



*4801 Business Park Blvd | Hobbs NM
88240 | 575-393-5905*

REMEDIATION SUMMARY & DEFERRED SITE CLOSURE REQUEST

**MEWBOURNE OIL COMPANY
Zircon 2 B1 EH W2IP State #2H
Eddy County, New Mexico
Unit Letter "E" (SW/NW), Section 2, Township 19 South, Range 29 East
Latitude 32.690532 North, Longitude -104.052694 West**

Prepared For:

New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 2)
1301 E. Grand Avenue
Artesia, NM 88210

Prepared By:

Mewbourne Oil Company

June, 2020

A handwritten signature in black ink, appearing to read "Robbie Runnels", is written over a horizontal line.

Robbie Runnels
Environmental Specialist

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1.0 INTRODUCTION & BACKGROUND INFORMATION

Mewbourne Oil Company (Mewbourne), has prepared this *Remediation Summary & Deferred Site Closure Request* for the release site known as Zircon 2 B1 EH State #2H (Zircon). The legal description of the release site is Unit Letter "E" (SW/NW) of Section 2 in Township 19 South of Range 29 East, in Eddy County, New Mexico. The geographic coordinates of the release site are 32.690532° North latitude and -104.052694° West longitude. The property affected by the release is owned by the State of New Mexico. A "Site Location Map" is provided as Figure 1.

On February 8th, 2020, Mewbourne discovered a release of approximately twenty (20) barrels (bbls) of produced water when a four-inch poly line pulled loose from the metal transition. No liquid was recovered. Approximately eight thousand eight-hundred 10 (8,810) square feet (ft²) of pasture area was impacted. New Mexico Oil Conservation Division (NMOCD) was notified of the release on February 24th, 2020, and an initial C-141 was submitted to NMOCD for approval.

Locations of soil sample collection areas are depicted in Figure 2, "Site & Sample Location Map". Laboratory analytical results are summarized in Table 1, "Concentrations of Benzene, BTEX, TPH & Chloride in Soil". Laboratory analytical reports are provided in Appendix C.

The Form C-141 is provided as Appendix C. General photographs of the release site and remediation activities are provided as Appendix A.

2.0 NMOCD SITE CLASSIFICATION

A search of the New Mexico Water Rights Reporting System (NMWRRS) database maintained by the New Mexico Office of the State Engineer (NMOSE) indicated no reportable wells for Section 17 of Township 23 South in Range 30 East. Utilizing the United States Geological Survey (USGS) website for groundwater in combination with the NMWRRS for the water wells in adjacent sections on all four sides of the FNR release area, an average depth to ground water (DGW) was determined to be two-hundred forty-one (241) feet below ground surface (bgs). A depth-to-groundwater reference map utilized by the NMOCD indicates groundwater could be encountered at approximately one-hundred sixty (160) feet. Based on the NMOCD-Table 1, this location would allow remediation concentration levels to be 10 mg/kg for Benzene, 50 mg/kg for BTEX, 2,500 mg/kg for TPH, and 20,000 mg/kg for chloride.

A search of the NMWRRS database indicated no records of any water wells within the section of the release or immediate surrounding area. Based on the NMOCD ranking system, zero (0) points were assigned to the site as a result of this criterion.

There are no surface water bodies within one thousand (1000) feet of the release. Based on the NMOCD-Table 1, this location would allow remediation concentration levels to be 10 mg/kg for Benzene, 50 mg/kg for BTEX, 2,500 mg/kg for TPH, and 20,000 mg/kg for chloride.

As remediation is taking place in the pasture area, the soil remediation level for chloride concentration is 600 mg/kg and 100 mg/kg for TPH for the first four (4) feet.

3.0 SUMMARY OF SOIL REMEDIATION ACTIVITIES

Remediation began on January 13th, 2020. Initial as well as final sampling began on January 20th, 2020. Nineteen (19) soil sample points were established (Floor 1 through Floor 19) and soil samples were retrieved at various depths in the pursuit of vertical as well as horizontal delineation. The soil samples were field screened for chloride concentrations and clean samples were submitted to an NMOCD approved and certified laboratory for confirmation analyses. Chloride, gasoline range organics (GRO), oil range organics (ORO), and diesel range organics (DRO) concentrations were analyzed in addition to benzene, toluene, ethyl-benzene, and xlyenes (BTEX) concentrations.

On January 20th, 2020, horizontal delineation composite samples were retrieved to ensure the total impacted area was encompassed within the excavated area. Composite samples represented no more than two-hundred (200) square feet of area. The composite soil samples were retrieved, field screened, and submitted to an NMOCD approved and certified laboratory for confirmation analyses. Laboratory analyses confirms that the site had been delineated horizontally.

Excavated soil was transferred to an approved NMOCD permitted facility for final disposal.

The floor of the excavation still exhibited contaminant concentrations above the Table 1 remediation levels for chlorides four (4) feet bgs. The floor of the excavation was fitted with a twenty (20) mil, impermeable, polyethylene plastic liner. The plastic liner is an engineered control that serves to inhibit vertical migration of contaminants both upward to the vegetative zone and downward to the underlying groundwater. The remaining portion of the excavation was backfilled with locally purchased, non-impacted material. The clean topsoil was compacted, and contoured to fit the surrounding topography.

The disturbed area will be seeded with the land-owner approved seed mix at such a time it is conducive for germination.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Soil Samples were delivered to Hall Laboratories, Inc., in Albuquerque, New Mexico, for analyses of BTEX, TPH, and/or chloride concentrations using the methods described below. Soil samples were analyzed for BTEX, TPH, and/or chloride concentrations within fourteen (14) days following the collection date.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method SW 846-8021b (TCLP - SW-8260B)
- TPH concentrations in accordance with modified EPA Method SW 846-8015M
- Chloride concentrations in accordance with EPA Method 300.1

4.2 Decontamination of Equipment

Cleaning of the sampling equipment was the responsibility of the environmental technician. Prior to use, and between each sample, the sampling equipment was cleaned with Liqui-Nox® detergent and rinsed with distilled water.

4.3 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form(s). These procedures were either transmitted with the laboratory analytical reports or are on file at the laboratory.

5.0 SITE CLOSURE REQUEST

Soil samples collected from the Zircon 2 B1 EH W2IP State #2H release site were analyzed by an NMOCD-approved laboratory, and concentrations of benzene, BTEX, and chloride were below the Table 1 limits established for the site. Soil exhibiting chloride concentrations above the Table 1 action level were removed above and isolated below a twenty (20) mil liner to protect the vegetative zone above the liner and to restrict the migration of chloride downward towards groundwater where possible. Areas where a liner was not possible will be remediated at the time of abandonment.

Mewbourne Oil Company is providing the NMOCD Artesia District Office a copy of this *Remediation Summary & Site Deferred Closure Request*. Mewbourne ask the NMOCD grant site closure to the Zircon 2 B1 EH W2IP State #2H release site.

6.0 LIMITATIONS

Mewbourne Oil Company has prepared this *Remediation Summary & Site Deferred Closure Request* to the best of its ability. No other warranty, expressed or implied, is made or intended. Mewbourne has examined and relied upon documents referenced in the report and on oral statements made by certain individuals. Mewbourne has not conducted an independent examination of the facts contained in referenced materials and statements. Mewbourne has presumed the genuineness of these documents and statements and that the information provided therein is true and accurate. Mewbourne has prepared this report in a professional manner, using the degree of skill and care exercised by similar oil company environmental departments and or consultants. Mewbourne notes that the facts and conditions referenced in this report may change over time, and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of the New Mexico Oil Conservation Division as well as Mewbourne Oil Company. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Mewbourne Oil Company.

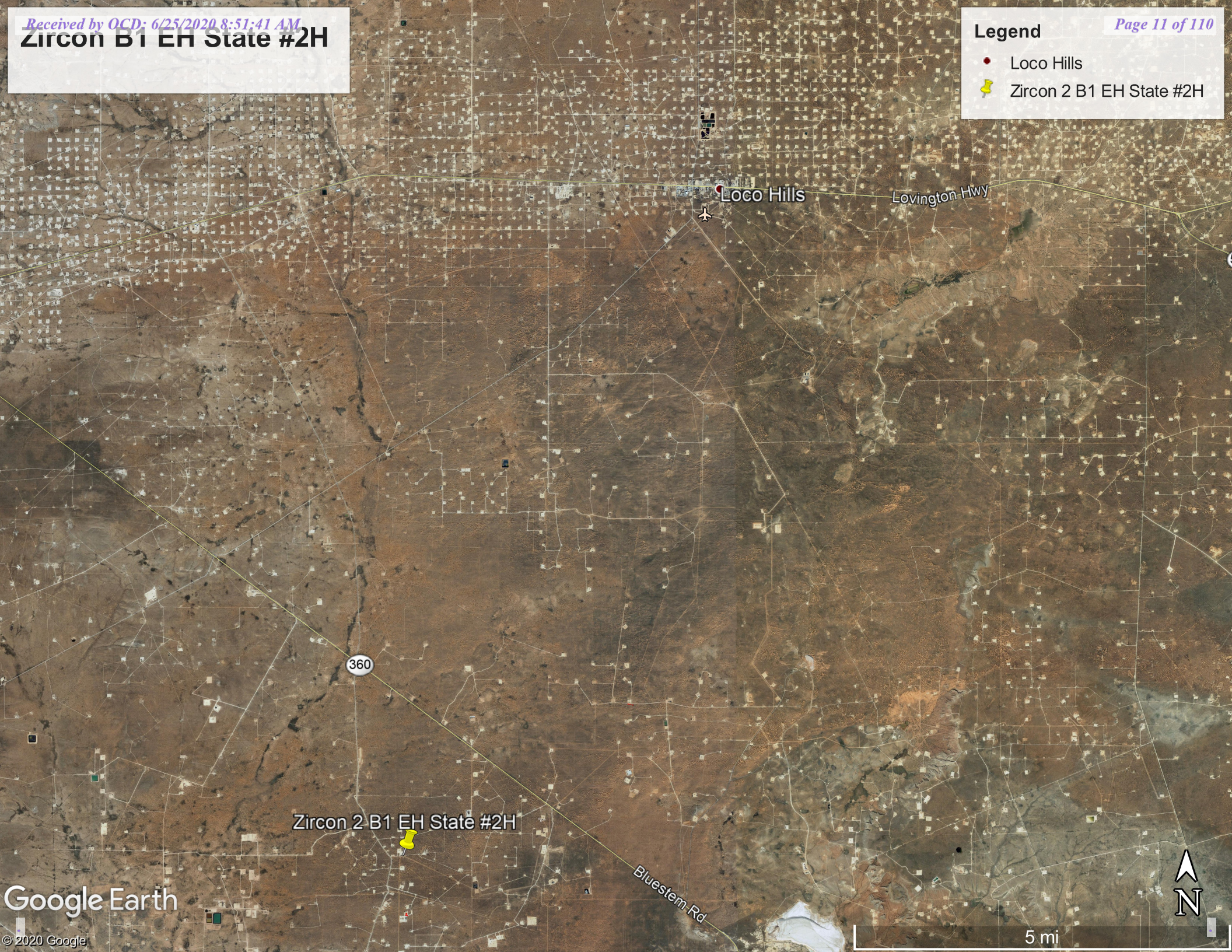
7.0 DISTRIBUTION:

