31 PM	20948
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	8/25/2015 4:39:31 PM	20948
Surr: DNOP	98.6	57.9-140		%REC	1	8/25/2015 4:39:31 PM	20948
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/25/2015 1:04:56 PM	20933
Surr: BFB	80.6	75.4-113		%REC	1	8/25/2015 1:04:56 PM	20933
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	8/25/2015 1:04:56 PM	20933
Benzene	ND	0.048		mg/Kg	1	8/25/2015 1:04:56 PM	20933
Toluene	ND	0.048		mg/Kg	1	8/25/2015 1:04:56 PM	20933
Ethylbenzene	ND	0.048		mg/Kg	1	8/25/2015 1:04:56 PM	20933
Xylenes, Total	ND	0.097		mg/Kg	1	8/25/2015 1:04:56 PM	20933
Surr: 4-Bromofluorobenzene	95.3	80-120		%REC	1	8/25/2015 1:04:56 PM	20933

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not In Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

Hall Environmental Analysis Laboratory, Inc.

Analytical Report

Lab Order 1508A80

Date Reported: 8/28/2015

CLIENT: Dixon Sandoval

Client Sample ID: North Lindrith 23-1

Project: Rucker Lake No. 2, North Lindrith 23-1 5

Collection Date: 8/19/2015 12:15:00 PM

Lab ID: 1508A80-003

Matrix: SOIL

Received Date: 8/21/2015 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	55	7.5		mg/Kg	5	8/27/2015 12:37:32 PM	21013
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: TOM
Diesel Range Organics (DRO)	470	10		mg/Kg	1	8/25/2015 5:06:50 PM	20948
Motor Oil Range Organics (MRO)	280	51		mg/Kg	1	8/25/2015 5:06:50 PM	20948
Surr: DNOP	110	57.9-140		%REC	1	8/25/2015 5:06:50 PM	20948
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	8/25/2015 1:29:49 PM	20933
Surr: BFB	96.0	75.4-113		%REC	1	8/25/2015 1:29:49 PM	20933
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	8/25/2015 1:29:49 PM	20933
Benzene	ND	0.048		mg/Kg	1	8/25/2015 1:29:49 PM	20933
Toluene	ND	0.048		mg/Kg	1	8/25/2015 1:29:49 PM	20933
Ethylbenzene	ND	0.048		mg/Kg	1	8/25/2015 1:29:49 PM	20933
Xylenes, Total	ND	0.097		mg/Kg	1	8/25/2015 1:29:49 PM	20933
Surr: 4-Bromofluorobenzene	102	80-120		%REC	1	8/25/2015 1:29:49 PM	20933

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
	D Sample Diluted Due to Matrix	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	P Sample pH Not in Range
	R RPD outside accepted recovery limits	RL Reporting Detection Limit
	S % Recovery outside of range due to dilution or matrix	

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1508A80

28-Aug-15

Client: Dixon Sandoval

Project: Rucker Lake No. 2, North Lindrith 23-1 5pt Co

Sample ID	1508A80-001AMS	SampType:	MS	TestCode:	EPA Method 300.0: Anions					
Client ID:	Rucker Lake #2 Site	Batch ID:	21013	RunNo:	28518					
Prep Date:	8/27/2015	Analysis Date:	8/27/2015	SeqNo:	862438	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	24	7.5	15.00	10.44	91.2	64.2	131			

Sample ID	1508A80-001AMSD	SampType:	MSD	TestCode:	EPA Method 300.0: Anions					
Client ID:	Rucker Lake #2 Site	Batch ID:	21013	RunNo:	28518					
Prep Date:	8/27/2015	Analysis Date:	8/27/2015	SeqNo:	862439					
				Units:	mg/Kg					
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	28	7.5	15.00	10.44	117	64.2	131	14.8	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RI Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1508A80