- Copy 1: Victoria Venegas
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division (District 2)
1301 E. Grand Avenue
Artesia, NM 88210
- Copy 2: Ryan Mann
New Mexico State Land Office
914 N. Linam St.
Hobbs, NM 88240
- Copy 3: Robin Terrell
Mewbourne Oil Company
4801 Business Park Blvd
Hobbs, New Mexico 88240

FIGURES

Legend

- Loco Hills
- 📌 Zircon 2 B1 EH State #2H



Zircon 2 B1 EH State #2H

Loco Hills

Lovington Hwy

Bluestem Rd

360



11 New Bourne
Zircon 2 B1EH



TABLES

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL
MEWBOURNE OIL COMPANY
ZIRCON 2 B1 EH STATE #2H
EDDY COUNTY, NEW MEXICO
UL E, SEC 2, T-19-S, R-29-E

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL TPH C ₆ -C ₃₆ (mg/Kg)	300 CHLORIDE (mg/Kg)	FIELD CHLORIDE (mg/Kg)
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₀ (mg/Kg)	DRO C ₁₀ -C ₂₈ (mg/Kg)	EXT DRO C ₂₈ -C ₃₆ (mg/Kg)			
Wall 1 South	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.3	<47	<61.1	<60	NA
Wall 1 East	Various	2/27/2020	Composite	<0.024	<0.049	<0.049	0.097	<0.219	<4.9	<9.7	<49	<63.6	<60	NA
Wall 1 West	Various	2/27/2020	Composite	<0.023	<0.046	<0.046	0.091	<0.206	<4.6	<9.5	<47	<61.1	<60	NA
Wall 2 South	Various	2/27/2020	Composite	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.3	<47	<61.2	<60	NA
Wall 2 East	Various	2/27/2020	Composite	<0.024	<0.047	<0.047	<0.094	<0.211	<4.7	<9.9	<50	<64.6	<60	NA
Wall 2 West	Various	2/27/2020	Composite	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.1	<46	<60.0	<60	NA
Wall 3 North	Various	2/27/2020	Composite	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.6	<48	<62.3	<59	NA
Wall 3 South	Various	2/27/2020	Composite	<0.023	<0.046	<0.046	<0.091	<0.206	<4.6	<10	<50	<64.6	4,200	NA
Wall 3 East	Various	2/27/2020	Composite	<0.025	<0.049	<0.049	<0.098	<0.220	<4.9	<9.6	<48	<62.5	<60	NA
Wall 3 West	Various	2/27/2020	Composite	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.9	<49	<63.8	700	NA
Wall 4 South	Various	2/27/2020	Composite	<0.025	<0.049	<0.049	<0.099	<0.222	<4.9	<9.5	<47	<61.4	<60	NA
Wall 4 North	Various	2/27/2020	Composite	<0.024	<0.047	<0.047	<0.094	<0.212	<4.7	<8.1	<41	<53.8	<60	NA
Wall 5 South	Various	2/27/2020	Composite	<0.025	<0.049	<0.049	<0.099	<0.221	<4.9	<9.6	<48	<62.5	<60	NA
Wall 5 North	Various	2/27/2020	Composite	<0.024	<0.049	<0.049	<0.097	<0.219	<4.9	<9.7	<49	<63.6	<60	NA
Wall 6 North	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.5	<47	<61.3	<60	NA
Wall 6 South	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.095	<0.215	<4.8	<9.1	<46	<59.9	<60	NA
Wall 7 North	Various	2/27/2020	Composite	<0.024	<0.049	<0.049	<0.098	<0.220	<4.9	<9.5	<48	<62.4	1,400	NA
Wall 7 South	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.095	<0.215	<4.8	<9.4	<47	<61.2	920	NA
Wall 7 West	Various	2/27/2020	Composite	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.3	<47	<61.0	260	NA
Wall 8 North	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.5	<47	<61.3	3,100	NA
Wall 8 South	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<10	<50	<64.8	2,600	NA
Wall 8 East	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<10	<50	<64.8	3,100	NA
Wall 9 North	Various	2/27/2020	Composite	<0.025	<0.050	<0.050	<0.10	<0.225	<5.0	<10	<50	<65.0	1,600	NA
Wall 9 South	Various	2/27/2020	Composite	<0.025	<0.049	<0.049	<0.098	<0.221	<4.3	<9.4	<47	<60.7	1,700	NA
Wall 9 West	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.8	<49	<63.6	830	NA
Wall 10 North	Various	2/27/2020	Composite	<0.025	<0.049	<0.049	<0.098	<0.221	<4.9	<9.3	<46	<60.2	250	NA
Wall 10 South	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.9	<49	<63.7	340	NA
Wall 10 West	Various	2/27/2020	Composite	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.3	<47	<61.0	150	NA
Wall 11 South	Various	2/27/2020	Composite	<0.023	<0.046	<0.046	0.092	<0.207	<4.6	<9.7	<49	<63.3	<60	NA
Wall 11 East	Various	2/27/2020	Composite	<0.024	<0.049	<0.049	<0.098	<0.220	<4.9	<9.2	<46	<60.1	<60	NA
Wall 11 West	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.4	<47	<61.2	<60	NA
Wall 12 North	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.2	<46	<60.0	1,300	NA
Wall 12 South	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.095	<0.215	<4.8	<9.5	<48	<62.3	4,000	NA
Wall 12 East	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<10	<50	<64.8	82	NA
Wall 12 West	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.2	<46	<60.0	2,200	NA
Wall 13 North	Various	2/27/2020	Composite	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	18	<48	<62.4	3,400	NA
Wall 13 South	Various	2/27/2020	Composite	<0.024	<0.049	<0.049	<0.098	<0.220	<4.9	<9.9	<50	<64.8	5,600	NA
Wall 13 East	Various	2/27/2020	Composite	<0.024	<0.049	<0.049	<0.098	<0.220	<4.9	<9.4	<47	<61.3	860	NA
Wall 14 North	Various	2/28/2020	Composite	<0.024	<0.047	<0.047	<0.094	<0.212	<4.7	<10	<50	<64.7	<60	NA
Wall 14 South	Various	2/28/2020	Composite	<0.025	<0.050	<0.050	<0.099	<0.224	<5.0	<9.6	<48	<62.6	3,500	NA
Wall 14 East	Various	2/28/2020	Composite	<0.024	<0.047	<0.047	<0.095	<0.213	<4.7	<9.4	<47	<61.1	2,200	NA
Wall 14 West	Various	2/28/2020	Composite	<0.024	<0.049	<0.049	<0.098	<0.220	<4.9	<9.2	<46	<60.1	2,400	NA
Wall 15 North	Various	2/28/2020	Composite	<0.024	<0.047	<0.047	<0.094	<0.212	<4.7	<9.3	<46	<60.0	<60	NA
Wall 15 South	Various	2/28/2020	Composite	<0.024	<0.048	<0.048	<0.096	<0.216	<4.8	<9.6	<48	<62.4	110	NA
Wall 15 East	Various	2/28/2020	Composite	<0.025	<0.050	<0.050	<0.099	<0.224	<5.0	<9.3	<47	<61.3	<60	NA
Wall 15 West	Various	2/28/2020	Composite	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.9	<49	<63.6	2,400	NA

TABLE 1
CONCENTRATIONS OF BENZENE, BTEX, TPH & CHLORIDE IN SOIL
MEWBOURNE OIL COMPANY
ZIRCON 2 B1 EH STATE #2H
EDDY COUNTY, NEW MEXICO
UL E, SEC 2, T-19-S, R-29-E

SAMPLE LOCATION	SAMPLE DEPTH (BGS)	SAMPLE DATE	SOIL STATUS	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M			TOTAL TPH C ₆ -C ₃₆ (mg/Kg)	300 CHLORIDE (mg/Kg)	FIELD CHLORIDE (mg/Kg)
				BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL- BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)	TOTAL BTEX (mg/Kg)	GRO C ₆ -C ₁₀ (mg/Kg)	DRO C ₁₀ -C ₂₈ (mg/Kg)	EXT DRO C ₂₈ -C ₃₆ (mg/Kg)			
Floor 1	4'	2/27/2020	In-Situ	<0.024	<0.049	<0.049	<0.098	<0.220	<4.9	<9.6	<48	<62.5	<60	NA
Floor 2	4'	2/27/2020	In-Situ	<0.023	<0.046	<0.046	0.092	<0.207	<4.6	<9.9	<49	<63.5	980	NA
Floor 3	4'	2/27/2020	In-Situ	<0.024	<0.049	<0.049	<0.098	<0.220	<4.9	<9.9	<49	<63.8	440	NA
Floor 4	4'	2/27/2020	In-Situ	<0.024	<0.047	<0.047	<0.095	<0.213	<4.7	<9.2	<46	<59.9	<60	NA
Floor 5	4'	2/27/2020	In-Situ	<0.024	<0.048	<0.048	<0.095	<0.215	<4.8	<9.5	<48	<62.3	350	NA
Floor 6	4'	2/27/2020	In-Situ	<0.024	<0.048	<0.048	<0.097	<0.217	<4.8	<9.7	<48	<62.3	1,500	NA
Floor 7	4'	2/27/2020	In-Situ	<0.024	<0.047	<0.047	<0.095	<0.213	<4.7	<9.9	<49	<63.6	1,500	NA
Floor 8	4'	2/27/2020	In-Situ	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.4	<47	<61.4	430	NA
Floor 9	4'	2/27/2020	In-Situ	<0.025	<0.049	<0.049	<0.099	<0.222	<4.9	<9.2	<46	<60.1	11,000	NA
Floor 10	4'	2/27/2020	In-Situ	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.9	<49	<63.6	<60	NA
Floor 11	4'	2/27/2020	In-Situ	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.1	<46	<59.8	<60	NA
Floor 12	4'	2/27/2020	In-Situ	<0.023	<0.047	<0.047	<0.094	<0.211	<4.7	<9.6	<48	<62.3	5,800	NA
Floor 13	4'	2/27/2020	In-Situ	<0.023	<0.047	<0.047	<0.093	<0.210	<4.7	<9.5	<47	<61.2	<60	NA
Floor 14	4'	2/28/2020	In-Situ	<0.025	<0.049	<0.049	<0.099	<0.222	<4.9	<9.2	<46	<60.1	1,700	NA
Floor 15	4'	2/28/2020	In-Situ	<0.024	<0.048	<0.048	<0.095	<0.215	<4.8	<9.9	<50	<64.7	2,300	NA
NMOC Regulatory Standard				10				50				2,500	600	