28-Aug-15

Client: Dixon Sandoval

Project: Rucker Lake No. 2, North Lindrith 23-1 5pt Co

Sample ID	MB-20948	SampType	MBLK	TestCode	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID	20948	RunNo	28434					
Prep Date:	8/24/2015	Analysis Date:	8/25/2015	SeqNo:	859160	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	8.6		10.00		85.6	57.9	140			

Sample ID	LCS-20948	SampType	LCS	TestCode	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID	20948	RunNo	28434					
Prep Date:	8/24/2015	Analysis Date:	8/25/2015	SeqNo:	859161	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.8	57.4	139			
Surr: DNOP	4.3		5.000		85.4	57.9	140			

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | 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 | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1508A80

28-Aug-15

Client: Dixon Sandoval

Project: Rucker Lake No. 2, North Lindrith 23-1 5pt Co

Sample ID	MB-20933	SampType	MBLK	TestCode	EPA Method 8015D: Gasoline Range					
Client ID	PBS	Batch ID	20933	RunNo	28433					
Prep Date	8/24/2015	Analysis Date	8/25/2015	SeqNo	859725	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	840		1000		83.6	75.4	113			

Sample ID	LCS-20933	SampType	LCS	TestCode	EPA Method 8015D: Gasoline Range					
Client ID	LCSS	Batch ID	20933	RunNo	28433					
Prep Date	8/24/2015	Analysis Date	8/25/2015	SeqNo	859726	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	99.5	79.6	122			
Surr: BFB	880		1000		88.2	75.4	113			

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1508A80

28-Aug-15

Client: Dixon Sandoval

Project: Rucker Lake No. 2, North Lindrith 23-1 5pt Co

Sample ID	MB-20933	SampType	MBLK	TestCode	EPA Method 8021B: Volatiles					
Client ID	PBS	Batch ID	20933	RunNo	28433					
Prep Date	8/24/2015	Analysis Date	8/25/2015	SeqNo	859761	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.10								
Benzene	ND	0.050								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.99		1.000		99.3	80	120			

Sample ID	LCS-20933	SampType	LCS	TestCode	EPA Method 8021B: Volatiles					
Client ID	LCSS	Batch ID	20933	RunNo	28433					
Prep Date	8/24/2015	Analysis Date	8/25/2015	SeqNo	859762	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.88	0.10	1.000	0	88.1	69.8	143			
Benzene	0.97	0.050	1.000	0	97.0	76.6	128			
Toluene	0.99	0.050	1.000	0	99.0	75	124			
Ethylbenzene	1.0	0.050	1.000	0	103	79.5	126			
Xylenes, Total	3.0	0.10	3.000	0	101	78.8	124			
Surr: 4-Bromofluorobenzene	1.1		1.000		109	80	120			

Sample ID	1508A80-001AMS	SampType	MS	TestCode: EPA Method 8021B: Volatiles						
Client ID	Rucker Lake #2 Site	Batch ID	20933	RunNo: 28433						
Prep Date	8/24/2015	Analysis Date	8/25/2015	SeqNo: 859766		Units: mg/Kg				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.89	0.097	0.9737	0	91.3	53.6	133			
Benzene	1.0	0.049	0.9737	0	106	69.6	136			
Toluene	1.1	0.049	0.9737	0.02172	106	76.2	134			
Ethylbenzene	1.1	0.049	0.9737	0.01808	111	75.8	137			
Xylenes, Total	3.2	0.097	2.921	0.03723	108	78.9	133			
Surr: 4-Bromofluorobenzene	1.0		0.9737		106	80	120			

Sample ID	1508A80-001AMSD		SampType	MSD		TestCode	EPA Method 8021B: Volatiles				
Client ID	Rucker Lake #2 Site		Batch ID	20933		RunNo	28433				
Prep Date	8/24/2015		Analysis Date	8/25/2015		SeqNo	859767		Units	mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Methyl tert-butyl ether (MTBE)	0.82	0.10	0.9970	0	82.1	53.6	133	8.28	20		
Benzene	0.96	0.050	0.9970	0	96.3	69.6	136	6.84	20		
Toluene	0.99	0.050	0.9970	0.02172	97.5	76.2	134	5.73	20		
Ethylbenzene	1.0	0.050	0.9970	0.01808	103	75.8	137	5.15	20		