APPENDICES

APPENDIX – A

Photo Documentation

Zircon 2 B1EH State #2H

Unit Letter E, Section 2, T19S, R29E



Initial Release

2/10/20



Initial Release

2/10/20



Completed Excavation

2/27/20



Backfilled

3/9/20

APPENDIX – B

Analytical Reports



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

March 10, 2020

Robbie Runnels
Mewbourne Oil Company
PO Box 5270
Hobbs, NM 88241
TEL: (575) 393-5905
FAX

RE: Zircon 2 B1 EH St 002H

OrderNo.: 2002D01

Dear Robbie Runnels:

Hall Environmental Analysis Laboratory received 63 sample(s) on 2/29/2020 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 #NM0901

Sincerely,

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

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 1 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:00:00 AM

Lab ID: 2002D01-001

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/3/2020 11:06:45 PM	50858
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/4/2020 2:06:53 AM	50805
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 2:06:53 AM	50805
Surr: DNOP	132	55.1-146		%Rec	1	3/4/2020 2:06:53 AM	50805
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/3/2020 9:55:56 PM	50800
Surr: BFB	80.7	66.6-105		%Rec	1	3/3/2020 9:55:56 PM	50800
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/3/2020 9:55:56 PM	50800
Toluene	ND	0.048		mg/Kg	1	3/3/2020 9:55:56 PM	50800
Ethylbenzene	ND	0.048		mg/Kg	1	3/3/2020 9:55:56 PM	50800
Xylenes, Total	ND	0.097		mg/Kg	1	3/3/2020 9:55:56 PM	50800
Surr: 4-Bromofluorobenzene	87.8	80-120		%Rec	1	3/3/2020 9:55:56 PM	50800

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 1 East

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:05:00 AM

Lab ID: 2002D01-002

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/3/2020 11:19:06 PM	50858
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/4/2020 2:15:49 AM	50805
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/4/2020 2:15:49 AM	50805
Surr: DNOP	115	55.1-146		%Rec	1	3/4/2020 2:15:49 AM	50805
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/3/2020 10:19:28 PM	50800
Surr: BFB	81.7	66.6-105		%Rec	1	3/3/2020 10:19:28 PM	50800
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/3/2020 10:19:28 PM	50800
Toluene	ND	0.049		mg/Kg	1	3/3/2020 10:19:28 PM	50800
Ethylbenzene	ND	0.049		mg/Kg	1	3/3/2020 10:19:28 PM	50800
Xylenes, Total	ND	0.097		mg/Kg	1	3/3/2020 10:19:28 PM	50800
Surr: 4-Bromofluorobenzene	88.5	80-120		%Rec	1	3/3/2020 10:19:28 PM	50800

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 1 West

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:10:00 AM

Lab ID: 2002D01-003

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/3/2020 11:31:26 PM	50858
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/4/2020 2:24:45 AM	50805
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 2:24:45 AM	50805
Surr: DNOP	110	55.1-146		%Rec	1	3/4/2020 2:24:45 AM	50805
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/3/2020 10:43:02 PM	50800
Surr: BFB	81.5	66.6-105		%Rec	1	3/3/2020 10:43:02 PM	50800
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/3/2020 10:43:02 PM	50800
Toluene	ND	0.046		mg/Kg	1	3/3/2020 10:43:02 PM	50800
Ethylbenzene	ND	0.046		mg/Kg	1	3/3/2020 10:43:02 PM	50800
Xylenes, Total	ND	0.091		mg/Kg	1	3/3/2020 10:43:02 PM	50800
Surr: 4-Bromofluorobenzene	88.0	80-120		%Rec	1	3/3/2020 10:43:02 PM	50800

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 1

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:15:00 AM

Lab ID: 2002D01-004

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/3/2020 11:43:48 PM	50858
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/4/2020 2:33:41 AM	50805
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/4/2020 2:33:41 AM	50805
Surr: DNOP	104	55.1-146		%Rec	1	3/4/2020 2:33:41 AM	50805
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/3/2020 11:06:36 PM	50800
Surr: BFB	84.9	66.6-105		%Rec	1	3/3/2020 11:06:36 PM	50800
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/3/2020 11:06:36 PM	50800
Toluene	ND	0.049		mg/Kg	1	3/3/2020 11:06:36 PM	50800
Ethylbenzene	ND	0.049		mg/Kg	1	3/3/2020 11:06:36 PM	50800
Xylenes, Total	ND	0.098		mg/Kg	1	3/3/2020 11:06:36 PM	50800
Surr: 4-Bromofluorobenzene	92.6	80-120		%Rec	1	3/3/2020 11:06:36 PM	50800

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 2 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:20:00 AM

Lab ID: 2002D01-005

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	ND	60		mg/Kg	20	3/3/2020 11:56:09 PM	50858
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/4/2020 2:42:46 AM	50805
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 2:42:46 AM	50805
Surr: DNOP	124	55.1-146		%Rec	1	3/4/2020 2:42:46 AM	50805
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/3/2020 11:30:04 PM	50800
Surr: BFB	81.7	66.6-105		%Rec	1	3/3/2020 11:30:04 PM	50800
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/3/2020 11:30:04 PM	50800
Toluene	ND	0.049		mg/Kg	1	3/3/2020 11:30:04 PM	50800
Ethylbenzene	ND	0.049		mg/Kg	1	3/3/2020 11:30:04 PM	50800
Xylenes, Total	ND	0.097		mg/Kg	1	3/3/2020 11:30:04 PM	50800
Surr: 4-Bromofluorobenzene	89.0	80-120		%Rec	1	3/3/2020 11:30:04 PM	50800

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 2 East

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:25:00 AM

Lab ID: 2002D01-006

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/3/2020 6:26:45 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/4/2020 2:51:50 AM	50805
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/4/2020 2:51:50 AM	50805
Surr: DNOP	137	55.1-146		%Rec	1	3/4/2020 2:51:50 AM	50805
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/3/2020 11:53:29 PM	50800
Surr: BFB	81.5	66.6-105		%Rec	1	3/3/2020 11:53:29 PM	50800
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/3/2020 11:53:29 PM	50800
Toluene	ND	0.047		mg/Kg	1	3/3/2020 11:53:29 PM	50800
Ethylbenzene	ND	0.047		mg/Kg	1	3/3/2020 11:53:29 PM	50800
Xylenes, Total	ND	0.095		mg/Kg	1	3/3/2020 11:53:29 PM	50800
Surr: 4-Bromofluorobenzene	88.1	80-120		%Rec	1	3/3/2020 11:53:29 PM	50800

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 2 West

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:30:00 AM

Lab ID: 2002D01-007

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/3/2020 7:28:47 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/4/2020 3:00:51 AM	50805
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/4/2020 3:00:51 AM	50805
Surr: DNOP	117	55.1-146		%Rec	1	3/4/2020 3:00:51 AM	50805
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/4/2020 12:16:57 AM	50800
Surr: BFB	80.9	66.6-105		%Rec	1	3/4/2020 12:16:57 AM	50800
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 12:16:57 AM	50800
Toluene	ND	0.049		mg/Kg	1	3/4/2020 12:16:57 AM	50800
Ethylbenzene	ND	0.049		mg/Kg	1	3/4/2020 12:16:57 AM	50800
Xylenes, Total	ND	0.097		mg/Kg	1	3/4/2020 12:16:57 AM	50800
Surr: 4-Bromofluorobenzene	86.9	80-120		%Rec	1	3/4/2020 12:16:57 AM	50800

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 2

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:35:00 AM

Lab ID: 2002D01-008

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	980	60		mg/Kg	20	3/3/2020 8:06:01 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: CLP
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/4/2020 3:09:51 AM	50805
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/4/2020 3:09:51 AM	50805
Surr: DNOP	114	55.1-146		%Rec	1	3/4/2020 3:09:51 AM	50805
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/4/2020 12:40:26 AM	50800
Surr: BFB	83.9	66.6-105		%Rec	1	3/4/2020 12:40:26 AM	50800
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/4/2020 12:40:26 AM	50800
Toluene	ND	0.046		mg/Kg	1	3/4/2020 12:40:26 AM	50800
Ethylbenzene	ND	0.046		mg/Kg	1	3/4/2020 12:40:26 AM	50800
Xylenes, Total	ND	0.092		mg/Kg	1	3/4/2020 12:40:26 AM	50800
Surr: 4-Bromofluorobenzene	91.4	80-120		%Rec	1	3/4/2020 12:40:26 AM	50800

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 3 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:40:00 AM

Lab ID: 2002D01-009

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	59		mg/Kg	20	3/3/2020 8:18:25 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/3/2020 3:28:14 PM	50808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/3/2020 3:28:14 PM	50808
Surr: DNOP	103	55.1-146		%Rec	1	3/3/2020 3:28:14 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/4/2020 3:00:44 AM	50804
Surr: BFB	79.1	66.6-105		%Rec	1	3/4/2020 3:00:44 AM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/4/2020 3:00:44 AM	50804
Toluene	ND	0.047		mg/Kg	1	3/4/2020 3:00:44 AM	50804
Ethylbenzene	ND	0.047		mg/Kg	1	3/4/2020 3:00:44 AM	50804
Xylenes, Total	ND	0.093		mg/Kg	1	3/4/2020 3:00:44 AM	50804
Surr: 4-Bromofluorobenzene	86.5	80-120		%Rec	1	3/4/2020 3:00:44 AM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 3 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:45:00 AM

Lab ID: 2002D01-010

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	4200	150		mg/Kg	50	3/6/2020 12:25:41 AM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/3/2020 4:41:40 PM	50808
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/3/2020 4:41:40 PM	50808
Surr: DNOP	101	55.1-146		%Rec	1	3/3/2020 4:41:40 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/4/2020 3:24:01 AM	50804
Surr: BFB	82.0	66.6-105		%Rec	1	3/4/2020 3:24:01 AM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/4/2020 3:24:01 AM	50804
Toluene	ND	0.046		mg/Kg	1	3/4/2020 3:24:01 AM	50804
Ethylbenzene	ND	0.046		mg/Kg	1	3/4/2020 3:24:01 AM	50804
Xylenes, Total	ND	0.091		mg/Kg	1	3/4/2020 3:24:01 AM	50804
Surr: 4-Bromofluorobenzene	90.7	80-120		%Rec	1	3/4/2020 3:24:01 AM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 3 East

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:50:00 AM

Lab ID: 2002D01-011

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/3/2020 8:43:14 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/3/2020 5:06:08 PM	50808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/3/2020 5:06:08 PM	50808
Surr: DNOP	85.3	55.1-146		%Rec	1	3/3/2020 5:06:08 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/4/2020 2:47:56 PM	50804
Surr: BFB	85.1	66.6-105		%Rec	1	3/4/2020 2:47:56 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/4/2020 2:47:56 PM	50804
Toluene	ND	0.049		mg/Kg	1	3/4/2020 2:47:56 PM	50804
Ethylbenzene	ND	0.049		mg/Kg	1	3/4/2020 2:47:56 PM	50804
Xylenes, Total	ND	0.098		mg/Kg	1	3/4/2020 2:47:56 PM	50804
Surr: 4-Bromofluorobenzene	94.4	80-120		%Rec	1	3/4/2020 2:47:56 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 3 West

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 8:55:00 AM

Lab ID: 2002D01-012

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	700	60		mg/Kg	20	3/3/2020 8:55:38 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/3/2020 5:30:39 PM	50808
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/3/2020 5:30:39 PM	50808
Surr: DNOP	99.9	55.1-146		%Rec	1	3/3/2020 5:30:39 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/4/2020 3:11:29 PM	50804
Surr: BFB	80.6	66.6-105		%Rec	1	3/4/2020 3:11:29 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 3:11:29 PM	50804
Toluene	ND	0.049		mg/Kg	1	3/4/2020 3:11:29 PM	50804
Ethylbenzene	ND	0.049		mg/Kg	1	3/4/2020 3:11:29 PM	50804
Xylenes, Total	ND	0.097		mg/Kg	1	3/4/2020 3:11:29 PM	50804
Surr: 4-Bromofluorobenzene	88.8	80-120		%Rec	1	3/4/2020 3:11:29 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 3

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:00:00 AM

Lab ID: 2002D01-013

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	440	60		mg/Kg	20	3/3/2020 9:32:52 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/3/2020 5:55:11 PM	50808
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/3/2020 5:55:11 PM	50808
Surr: DNOP	89.0	55.1-146		%Rec	1	3/3/2020 5:55:11 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/4/2020 3:34:56 PM	50804
Surr: BFB	83.4	66.6-105		%Rec	1	3/4/2020 3:34:56 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 3:34:56 PM	50804
Toluene	ND	0.049		mg/Kg	1	3/4/2020 3:34:56 PM	50804
Ethylbenzene	ND	0.049		mg/Kg	1	3/4/2020 3:34:56 PM	50804
Xylenes, Total	ND	0.098		mg/Kg	1	3/4/2020 3:34:56 PM	50804
Surr: 4-Bromofluorobenzene	92.4	80-120		%Rec	1	3/4/2020 3:34:56 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 4 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:05:00 AM

Lab ID: 2002D01-014

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/3/2020 9:45:16 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/3/2020 6:19:34 PM	50808
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/3/2020 6:19:34 PM	50808
Surr: DNOP	105	55.1-146		%Rec	1	3/3/2020 6:19:34 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/4/2020 3:58:21 PM	50804
Surr: BFB	83.0	66.6-105		%Rec	1	3/4/2020 3:58:21 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 3:58:21 PM	50804
Toluene	ND	0.048		mg/Kg	1	3/4/2020 3:58:21 PM	50804
Ethylbenzene	ND	0.048		mg/Kg	1	3/4/2020 3:58:21 PM	50804
Xylenes, Total	ND	0.097		mg/Kg	1	3/4/2020 3:58:21 PM	50804
Surr: 4-Bromofluorobenzene	91.2	80-120		%Rec	1	3/4/2020 3:58:21 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 4 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:10:00 AM

Lab ID: 2002D01-015

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/3/2020 9:57:41 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/3/2020 6:43:50 PM	50808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/3/2020 6:43:50 PM	50808
Surr: DNOP	110	55.1-146		%Rec	1	3/3/2020 6:43:50 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/4/2020 4:21:52 PM	50804
Surr: BFB	79.3	66.6-105		%Rec	1	3/4/2020 4:21:52 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/4/2020 4:21:52 PM	50804
Toluene	ND	0.046		mg/Kg	1	3/4/2020 4:21:52 PM	50804
Ethylbenzene	ND	0.046		mg/Kg	1	3/4/2020 4:21:52 PM	50804
Xylenes, Total	ND	0.092		mg/Kg	1	3/4/2020 4:21:52 PM	50804
Surr: 4-Bromofluorobenzene	88.0	80-120		%Rec	1	3/4/2020 4:21:52 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 4 East

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:15:00 AM

Lab ID: 2002D01-016

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	61		mg/Kg	20	3/3/2020 10:10:06 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/3/2020 7:08:05 PM	50808
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/3/2020 7:08:05 PM	50808
Surr: DNOP	99.3	55.1-146		%Rec	1	3/3/2020 7:08:05 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/4/2020 4:45:25 PM	50804
Surr: BFB	78.6	66.6-105		%Rec	1	3/4/2020 4:45:25 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/4/2020 4:45:25 PM	50804
Toluene	ND	0.046		mg/Kg	1	3/4/2020 4:45:25 PM	50804
Ethylbenzene	ND	0.046		mg/Kg	1	3/4/2020 4:45:25 PM	50804
Xylenes, Total	ND	0.093		mg/Kg	1	3/4/2020 4:45:25 PM	50804
Surr: 4-Bromofluorobenzene	86.6	80-120		%Rec	1	3/4/2020 4:45:25 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 4

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:20:00 AM

Lab ID: 2002D01-017

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/3/2020 10:22:31 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/3/2020 7:32:15 PM	50808
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/3/2020 7:32:15 PM	50808
Surr: DNOP	85.0	55.1-146		%Rec	1	3/3/2020 7:32:15 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/4/2020 5:08:38 PM	50804
Surr: BFB	82.9	66.6-105		%Rec	1	3/4/2020 5:08:38 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 5:08:38 PM	50804
Toluene	ND	0.047		mg/Kg	1	3/4/2020 5:08:38 PM	50804
Ethylbenzene	ND	0.047		mg/Kg	1	3/4/2020 5:08:38 PM	50804
Xylenes, Total	ND	0.095		mg/Kg	1	3/4/2020 5:08:38 PM	50804
Surr: 4-Bromofluorobenzene	93.0	80-120		%Rec	1	3/4/2020 5:08:38 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 5 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:25:00 AM

Lab ID: 2002D01-018

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/3/2020 10:34:56 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/3/2020 7:56:29 PM	50808
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/3/2020 7:56:29 PM	50808
Surr: DNOP	103	55.1-146		%Rec	1	3/3/2020 7:56:29 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/4/2020 6:42:09 PM	50804
Surr: BFB	79.0	66.6-105		%Rec	1	3/4/2020 6:42:09 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 6:42:09 PM	50804
Toluene	ND	0.049		mg/Kg	1	3/4/2020 6:42:09 PM	50804
Ethylbenzene	ND	0.049		mg/Kg	1	3/4/2020 6:42:09 PM	50804
Xylenes, Total	ND	0.097		mg/Kg	1	3/4/2020 6:42:09 PM	50804
Surr: 4-Bromofluorobenzene	87.2	80-120		%Rec	1	3/4/2020 6:42:09 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 5 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:30:00 AM

Lab ID: 2002D01-019

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/3/2020 10:47:20 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/3/2020 8:20:34 PM	50808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/3/2020 8:20:34 PM	50808
Surr: DNOP	99.4	55.1-146		%Rec	1	3/3/2020 8:20:34 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/4/2020 7:05:40 PM	50804
Surr: BFB	79.4	66.6-105		%Rec	1	3/4/2020 7:05:40 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/4/2020 7:05:40 PM	50804
Toluene	ND	0.049		mg/Kg	1	3/4/2020 7:05:40 PM	50804
Ethylbenzene	ND	0.049		mg/Kg	1	3/4/2020 7:05:40 PM	50804
Xylenes, Total	ND	0.098		mg/Kg	1	3/4/2020 7:05:40 PM	50804
Surr: 4-Bromofluorobenzene	87.9	80-120		%Rec	1	3/4/2020 7:05:40 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 5 East

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:35:00 AM

Lab ID: 2002D01-020

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/3/2020 10:59:44 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/3/2020 8:44:45 PM	50808
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/3/2020 8:44:45 PM	50808
Surr: DNOP	98.7	55.1-146		%Rec	1	3/3/2020 8:44:45 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/4/2020 7:29:09 PM	50804
Surr: BFB	78.5	66.6-105		%Rec	1	3/4/2020 7:29:09 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 7:29:09 PM	50804
Toluene	ND	0.048		mg/Kg	1	3/4/2020 7:29:09 PM	50804
Ethylbenzene	ND	0.048		mg/Kg	1	3/4/2020 7:29:09 PM	50804
Xylenes, Total	ND	0.096		mg/Kg	1	3/4/2020 7:29:09 PM	50804
Surr: 4-Bromofluorobenzene	87.1	80-120		%Rec	1	3/4/2020 7:29:09 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 5

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:40:00 AM

Lab ID: 2002D01-021

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	350	60		mg/Kg	20	3/3/2020 11:12:09 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/3/2020 9:08:48 PM	50808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/3/2020 9:08:48 PM	50808
Surr: DNOP	102	55.1-146		%Rec	1	3/3/2020 9:08:48 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/4/2020 7:52:40 PM	50804
Surr: BFB	83.4	66.6-105		%Rec	1	3/4/2020 7:52:40 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 7:52:40 PM	50804
Toluene	ND	0.048		mg/Kg	1	3/4/2020 7:52:40 PM	50804
Ethylbenzene	ND	0.048		mg/Kg	1	3/4/2020 7:52:40 PM	50804
Xylenes, Total	ND	0.095		mg/Kg	1	3/4/2020 7:52:40 PM	50804
Surr: 4-Bromofluorobenzene	91.1	80-120		%Rec	1	3/4/2020 7:52:40 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 6 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:45:00 AM