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RI Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1508A80

28-Aug-15

Client: Dixon Sandoval

Project: Rucker Lake No. 2, North Lindrith 23-1 Spt Co

Sample ID	1508A80-001AMSD	SampType	MSD	TestCode	EPA Method 8021B: Volatiles					
Client ID	Rucker Lake #2 Site	Batch ID	20933	RunNo	28433					
Prep Date	8/24/2015	Analysis Date	8/25/2015	SeqNo	859767	Units	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	3.0	0.10	2.991	0.03723	99.2	78.9	133	6.37	20	
Surr: 4-Bromofluorobenzene	1.1		0.9970		107	80	120	0	0	

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit



Hall Environmental Analysis Laboratory
4961 Hawks Nest
Albuquerque, NM 87109
TEL: 505.345.3975 FAX: 505.345.4707
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: DIXON SANDOVAL

Work Order Number: 1503A80

RcptNo. 1

Received by/date

Logged By: Ashley Gallegos

8/21/2015 8:00:00 AM

Completed By: Ashley Gallegos

8/21/2015 2:01:35 PM

Reviewed By:

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 ☒ # of preserved bottles checked for pH: ☐ (<2 or >12 unless noted)
12. Does paperwork match bottle labels? Yes ☒ No ☐ Adjusted? ☐
(Note discrepancies on chain of custody)
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? Yes ☒ No ☐ Checked by: ☐
(If no, notify customer for authorization.)

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	10	Good	Not Present			

Chain-of-Custody Record		Turn-Around Time:	
Client: GA NM 3D Operating C/6 Dixon Sandoval		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	
Mailing Address: Box 1025 Dulce, NM 87528		Project Name: Rucker Lake No. 2 North Lindrith 23-1	
Phone #: 575-235-8048		Project #:	
Email or Fax #: dksandoval2010@gmail.com		Project Manager: Dixon Sandoval	
QA/QC Package:			
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)			
Accreditation		Sampler: <i>same</i>	
<input type="checkbox"/> NELAP <input type="checkbox"/> Other		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> EDD (Type)		Sample Temperature: 1.0	

☒ Standard ☐ Rush

Rucker Lake No. 2.
North Lindrith 23-1

Project #:

Project Manager:

Dixon Sandoval

Sampler: *gamb*

On Ice: ☒ Yes ☐ No

Sample Temperature: 1.0

[illegible]

Date: 12/15	Time: 10:45	Relinquished by: [Signature]	Received by: [Signature]	Date: 12/15	Time: 10:45
Date: 8/24/15	Time: 1840	Relinquished by: [Signature]	Received by: [Signature]	Date: 08/21/15	Time: 0800

www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

	X	X	X	BTEX + MTBE + TMB's (8021)
			X	BTEX + MTBE + TPH (Gas only)
	X	X	X	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^- , NO_3^- , NO_2^- , PO_4^{3-} , SO_4^{2-})
				8081 Pesticides / 8082 PCB's
				8260B (VOA)
				8270 (Semi-VOA)
		X	X	chloride
				Air Bubbles (Y or N)

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



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

October 13, 2015

Dixon Sandoval
Dixon Sandoval
P.O. Box 770
Dulce, NM 87582
TEL: (505) 360-2030
FAX

RE: Rucker Lake No 2

OrderNo.: 1510133

Dear Dixon Sandoval:

Hall Environmental Analysis Laboratory received 3 sample(s) on 10/2/2015 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 1510133