Lab ID: 2002D01-022

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/3/2020 11:24:34 PM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/3/2020 9:32:49 PM	50808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/3/2020 9:32:49 PM	50808
Surr: DNOP	102	55.1-146		%Rec	1	3/3/2020 9:32:49 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/4/2020 8:16:08 PM	50804
Surr: BFB	78.2	66.6-105		%Rec	1	3/4/2020 8:16:08 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/4/2020 8:16:08 PM	50804
Toluene	ND	0.047		mg/Kg	1	3/4/2020 8:16:08 PM	50804
Ethylbenzene	ND	0.047		mg/Kg	1	3/4/2020 8:16:08 PM	50804
Xylenes, Total	ND	0.094		mg/Kg	1	3/4/2020 8:16:08 PM	50804
Surr: 4-Bromofluorobenzene	85.7	80-120		%Rec	1	3/4/2020 8:16:08 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 6 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:50:00 AM

Lab ID: 2002D01-023

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	ND	60		mg/Kg	20	3/4/2020 12:01:47 AM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/3/2020 10:20:47 PM	50808
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/3/2020 10:20:47 PM	50808
Surr: DNOP	103	55.1-146		%Rec	1	3/3/2020 10:20:47 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/4/2020 8:39:39 PM	50804
Surr: BFB	75.3	66.6-105		%Rec	1	3/4/2020 8:39:39 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/4/2020 8:39:39 PM	50804
Toluene	ND	0.047		mg/Kg	1	3/4/2020 8:39:39 PM	50804
Ethylbenzene	ND	0.047		mg/Kg	1	3/4/2020 8:39:39 PM	50804
Xylenes, Total	ND	0.093		mg/Kg	1	3/4/2020 8:39:39 PM	50804
Surr: 4-Bromofluorobenzene	83.0	80-120		%Rec	1	3/4/2020 8:39:39 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 6

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 9:55:00 AM

Lab ID: 2002D01-024

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	1500	60		mg/Kg	20	3/4/2020 12:14:11 AM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/3/2020 10:44:38 PM	50808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/3/2020 10:44:38 PM	50808
Surr: DNOP	100	55.1-146		%Rec	1	3/3/2020 10:44:38 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/4/2020 9:03:10 PM	50804
Surr: BFB	77.9	66.6-105		%Rec	1	3/4/2020 9:03:10 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 9:03:10 PM	50804
Toluene	ND	0.048		mg/Kg	1	3/4/2020 9:03:10 PM	50804
Ethylbenzene	ND	0.048		mg/Kg	1	3/4/2020 9:03:10 PM	50804
Xylenes, Total	ND	0.097		mg/Kg	1	3/4/2020 9:03:10 PM	50804
Surr: 4-Bromofluorobenzene	86.2	80-120		%Rec	1	3/4/2020 9:03:10 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 7 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:00:00 AM

Lab ID: 2002D01-025

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CJS
Chloride	1400	60		mg/Kg	20	3/4/2020 12:26:36 AM	50860
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/3/2020 11:08:32 PM	50808
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/3/2020 11:08:32 PM	50808
Surr: DNOP	113	55.1-146		%Rec	1	3/3/2020 11:08:32 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/4/2020 9:26:31 PM	50804
Surr: BFB	80.6	66.6-105		%Rec	1	3/4/2020 9:26:31 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 9:26:31 PM	50804
Toluene	ND	0.049		mg/Kg	1	3/4/2020 9:26:31 PM	50804
Ethylbenzene	ND	0.049		mg/Kg	1	3/4/2020 9:26:31 PM	50804
Xylenes, Total	ND	0.098		mg/Kg	1	3/4/2020 9:26:31 PM	50804
Surr: 4-Bromofluorobenzene	89.0	80-120		%Rec	1	3/4/2020 9:26:31 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 7 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:05:00 AM

Lab ID: 2002D01-026

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	920	60		mg/Kg	20	3/4/2020 11:28:12 AM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/3/2020 11:32:15 PM	50808
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/3/2020 11:32:15 PM	50808
Surr: DNOP	104	55.1-146		%Rec	1	3/3/2020 11:32:15 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/4/2020 9:49:46 PM	50804
Surr: BFB	79.6	66.6-105		%Rec	1	3/4/2020 9:49:46 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 9:49:46 PM	50804
Toluene	ND	0.048		mg/Kg	1	3/4/2020 9:49:46 PM	50804
Ethylbenzene	ND	0.048		mg/Kg	1	3/4/2020 9:49:46 PM	50804
Xylenes, Total	ND	0.095		mg/Kg	1	3/4/2020 9:49:46 PM	50804
Surr: 4-Bromofluorobenzene	88.2	80-120		%Rec	1	3/4/2020 9:49:46 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 7 West

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:10:00 AM

Lab ID: 2002D01-027

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	2400	150		mg/Kg	50	3/6/2020 12:38:01 AM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/3/2020 11:56:06 PM	50808
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/3/2020 11:56:06 PM	50808
Surr: DNOP	104	55.1-146		%Rec	1	3/3/2020 11:56:06 PM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/4/2020 10:13:15 PM	50804
Surr: BFB	77.8	66.6-105		%Rec	1	3/4/2020 10:13:15 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/4/2020 10:13:15 PM	50804
Toluene	ND	0.047		mg/Kg	1	3/4/2020 10:13:15 PM	50804
Ethylbenzene	ND	0.047		mg/Kg	1	3/4/2020 10:13:15 PM	50804
Xylenes, Total	ND	0.094		mg/Kg	1	3/4/2020 10:13:15 PM	50804
Surr: 4-Bromofluorobenzene	85.4	80-120		%Rec	1	3/4/2020 10:13:15 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 7

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:15:00 AM

Lab ID: 2002D01-028

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	1500	60		mg/Kg	20	3/4/2020 12:17:50 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/4/2020 12:19:52 AM	50808
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/4/2020 12:19:52 AM	50808
Surr: DNOP	100	55.1-146		%Rec	1	3/4/2020 12:19:52 AM	50808
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/4/2020 11:47:24 PM	50804
Surr: BFB	78.0	66.6-105		%Rec	1	3/4/2020 11:47:24 PM	50804
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/4/2020 11:47:24 PM	50804
Toluene	ND	0.047		mg/Kg	1	3/4/2020 11:47:24 PM	50804
Ethylbenzene	ND	0.047		mg/Kg	1	3/4/2020 11:47:24 PM	50804
Xylenes, Total	ND	0.095		mg/Kg	1	3/4/2020 11:47:24 PM	50804
Surr: 4-Bromofluorobenzene	85.1	80-120		%Rec	1	3/4/2020 11:47:24 PM	50804

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 8 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:20:00 AM

Lab ID: 2002D01-029

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	3100	150		mg/Kg	50	3/6/2020 12:50:23 AM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/4/2020 8:32:07 AM	50824
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 8:32:07 AM	50824
Surr: DNOP	122	55.1-146		%Rec	1	3/4/2020 8:32:07 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 12:10:54 AM	50809
Surr: BFB	83.0	66.6-105		%Rec	1	3/5/2020 12:10:54 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 12:10:54 AM	50809
Toluene	ND	0.048		mg/Kg	1	3/5/2020 12:10:54 AM	50809
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 12:10:54 AM	50809
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2020 12:10:54 AM	50809
Surr: 4-Bromofluorobenzene	90.9	80-120		%Rec	1	3/5/2020 12:10:54 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 8 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:25:00 AM

Lab ID: 2002D01-030

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	2600	150		mg/Kg	50	3/6/2020 1:02:43 AM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/4/2020 8:59:26 AM	50824
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/4/2020 8:59:26 AM	50824
Surr: DNOP	103	55.1-146		%Rec	1	3/4/2020 8:59:26 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 1:21:29 AM	50809
Surr: BFB	80.2	66.6-105		%Rec	1	3/5/2020 1:21:29 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 1:21:29 AM	50809
Toluene	ND	0.048		mg/Kg	1	3/5/2020 1:21:29 AM	50809
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 1:21:29 AM	50809
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2020 1:21:29 AM	50809
Surr: 4-Bromofluorobenzene	88.1	80-120		%Rec	1	3/5/2020 1:21:29 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 8 East

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:30:00 AM

Lab ID: 2002D01-031

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	3100	150		mg/Kg	50	3/6/2020 1:15:04 AM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/4/2020 9:08:34 AM	50824
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/4/2020 9:08:34 AM	50824
Surr: DNOP	104	55.1-146		%Rec	1	3/4/2020 9:08:34 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 2:31:55 AM	50809
Surr: BFB	80.7	66.6-105		%Rec	1	3/5/2020 2:31:55 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 2:31:55 AM	50809
Toluene	ND	0.048		mg/Kg	1	3/5/2020 2:31:55 AM	50809
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 2:31:55 AM	50809
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2020 2:31:55 AM	50809
Surr: 4-Bromofluorobenzene	88.5	80-120		%Rec	1	3/5/2020 2:31:55 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 8

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:35:00 AM

Lab ID: 2002D01-032

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	430	60		mg/Kg	20	3/4/2020 1:32:17 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/4/2020 9:17:40 AM	50824
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 9:17:40 AM	50824
Surr: DNOP	105	55.1-146		%Rec	1	3/4/2020 9:17:40 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2020 2:55:24 AM	50809
Surr: BFB	86.0	66.6-105		%Rec	1	3/5/2020 2:55:24 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/5/2020 2:55:24 AM	50809
Toluene	ND	0.047		mg/Kg	1	3/5/2020 2:55:24 AM	50809
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2020 2:55:24 AM	50809
Xylenes, Total	ND	0.093		mg/Kg	1	3/5/2020 2:55:24 AM	50809
Surr: 4-Bromofluorobenzene	95.0	80-120		%Rec	1	3/5/2020 2:55:24 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 9 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:40:00 AM

Lab ID: 2002D01-033

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	1600	60		mg/Kg	20	3/4/2020 1:44:41 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/4/2020 9:26:49 AM	50824
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/4/2020 9:26:49 AM	50824
Surr: DNOP	102	55.1-146		%Rec	1	3/4/2020 9:26:49 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/5/2020 3:18:53 AM	50809
Surr: BFB	80.0	66.6-105		%Rec	1	3/5/2020 3:18:53 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/5/2020 3:18:53 AM	50809
Toluene	ND	0.050		mg/Kg	1	3/5/2020 3:18:53 AM	50809
Ethylbenzene	ND	0.050		mg/Kg	1	3/5/2020 3:18:53 AM	50809
Xylenes, Total	ND	0.10		mg/Kg	1	3/5/2020 3:18:53 AM	50809
Surr: 4-Bromofluorobenzene	87.5	80-120		%Rec	1	3/5/2020 3:18:53 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 9 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:45:00 AM

Lab ID: 2002D01-034

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	1700	60		mg/Kg	20	3/4/2020 1:57:06 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/4/2020 9:35:57 AM	50824
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 9:35:57 AM	50824
Surr: DNOP	100	55.1-146		%Rec	1	3/4/2020 9:35:57 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2020 3:42:24 AM	50809
Surr: BFB	82.4	66.6-105		%Rec	1	3/5/2020 3:42:24 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/5/2020 3:42:24 AM	50809
Toluene	ND	0.049		mg/Kg	1	3/5/2020 3:42:24 AM	50809
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2020 3:42:24 AM	50809
Xylenes, Total	ND	0.098		mg/Kg	1	3/5/2020 3:42:24 AM	50809
Surr: 4-Bromofluorobenzene	91.7	80-120		%Rec	1	3/5/2020 3:42:24 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 9 West

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:50:00 AM

Lab ID: 2002D01-035

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	830	60		mg/Kg	20	3/4/2020 2:09:31 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.8		mg/Kg	1	3/4/2020 9:44:53 AM	50824
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/4/2020 9:44:53 AM	50824
Surr: DNOP	109	55.1-146		%Rec	1	3/4/2020 9:44:53 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 9:29:10 AM	50809
Surr: BFB	78.9	66.6-105		%Rec	1	3/5/2020 9:29:10 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 9:29:10 AM	50809
Toluene	ND	0.048		mg/Kg	1	3/5/2020 9:29:10 AM	50809
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 9:29:10 AM	50809
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2020 9:29:10 AM	50809
Surr: 4-Bromofluorobenzene	86.2	80-120		%Rec	1	3/5/2020 9:29:10 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 9

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 10:55:00 AM

Lab ID: 2002D01-036

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	11000	600		mg/Kg	200	3/6/2020 1:27:24 AM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/4/2020 9:53:47 AM	50824
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/4/2020 9:53:47 AM	50824
Surr: DNOP	114	55.1-146		%Rec	1	3/4/2020 9:53:47 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2020 9:52:43 AM	50809
Surr: BFB	78.2	66.6-105		%Rec	1	3/5/2020 9:52:43 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/5/2020 9:52:43 AM	50809
Toluene	ND	0.049		mg/Kg	1	3/5/2020 9:52:43 AM	50809
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2020 9:52:43 AM	50809
Xylenes, Total	ND	0.099		mg/Kg	1	3/5/2020 9:52:43 AM	50809
Surr: 4-Bromofluorobenzene	85.7	80-120		%Rec	1	3/5/2020 9:52:43 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 10 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:00:00 AM

Lab ID: 2002D01-037

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	250	60		mg/Kg	20	3/4/2020 2:34:20 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/4/2020 10:02:42 AM	50824
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/4/2020 10:02:42 AM	50824
Surr: DNOP	117	55.1-146		%Rec	1	3/4/2020 10:02:42 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2020 10:16:16 AM	50809
Surr: BFB	76.4	66.6-105		%Rec	1	3/5/2020 10:16:16 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/5/2020 10:16:16 AM	50809
Toluene	ND	0.049		mg/Kg	1	3/5/2020 10:16:16 AM	50809
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2020 10:16:16 AM	50809
Xylenes, Total	ND	0.098		mg/Kg	1	3/5/2020 10:16:16 AM	50809
Surr: 4-Bromofluorobenzene	83.6	80-120		%Rec	1	3/5/2020 10:16:16 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 10 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:05:00 AM

Lab ID: 2002D01-038

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	340	60		mg/Kg	20	3/4/2020 2:46:44 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/4/2020 10:11:35 AM	50824
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/4/2020 10:11:35 AM	50824
Surr: DNOP	111	55.1-146		%Rec	1	3/4/2020 10:11:35 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 10:39:42 AM	50809
Surr: BFB	77.3	66.6-105		%Rec	1	3/5/2020 10:39:42 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 10:39:42 AM	50809
Toluene	ND	0.048		mg/Kg	1	3/5/2020 10:39:42 AM	50809
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 10:39:42 AM	50809
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2020 10:39:42 AM	50809
Surr: 4-Bromofluorobenzene	85.0	80-120		%Rec	1	3/5/2020 10:39:42 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 10 West

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:11:00 AM

Lab ID: 2002D01-039

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	150	60		mg/Kg	20	3/4/2020 2:59:08 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/4/2020 10:20:28 AM	50824
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 10:20:28 AM	50824
Surr: DNOP	115	55.1-146		%Rec	1	3/4/2020 10:20:28 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2020 11:03:09 AM	50809
Surr: BFB	79.7	66.6-105		%Rec	1	3/5/2020 11:03:09 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/5/2020 11:03:09 AM	50809
Toluene	ND	0.047		mg/Kg	1	3/5/2020 11:03:09 AM	50809
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2020 11:03:09 AM	50809
Xylenes, Total	ND	0.093		mg/Kg	1	3/5/2020 11:03:09 AM	50809
Surr: 4-Bromofluorobenzene	87.9	80-120		%Rec	1	3/5/2020 11:03:09 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 10

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:15:00 AM

Lab ID: 2002D01-040

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/4/2020 3:11:33 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/4/2020 10:29:23 AM	50824
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/4/2020 10:29:23 AM	50824
Surr: DNOP	126	55.1-146		%Rec	1	3/4/2020 10:29:23 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2020 11:26:27 AM	50809
Surr: BFB	80.3	66.6-105		%Rec	1	3/5/2020 11:26:27 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/5/2020 11:26:27 AM	50809
Toluene	ND	0.047		mg/Kg	1	3/5/2020 11:26:27 AM	50809
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2020 11:26:27 AM	50809
Xylenes, Total	ND	0.093		mg/Kg	1	3/5/2020 11:26:27 AM	50809
Surr: 4-Bromofluorobenzene	88.7	80-120		%Rec	1	3/5/2020 11:26:27 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 11 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:20:00 AM

Lab ID: 2002D01-041

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/4/2020 3:23:58 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.7		mg/Kg	1	3/4/2020 10:38:19 AM	50824
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/4/2020 10:38:19 AM	50824
Surr: DNOP	118	55.1-146		%Rec	1	3/4/2020 10:38:19 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	3/5/2020 11:49:51 AM	50809
Surr: BFB	80.1	66.6-105		%Rec	1	3/5/2020 11:49:51 AM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/5/2020 11:49:51 AM	50809
Toluene	ND	0.046		mg/Kg	1	3/5/2020 11:49:51 AM	50809
Ethylbenzene	ND	0.046		mg/Kg	1	3/5/2020 11:49:51 AM	50809
Xylenes, Total	ND	0.092		mg/Kg	1	3/5/2020 11:49:51 AM	50809
Surr: 4-Bromofluorobenzene	87.4	80-120		%Rec	1	3/5/2020 11:49:51 AM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 11 East

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:25:00 AM

Lab ID: 2002D01-042

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/4/2020 4:01:11 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/4/2020 10:47:16 AM	50824
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/4/2020 10:47:16 AM	50824
Surr: DNOP	109	55.1-146		%Rec	1	3/4/2020 10:47:16 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2020 12:13:24 PM	50809
Surr: BFB	81.7	66.6-105		%Rec	1	3/5/2020 12:13:24 PM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 12:13:24 PM	50809
Toluene	ND	0.049		mg/Kg	1	3/5/2020 12:13:24 PM	50809
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2020 12:13:24 PM	50809
Xylenes, Total	ND	0.098		mg/Kg	1	3/5/2020 12:13:24 PM	50809
Surr: 4-Bromofluorobenzene	91.0	80-120		%Rec	1	3/5/2020 12:13:24 PM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 11 West

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:30:00 AM

Lab ID: 2002D01-043

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/4/2020 4:13:36 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/4/2020 10:56:15 AM	50824
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 10:56:15 AM	50824
Surr: DNOP	105	55.1-146		%Rec	1	3/4/2020 10:56:15 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 12:36:59 PM	50809
Surr: BFB	77.9	66.6-105		%Rec	1	3/5/2020 12:36:59 PM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 12:36:59 PM	50809
Toluene	ND	0.048		mg/Kg	1	3/5/2020 12:36:59 PM	50809
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 12:36:59 PM	50809
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2020 12:36:59 PM	50809
Surr: 4-Bromofluorobenzene	86.5	80-120		%Rec	1	3/5/2020 12:36:59 PM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 11

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:35:00 AM

Lab ID: 2002D01-044

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/4/2020 4:26:00 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.1		mg/Kg	1	3/4/2020 11:05:14 AM	50824
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/4/2020 11:05:14 AM	50824
Surr: DNOP	109	55.1-146		%Rec	1	3/4/2020 11:05:14 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2020 1:00:30 PM	50809
Surr: BFB	79.0	66.6-105		%Rec	1	3/5/2020 1:00:30 PM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/5/2020 1:00:30 PM	50809
Toluene	ND	0.047		mg/Kg	1	3/5/2020 1:00:30 PM	50809
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2020 1:00:30 PM	50809
Xylenes, Total	ND	0.093		mg/Kg	1	3/5/2020 1:00:30 PM	50809
Surr: 4-Bromofluorobenzene	87.3	80-120		%Rec	1	3/5/2020 1:00:30 PM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 12 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:40:00 AM

Lab ID: 2002D01-045

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	1300	60		mg/Kg	20	3/4/2020 4:38:25 PM	50869
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/4/2020 11:14:21 AM	50824
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/4/2020 11:14:21 AM	50824
Surr: DNOP	106	55.1-146		%Rec	1	3/4/2020 11:14:21 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 1:47:25 PM	50809
Surr: BFB	77.6	66.6-105		%Rec	1	3/5/2020 1:47:25 PM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 1:47:25 PM	50809
Toluene	ND	0.048		mg/Kg	1	3/5/2020 1:47:25 PM	50809
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 1:47:25 PM	50809
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2020 1:47:25 PM	50809
Surr: 4-Bromofluorobenzene	84.6	80-120		%Rec	1	3/5/2020 1:47:25 PM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 12 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:45:00 AM