Date Reported: 10/13/2015

CLIENT: Dixon Sandoval

Client Sample ID: 01-5pt bottom

Project: Rucker Lake No 2

Collection Date: 10/1/2015 12:45:00 PM

Lab ID: 1510133-001

Matrix: SOIL

Received Date: 10/2/2015 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	51	7.5		mg/Kg	5	10/7/2015 3:29:09 PM	21731
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	10/8/2015 8:20:24 PM	21679
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	10/8/2015 8:20:24 PM	21679
Surr: DNOP	106	57.9-140		%REC	1	10/8/2015 8:20:24 PM	21679
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	10/7/2015 3:25:36 PM	21694
Surr: BFB	88.7	75.4-113		%REC	1	10/7/2015 3:25:36 PM	21694
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.097		mg/Kg	1	10/7/2015 3:25:36 PM	21694
Benzene	ND	0.048		mg/Kg	1	10/7/2015 3:25:36 PM	21694
Toluene	ND	0.048		mg/Kg	1	10/7/2015 3:25:36 PM	21694
Ethylbenzene	ND	0.048		mg/Kg	1	10/7/2015 3:25:36 PM	21694
Xylenes, Total	ND	0.097		mg/Kg	1	10/7/2015 3:25:36 PM	21694
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	10/7/2015 3:25:36 PM	21694

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
	D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 1510133

Date Reported: 10/13/2015

Hall Environmental Analysis Laboratory, Inc.**CLIENT:** Dixon Sandoval**Client Sample ID:** 02-5pt SE Wall**Project:** Rucker Lake No 2**Collection Date:** 10/1/2015 12:47:00 PM**Lab ID:** 1510133-002**Matrix:** SOIL**Received Date:** 10/2/2015 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	41	7.5		mg/Kg	5	10/7/2015 4:18:48 PM	21731
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	10/8/2015 8:47:45 PM	21679
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	10/8/2015 8:47:45 PM	21679
Surr: DNOP	103	57.9-140		%REC	1	10/8/2015 8:47:45 PM	21679
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/7/2015 8:26:38 PM	21694
Surr: BFB	88.4	75.4-113		%REC	1	10/7/2015 8:26:38 PM	21694
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	10/7/2015 8:26:38 PM	21694
Benzene	ND	0.047		mg/Kg	1	10/7/2015 8:26:38 PM	21694
Toluene	ND	0.047		mg/Kg	1	10/7/2015 8:26:38 PM	21694
Ethylbenzene	ND	0.047		mg/Kg	1	10/7/2015 8:26:38 PM	21694
Xylenes, Total	ND	0.095		mg/Kg	1	10/7/2015 8:26:38 PM	21694
Surr: 4-Bromofluorobenzene	103	80-120		%REC	1	10/7/2015 8:26:38 PM	21694

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
	D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

Hall Environmental Analysis Laboratory, Inc.**Analytical Report**Lab Order **1510133**Date Reported: **10/13/2015****CLIENT:** Dixon Sandoval**Client Sample ID:** 03-5pt NW Wall**Project:** Rucker Lake No 2**Collection Date:** 10/1/2015 12:50:00 PM**Lab ID:** 1510133-003**Matrix:** SOIL**Received Date:** 10/2/2015 2:10:00 PM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: LGT
Chloride	ND	7.5		mg/Kg	5	10/7/2015 4:43:37 PM	21731
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: KJH
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	10/8/2015 9:15:02 PM	21679
Motor Oil Range Organics (MRO)	ND	51		mg/Kg	1	10/8/2015 9:15:02 PM	21679
Surr: DNOP	102	57.9-140		%REC	1	10/8/2015 9:15:02 PM	21679
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	10/7/2015 8:49:46 PM	21694
Surr: BFB	88.2	75.4-113		%REC	1	10/7/2015 8:49:46 PM	21694
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Methyl tert-butyl ether (MTBE)	ND	0.095		mg/Kg	1	10/7/2015 8:49:46 PM	21694
Benzene	ND	0.047		mg/Kg	1	10/7/2015 8:49:46 PM	21694
Toluene	ND	0.047		mg/Kg	1	10/7/2015 8:49:46 PM	21694
Ethylbenzene	ND	0.047		mg/Kg	1	10/7/2015 8:49:46 PM	21694
Xylenes, Total	ND	0.095		mg/Kg	1	10/7/2015 8:49:46 PM	21694
Surr: 4-Bromofluorobenzene	104	80-120		%REC	1	10/7/2015 8:49:46 PM	21694

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
	D	Sample Diluted Due to Matrix	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	P	Sample pH Not In Range
	R	RPD outside accepted recovery limits	RL	Reporting Detection Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1510133

13-Oct-15

Client: Dixon Sandoval

Project: Rucker Lake No 2

Sample ID	MB-21731		SampType:	MBLK		TestCode:	EPA Method 300.0: Anions				
Client ID:	PBS		Batch ID:	21731		RunNo:	29381				
Prep Date:	10/7/2015		Analysis Date:	10/7/2015		SeqNo:	893383		Units: mg/Kg		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Chloride	ND	1.5									

Sample ID	LCS-21731		SampType: LCS		TestCode: EPA Method 300.0: Anions					
Client ID:	LCSS		Batch ID: 21731		RunNo: 29381					
Prep Date:	10/7/2015		Analysis Date: 10/7/2015		SeqNo: 893384		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.9	90	110			

Sample ID	1510133-001AMS		SampType: MS		TestCode: EPA Method 300.0: Anions					
Client ID:	01-5pt bottom		Batch ID: 21731		RunNo: 29381					
Prep Date:	10/7/2015		Analysis Date: 10/7/2015		SeqNo: 893386		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	63	7.5	15.00	50.70	79.7	64.2	131			

Sample ID	1510133-001AMSD		SampType: MSD		TestCode: EPA Method 300.0: Anions					
Client ID:	01-5pt bottom		Batch ID: 21731		RunNo: 29381					
Prep Date:	10/7/2015		Analysis Date: 10/7/2015		SeqNo: 893387		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	69	7.5	15.00	50.70	120	64.2	131	9.24	20	

Qualifiers:

- * Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- R RPD outside accepted recovery limits
- S % Recovery outside of range due to dilution or matrix

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1510133

13-Oct-15

Client: Dixon Sandoval
Project: Rucker Lake No 2

Sample ID	MB-21652	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	21652	RunNo:	29273					
Prep Date:	10/5/2015	Analysis Date:	10/5/2015	SeqNo:	890900	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	7.9		10.00		78.7	57.9	140			

Sample ID	LCS-21652	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	21652	RunNo:	29273					
Prep Date:	10/5/2015	Analysis Date:	10/5/2015	SeqNo:	890901	Units:	%REC			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.7		5.000		94.7	57.9	140			

Sample ID	MB-21679	SampType:	MBLK	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	PBS	Batch ID:	21679	RunNo:	29273					
Prep Date:	10/6/2015	Analysis Date:	10/8/2015	SeqNo:	894236	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	10		10.00		105	57.9	140			

Sample ID	LCS-21679	SampType:	LCS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	LCSS	Batch ID:	21679	RunNo:	29273					
Prep Date:	10/6/2015	Analysis Date:	10/8/2015	SeqNo:	894238	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	52	10	50.00	0	104	57.4	139			
Surr: DNOP	5.6		5.000		112	57.9	140			

Sample ID	1510133-001AMS	SampType:	MS	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	01-5pt bottom	Batch ID:	21679	RunNo:	29273					
Prep Date:	10/6/2015	Analysis Date:	10/8/2015	SeqNo:	894686	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.8	49.16	0	95.8	42.3	146			
Surr: DNOP	4.9		4.916		98.9	57.9	140			

Sample ID	1510133-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	01-5pt bottom	Batch ID:	21679	RunNo:	29273					
Prep Date:	10/6/2015	Analysis Date:	10/8/2015	SeqNo:	894688	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	69	9.9	49.60	0	140	42.3	146	38.1	28.9	R