Lab ID: 2002D01-046

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	4000	150		mg/Kg	50	3/6/2020 1:39:45 AM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/4/2020 11:23:27 AM	50824
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/4/2020 11:23:27 AM	50824
Surr: DNOP	103	55.1-146		%Rec	1	3/4/2020 11:23:27 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 2:10:59 PM	50809
Surr: BFB	77.1	66.6-105		%Rec	1	3/5/2020 2:10:59 PM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 2:10:59 PM	50809
Toluene	ND	0.048		mg/Kg	1	3/5/2020 2:10:59 PM	50809
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 2:10:59 PM	50809
Xylenes, Total	ND	0.095		mg/Kg	1	3/5/2020 2:10:59 PM	50809
Surr: 4-Bromofluorobenzene	85.5	80-120		%Rec	1	3/5/2020 2:10:59 PM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 12 East

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:50:00 AM

Lab ID: 2002D01-047

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	82	60		mg/Kg	20	3/4/2020 12:00:16 PM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/4/2020 11:32:30 AM	50824
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/4/2020 11:32:30 AM	50824
Surr: DNOP	115	55.1-146		%Rec	1	3/4/2020 11:32:30 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 2:34:37 PM	50809
Surr: BFB	75.3	66.6-105		%Rec	1	3/5/2020 2:34:37 PM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 2:34:37 PM	50809
Toluene	ND	0.048		mg/Kg	1	3/5/2020 2:34:37 PM	50809
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 2:34:37 PM	50809
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2020 2:34:37 PM	50809
Surr: 4-Bromofluorobenzene	84.0	80-120		%Rec	1	3/5/2020 2:34:37 PM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 12 West

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 11:55:00 AM

Lab ID: 2002D01-048

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	2200	60		mg/Kg	20	3/4/2020 4:56:37 PM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/4/2020 11:41:35 AM	50824
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/4/2020 11:41:35 AM	50824
Surr: DNOP	103	55.1-146		%Rec	1	3/4/2020 11:41:35 AM	50824
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 2:58:06 PM	50809
Surr: BFB	79.4	66.6-105		%Rec	1	3/5/2020 2:58:06 PM	50809
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 2:58:06 PM	50809
Toluene	ND	0.048		mg/Kg	1	3/5/2020 2:58:06 PM	50809
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 2:58:06 PM	50809
Xylenes, Total	ND	0.097		mg/Kg	1	3/5/2020 2:58:06 PM	50809
Surr: 4-Bromofluorobenzene	85.9	80-120		%Rec	1	3/5/2020 2:58:06 PM	50809

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 12

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 12:00:00 PM

Lab ID: 2002D01-049

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	5800	300		mg/Kg	100	3/6/2020 2:16:47 AM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/4/2020 12:57:32 PM	50831
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/4/2020 12:57:32 PM	50831
Surr: DNOP	98.8	55.1-146		%Rec	1	3/4/2020 12:57:32 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2020 3:21:23 PM	50812
Surr: BFB	79.4	66.6-105		%Rec	1	3/5/2020 3:21:23 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/5/2020 3:21:23 PM	50812
Toluene	ND	0.047		mg/Kg	1	3/5/2020 3:21:23 PM	50812
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2020 3:21:23 PM	50812
Xylenes, Total	ND	0.094		mg/Kg	1	3/5/2020 3:21:23 PM	50812
Surr: 4-Bromofluorobenzene	87.9	80-120		%Rec	1	3/5/2020 3:21:23 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 13 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 1:00:00 PM

Lab ID: 2002D01-050

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	3400	150		mg/Kg	50	3/6/2020 2:29:08 AM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	18	9.6		mg/Kg	1	3/4/2020 1:25:31 PM	50831
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/4/2020 1:25:31 PM	50831
Surr: DNOP	102	55.1-146		%Rec	1	3/4/2020 1:25:31 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 3:44:40 PM	50812
Surr: BFB	79.0	66.6-105		%Rec	1	3/5/2020 3:44:40 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 3:44:40 PM	50812
Toluene	ND	0.048		mg/Kg	1	3/5/2020 3:44:40 PM	50812
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 3:44:40 PM	50812
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2020 3:44:40 PM	50812
Surr: 4-Bromofluorobenzene	87.6	80-120		%Rec	1	3/5/2020 3:44:40 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 13 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 1:05:00 PM

Lab ID: 2002D01-051

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	5600	300		mg/Kg	100	3/8/2020 4:12:07 PM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/4/2020 1:34:41 PM	50831
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/4/2020 1:34:41 PM	50831
Surr: DNOP	98.5	55.1-146		%Rec	1	3/4/2020 1:34:41 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2020 4:07:59 PM	50812
Surr: BFB	82.7	66.6-105		%Rec	1	3/5/2020 4:07:59 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 4:07:59 PM	50812
Toluene	ND	0.049		mg/Kg	1	3/5/2020 4:07:59 PM	50812
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2020 4:07:59 PM	50812
Xylenes, Total	ND	0.098		mg/Kg	1	3/5/2020 4:07:59 PM	50812
Surr: 4-Bromofluorobenzene	91.3	80-120		%Rec	1	3/5/2020 4:07:59 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 13 East

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 1:10:00 PM

Lab ID: 2002D01-052

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	860	60		mg/Kg	20	3/4/2020 1:51:24 PM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/4/2020 1:43:50 PM	50831
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 1:43:50 PM	50831
Surr: DNOP	104	55.1-146		%Rec	1	3/4/2020 1:43:50 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2020 4:31:39 PM	50812
Surr: BFB	77.6	66.6-105		%Rec	1	3/5/2020 4:31:39 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 4:31:39 PM	50812
Toluene	ND	0.049		mg/Kg	1	3/5/2020 4:31:39 PM	50812
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2020 4:31:39 PM	50812
Xylenes, Total	ND	0.098		mg/Kg	1	3/5/2020 4:31:39 PM	50812
Surr: 4-Bromofluorobenzene	86.4	80-120		%Rec	1	3/5/2020 4:31:39 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 13

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/27/2020 1:15:00 PM

Lab ID: 2002D01-053

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/4/2020 2:03:46 PM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	3/4/2020 1:52:59 PM	50831
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 1:52:59 PM	50831
Surr: DNOP	105	55.1-146		%Rec	1	3/4/2020 1:52:59 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2020 4:55:01 PM	50812
Surr: BFB	78.0	66.6-105		%Rec	1	3/5/2020 4:55:01 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/5/2020 4:55:01 PM	50812
Toluene	ND	0.047		mg/Kg	1	3/5/2020 4:55:01 PM	50812
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2020 4:55:01 PM	50812
Xylenes, Total	ND	0.093		mg/Kg	1	3/5/2020 4:55:01 PM	50812
Surr: 4-Bromofluorobenzene	86.5	80-120		%Rec	1	3/5/2020 4:55:01 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 14 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/28/2020 8:00:00 AM

Lab ID: 2002D01-054

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/4/2020 2:16:06 PM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	10		mg/Kg	1	3/4/2020 2:02:07 PM	50831
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/4/2020 2:02:07 PM	50831
Surr: DNOP	100	55.1-146		%Rec	1	3/4/2020 2:02:07 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2020 5:18:16 PM	50812
Surr: BFB	76.6	66.6-105		%Rec	1	3/5/2020 5:18:16 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 5:18:16 PM	50812
Toluene	ND	0.047		mg/Kg	1	3/5/2020 5:18:16 PM	50812
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2020 5:18:16 PM	50812
Xylenes, Total	ND	0.094		mg/Kg	1	3/5/2020 5:18:16 PM	50812
Surr: 4-Bromofluorobenzene	84.9	80-120		%Rec	1	3/5/2020 5:18:16 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 14 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/28/2020 8:05:00 AM

Lab ID: 2002D01-055

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	3500	150		mg/Kg	50	3/6/2020 2:41:28 AM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/4/2020 2:11:17 PM	50831
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/4/2020 2:11:17 PM	50831
Surr: DNOP	106	55.1-146		%Rec	1	3/4/2020 2:11:17 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/5/2020 9:12:07 PM	50812
Surr: BFB	82.6	66.6-105		%Rec	1	3/5/2020 9:12:07 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/5/2020 9:12:07 PM	50812
Toluene	ND	0.050		mg/Kg	1	3/5/2020 9:12:07 PM	50812
Ethylbenzene	ND	0.050		mg/Kg	1	3/5/2020 9:12:07 PM	50812
Xylenes, Total	ND	0.099		mg/Kg	1	3/5/2020 9:12:07 PM	50812
Surr: 4-Bromofluorobenzene	90.3	80-120		%Rec	1	3/5/2020 9:12:07 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 14 East

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/28/2020 8:10:00 AM

Lab ID: 2002D01-056

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	2200	150		mg/Kg	50	3/6/2020 2:53:49 AM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	3/4/2020 2:20:25 PM	50831
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 2:20:25 PM	50831
Surr: DNOP	104	55.1-146		%Rec	1	3/4/2020 2:20:25 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2020 9:35:28 PM	50812
Surr: BFB	79.6	66.6-105		%Rec	1	3/5/2020 9:35:28 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 9:35:28 PM	50812
Toluene	ND	0.047		mg/Kg	1	3/5/2020 9:35:28 PM	50812
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2020 9:35:28 PM	50812
Xylenes, Total	ND	0.095		mg/Kg	1	3/5/2020 9:35:28 PM	50812
Surr: 4-Bromofluorobenzene	87.4	80-120		%Rec	1	3/5/2020 9:35:28 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 14 West

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/28/2020 8:15:00 AM

Lab ID: 2002D01-057

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	2400	150		mg/Kg	50	3/6/2020 3:06:09 AM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/4/2020 2:29:36 PM	50831
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/4/2020 2:29:36 PM	50831
Surr: DNOP	104	55.1-146		%Rec	1	3/4/2020 2:29:36 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2020 9:58:46 PM	50812
Surr: BFB	78.8	66.6-105		%Rec	1	3/5/2020 9:58:46 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 9:58:46 PM	50812
Toluene	ND	0.049		mg/Kg	1	3/5/2020 9:58:46 PM	50812
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2020 9:58:46 PM	50812
Xylenes, Total	ND	0.098		mg/Kg	1	3/5/2020 9:58:46 PM	50812
Surr: 4-Bromofluorobenzene	87.6	80-120		%Rec	1	3/5/2020 9:58:46 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 14

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/28/2020 8:20:00 AM

Lab ID: 2002D01-058

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	1700	60		mg/Kg	20	3/4/2020 3:30:11 PM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.2		mg/Kg	1	3/4/2020 2:38:44 PM	50831
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/4/2020 2:38:44 PM	50831
Surr: DNOP	102	55.1-146		%Rec	1	3/4/2020 2:38:44 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	3/5/2020 10:22:24 PM	50812
Surr: BFB	78.5	66.6-105		%Rec	1	3/5/2020 10:22:24 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/5/2020 10:22:24 PM	50812
Toluene	ND	0.049		mg/Kg	1	3/5/2020 10:22:24 PM	50812
Ethylbenzene	ND	0.049		mg/Kg	1	3/5/2020 10:22:24 PM	50812
Xylenes, Total	ND	0.099		mg/Kg	1	3/5/2020 10:22:24 PM	50812
Surr: 4-Bromofluorobenzene	85.2	80-120		%Rec	1	3/5/2020 10:22:24 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 15 North