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1510133

13-Oct-15

Client: Dixon Sandoval

Project: Rucker Lake No 2

Sample ID	1510133-001AMSD	SampType:	MSD	TestCode:	EPA Method 8015M/D: Diesel Range Organics					
Client ID:	01-5pt bottom	Batch ID:	21679	RunNo:	29273					
Prep Date:	10/6/2015	Analysis Date:	10/8/2015	SeqNo:	894688	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.0		4.960		100	57.9	140	0	0	

Qualifiers:

- | | |
|---|---|
| * Value exceeds Maximum Contaminant Level. | B Analyte detected in the associated Method Blank |
| D Sample Diluted Due to Matrix | 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 | P Sample pH Not In Range |
| R RPD outside accepted recovery limits | RL Reporting Detection Limit |
| S % Recovery outside of range due to dilution or matrix | |

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1510133

13-Oct-15

Client: Dixon Sandoval
Project: Rucker Lake No 2

Sample ID	MB-21694		SampType: MBLK		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	PBS		Batch ID: 21694		RunNo: 29364					
Prep Date:	10/6/2015		Analysis Date: 10/7/2015		SeqNo: 893258		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	880		1000		88.0	75.4	113			

Sample ID	LCS-21694		SampType: LCS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	LCSS		Batch ID: 21694		RunNo: 29364					
Prep Date:	10/6/2015		Analysis Date: 10/7/2015		SeqNo: 893259		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	102	79.6	122			
Surr: BFB	960		1000		95.7	75.4	113			

Sample ID	1510133-002AMS		SampType: MS		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	02-5pt SE Wall		Batch ID: 21694		RunNo: 29364					
Prep Date:	10/6/2015		Analysis Date: 10/7/2015		SeqNo: 893267		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	29	4.8	24.11	0	120	62.5	151			
Surr: BFB	940		964.3		97.5	75.4	113			

Sample ID	1510133-002AMSD		SampType: MSD		TestCode: EPA Method 8015D: Gasoline Range					
Client ID:	02-5pt SE Wall		Batch ID: 21694		RunNo: 29364					
Prep Date:	10/6/2015		Analysis Date: 10/7/2015		SeqNo: 893268		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	28	4.8	23.95	0	117	62.5	151	2.87	22.1	
Surr: BFB	920		957.9		95.7	75.4	113	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1510133

13-Oct-15

Client: Dixon Sandoval
Project: Rucker Lake No 2

Sample ID	MB-21694	SampType:		MBLK		TestCode:					EPA Method 8021B: Volatiles		
Client ID:	PBS	Batch ID:		21694		RunNo:					29364		
Prep Date:	10/6/2015	Analysis Date:		10/7/2015		SeqNo:			893314			Units: mg/Kg	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual			
Methyl tert-butyl ether (MTBE)	ND	0.10											
Benzene	ND	0.050											
Toluene	ND	0.050											
Ethylbenzene	ND	0.050											
Xylenes, Total	ND	0.10											
Surr: 4-Bromofluorobenzene	1.0		1.000		105	80	120						

Sample ID	LCS-21694		SampType: LCS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	LCSS		Batch ID: 21694		RunNo: 29364					
Prep Date:	10/6/2015		Analysis Date: 10/7/2015		SeqNo: 893315		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.0	0.10	1.000	0	103	67.2	121			
Benzene	0.97	0.050	1.000	0	96.8	80	120			
Toluene	0.93	0.050	1.000	0	93.5	80	120			
Ethylbenzene	0.94	0.050	1.000	0	93.6	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.4	80	120			
Surr: 4-Bromofluorobenzene	1.1		1.000		111	80	120			

Sample ID	1510133-001AMS		SampType: MS		TestCode: EPA Method 8021B: Volatiles					
Client ID:	01-5pt bottom		Batch ID: 21694		RunNo: 29364					
Prep Date:	10/6/2015		Analysis Date: 10/7/2015		SeqNo: 893322		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.0	0.097	0.9662	0	106	53.6	133			
Benzene	0.98	0.048	0.9662	0	101	69.6	136			
Toluene	0.98	0.048	0.9662	0	101	76.2	134			
Ethylbenzene	1.0	0.048	0.9662	0	105	75.8	137			
Xylenes, Total	3.1	0.097	2.899	0	105	78.9	133			
Surr: 4-Bromofluorobenzene	1.1		0.9662		111	80	120			

Sample ID	1510133-001AMSD		SampType: MSD		TestCode: EPA Method 8021B: Volatiles					
Client ID:	01-5pt bottom		Batch ID: 21694		RunNo: 29364					
Prep Date:	10/6/2015		Analysis Date: 10/7/2015		SeqNo: 893324		Units: mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	1.1	0.097	0.9681	0	113	53.6	133	6.12	20	
Benzene	1.0	0.048	0.9681	0	107	69.6	136	5.31	20	
Toluene	1.0	0.048	0.9681	0	106	76.2	134	4.46	20	
Ethylbenzene	1.0	0.048	0.9681	0	107	75.8	137	2.41	20	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 1510133

13-Oct-15

Client: Dixon Sandoval
Project: Rucker Lake No 2

Sample ID	1510133-001AMSD	SampType:	MSD	TestCode:	EPA Method 8021B: Volatiles					
Client ID:	01-5pt bottom	Batch ID:	21694	RunNo:	29364					
Prep Date:	10/6/2015	Analysis Date:	10/7/2015	SeqNo:	893324	Units:	mg/Kg			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Xylenes, Total	3.1	0.097	2.904	0	108	78.9	133	2.86	20	
Surr: 4-Bromofluorobenzene	1.1		0.9681		112	80	120	0	0	

Qualifiers:

* Value exceeds Maximum Contaminant Level.
D Sample Diluted Due to Matrix
H Holding times for preparation or analysis exceeded
ND Not Detected at the Reporting Limit
R RPD outside accepted recovery limits
S % Recovery outside of range due to dilution or matrix

B Analyte detected in the associated Method Blank
E Value above quantitation range
J Analyte detected below quantitation limits
P Sample pH Not In Range
RL Reporting Detection Limit

Sample Log-In Check List

Client Name: DIXON SANDOVAL

Work Order Number: 1510133

RcptNo: 1

Received by/date:

Logged By: Lindsay Mangin

10/2/2015 2:10:00 PM

Completed By: Lindsay Mangin

10/5/2015 12:38:59 PM

Reviewed By:

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?

Client

Log In

4. Was an attempt made to cool the samples?

Yes ☒

No ☐

NA ☐

5. Were all samples received at a temperature of >0° C to 6.0°C

Yes ☐

No ☒

NA ☐

6. Sample(s) in proper container(s)?

Yes ☒

No ☐

Approved by client

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 ☒

of preserved
bottles checked
for pH:

(<2 or >12 unless noted)

12. Does paperwork match bottle labels?

(Note discrepancies on chain of custody)

Yes ☒

No ☐

Adjusted?

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 ☐

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 °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	21.4	Good	Not Present			

Chain-of-Custody Record		Turn-Around Time:
Client: NMEO Operating % Dixon Sandoval.	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush	Project Name: Rucker Lake. NO. 2.
Mailing Address: PO Box 1025 Dulce, NM 87528	Project #: Waste Oil Tank bottom	
Phone #: 575-235-8048	Project Manager:	Dixon Sandoval
email or Fax#: ksandoval2010@gmail.com		
QA/QC Package: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		
Accreditation <input type="checkbox"/> NELAP <input type="checkbox"/> Other	Sampler:	On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> EDD (Type)	Sample Temperature: 21.4	

☒ **Standard** ☐ **Rush**

Bucher Lake. No. 2.

Project #. Waste Oil Tank bottom

Dixon Sandoval

On Ice: ☒ Yes ☐ No

Sample Temperature: 21.4

[illegible]

Date:	Time:	Relinquished by:	Received by:	Date:	Time:
10-02-15	1410			10/02/15	1410
Date:	Time:	Relinquished by:	Received by:	Date:	Time:



www.hallenvironmental.com

4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

[illegible]

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.