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/28/2020 8:25:00 AM

Lab ID: 2002D01-059

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/4/2020 3:42:31 PM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/4/2020 2:47:54 PM	50831
Motor Oil Range Organics (MRO)	ND	46		mg/Kg	1	3/4/2020 2:47:54 PM	50831
Surr: DNOP	107	55.1-146		%Rec	1	3/4/2020 2:47:54 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2020 10:46:05 PM	50812
Surr: BFB	81.8	66.6-105		%Rec	1	3/5/2020 10:46:05 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 10:46:05 PM	50812
Toluene	ND	0.047		mg/Kg	1	3/5/2020 10:46:05 PM	50812
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2020 10:46:05 PM	50812
Xylenes, Total	ND	0.094		mg/Kg	1	3/5/2020 10:46:05 PM	50812
Surr: 4-Bromofluorobenzene	89.5	80-120		%Rec	1	3/5/2020 10:46:05 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 15 South

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/28/2020 8:30:00 AM

Lab ID: 2002D01-060

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	110	60		mg/Kg	20	3/4/2020 3:54:52 PM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	3/4/2020 2:57:08 PM	50831
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	3/4/2020 2:57:08 PM	50831
Surr: DNOP	104	55.1-146		%Rec	1	3/4/2020 2:57:08 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/5/2020 11:09:44 PM	50812
Surr: BFB	81.2	66.6-105		%Rec	1	3/5/2020 11:09:44 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/5/2020 11:09:44 PM	50812
Toluene	ND	0.048		mg/Kg	1	3/5/2020 11:09:44 PM	50812
Ethylbenzene	ND	0.048		mg/Kg	1	3/5/2020 11:09:44 PM	50812
Xylenes, Total	ND	0.096		mg/Kg	1	3/5/2020 11:09:44 PM	50812
Surr: 4-Bromofluorobenzene	88.2	80-120		%Rec	1	3/5/2020 11:09:44 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 15 East

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/28/2020 11:30:00 AM

Lab ID: 2002D01-061

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	3/4/2020 4:07:13 PM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.3		mg/Kg	1	3/4/2020 3:06:18 PM	50831
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	3/4/2020 3:06:18 PM	50831
Surr: DNOP	112	55.1-146		%Rec	1	3/4/2020 3:06:18 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	3/5/2020 11:33:25 PM	50812
Surr: BFB	82.3	66.6-105		%Rec	1	3/5/2020 11:33:25 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.025		mg/Kg	1	3/5/2020 11:33:25 PM	50812
Toluene	ND	0.050		mg/Kg	1	3/5/2020 11:33:25 PM	50812
Ethylbenzene	ND	0.050		mg/Kg	1	3/5/2020 11:33:25 PM	50812
Xylenes, Total	ND	0.099		mg/Kg	1	3/5/2020 11:33:25 PM	50812
Surr: 4-Bromofluorobenzene	89.9	80-120		%Rec	1	3/5/2020 11:33:25 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Wall 15 West

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/28/2020 8:35:00 AM

Lab ID: 2002D01-062

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	2400	150		mg/Kg	50	3/6/2020 3:18:31 AM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/4/2020 3:15:29 PM	50831
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	3/4/2020 3:15:29 PM	50831
Surr: DNOP	113	55.1-146		%Rec	1	3/4/2020 3:15:29 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	3/5/2020 11:57:00 PM	50812
Surr: BFB	85.1	66.6-105		%Rec	1	3/5/2020 11:57:00 PM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.023		mg/Kg	1	3/5/2020 11:57:00 PM	50812
Toluene	ND	0.047		mg/Kg	1	3/5/2020 11:57:00 PM	50812
Ethylbenzene	ND	0.047		mg/Kg	1	3/5/2020 11:57:00 PM	50812
Xylenes, Total	ND	0.093		mg/Kg	1	3/5/2020 11:57:00 PM	50812
Surr: 4-Bromofluorobenzene	93.8	80-120		%Rec	1	3/5/2020 11:57:00 PM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

Analytical Report

Lab Order 2002D01

Date Reported: 3/10/2020

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Mewbourne Oil Company

Client Sample ID: Floor 15

Project: Zircon 2 B1 EH St 002H

Collection Date: 2/28/2020 8:40:00 AM

Lab ID: 2002D01-063

Matrix: SOIL

Received Date: 2/29/2020 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: JMT
Chloride	2300	150		mg/Kg	50	3/6/2020 3:30:52 AM	50868
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: BRM
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	3/4/2020 3:24:41 PM	50831
Motor Oil Range Organics (MRO)	ND	50		mg/Kg	1	3/4/2020 3:24:41 PM	50831
Surr: DNOP	97.8	55.1-146		%Rec	1	3/4/2020 3:24:41 PM	50831
EPA METHOD 8015D: GASOLINE RANGE							Analyst: NSB
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	3/6/2020 12:20:33 AM	50812
Surr: BFB	81.0	66.6-105		%Rec	1	3/6/2020 12:20:33 AM	50812
EPA METHOD 8021B: VOLATILES							Analyst: NSB
Benzene	ND	0.024		mg/Kg	1	3/6/2020 12:20:33 AM	50812
Toluene	ND	0.048		mg/Kg	1	3/6/2020 12:20:33 AM	50812
Ethylbenzene	ND	0.048		mg/Kg	1	3/6/2020 12:20:33 AM	50812
Xylenes, Total	ND	0.095		mg/Kg	1	3/6/2020 12:20:33 AM	50812
Surr: 4-Bromofluorobenzene	88.6	80-120		%Rec	1	3/6/2020 12:20:33 AM	50812

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
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: MB-50860	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 50860	RunNo: 66982								
Prep Date: 3/3/2020	Analysis Date: 3/3/2020	SeqNo: 2305581 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-50860	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 50860	RunNo: 66982								
Prep Date: 3/3/2020	Analysis Date: 3/3/2020	SeqNo: 2305583 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.4	90	110			

Sample ID: MB-50858	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 50858	RunNo: 66981								
Prep Date: 3/3/2020	Analysis Date: 3/3/2020	SeqNo: 2305724 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-50858	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 50858	RunNo: 66981								
Prep Date: 3/3/2020	Analysis Date: 3/3/2020	SeqNo: 2305725 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.1	90	110			

Sample ID: MB-50869	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 50869	RunNo: 67043								
Prep Date: 3/4/2020	Analysis Date: 3/4/2020	SeqNo: 2307493 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-50869	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 50869	RunNo: 67043								
Prep Date: 3/4/2020	Analysis Date: 3/4/2020	SeqNo: 2307494 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.0	90	110			

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
PQL Practical Quantitative Limit
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 Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**WO#: **2002D01****10-Mar-20****Client:** Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: MB-50868	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 50868	RunNo: 67015								
Prep Date: 3/4/2020	Analysis Date: 3/4/2020	SeqNo: 2307572	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-50868	SampType: lcs	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 50868	RunNo: 67015								
Prep Date: 3/4/2020	Analysis Date: 3/4/2020	SeqNo: 2307573	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	92.3	90	110			

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
PQL Practical Quantitative Limit
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 Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: LCS-50805	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 50805	RunNo: 66969								
Prep Date: 3/2/2020	Analysis Date: 3/3/2020	SeqNo: 2305261 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	102	70	130			
Surr: DNOP	5.3		5.000		106	55.1	146			

Sample ID: MB-50805	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 50805	RunNo: 66969								
Prep Date: 3/2/2020	Analysis Date: 3/3/2020	SeqNo: 2305263 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		107	55.1	146			

Sample ID: 2002D01-009AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: Wall 3 North	Batch ID: 50808	RunNo: 66948								
Prep Date: 3/2/2020	Analysis Date: 3/3/2020	SeqNo: 2305436 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.2	45.96	0	109	47.4	136			
Surr: DNOP	4.7		4.596		103	55.1	146			

Sample ID: 2002D01-009AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: Wall 3 North	Batch ID: 50808	RunNo: 66948								
Prep Date: 3/2/2020	Analysis Date: 3/3/2020	SeqNo: 2305437 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	9.4	46.82	0	99.6	47.4	136	7.41	43.4	
Surr: DNOP	4.4		4.682		94.4	55.1	146	0	0	

Sample ID: LCS-50808	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 50808	RunNo: 66948								
Prep Date: 3/2/2020	Analysis Date: 3/3/2020	SeqNo: 2305457 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	101	70	130			
Surr: DNOP	4.7		5.000		94.0	55.1	146			

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
PQL Practical Quantitative Limit
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 Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: MB-50808	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 50808	RunNo: 66948								
Prep Date: 3/2/2020	Analysis Date: 3/3/2020	SeqNo: 2305458 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		102	55.1	146			

Sample ID: 2002D01-029AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: Wall 8 North	Batch ID: 50824	RunNo: 67011								
Prep Date: 3/3/2020	Analysis Date: 3/4/2020	SeqNo: 2306287 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	37	9.8	48.88	0	75.7	47.4	136			
Surr: DNOP	5.2		4.888		105	55.1	146			

Sample ID: 2002D01-029AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: Wall 8 North	Batch ID: 50824	RunNo: 67011								
Prep Date: 3/3/2020	Analysis Date: 3/4/2020	SeqNo: 2306288 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	50	9.4	46.82	0	107	47.4	136	30.3	43.4	
Surr: DNOP	5.3		4.682		114	55.1	146	0	0	

Sample ID: 2002D01-049AMS	SampType: MS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: Floor 12	Batch ID: 50831	RunNo: 67011								
Prep Date: 3/3/2020	Analysis Date: 3/4/2020	SeqNo: 2306309 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	48	9.7	48.54	3.422	91.1	47.4	136			
Surr: DNOP	5.2		4.854		107	55.1	146			

Sample ID: 2002D01-049AMSD	SampType: MSD	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: Floor 12	Batch ID: 50831	RunNo: 67011								
Prep Date: 3/3/2020	Analysis Date: 3/4/2020	SeqNo: 2306310 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	43	9.3	46.64	3.422	85.7	47.4	136	9.35	43.4	
Surr: DNOP	4.8		4.664		104	55.1	146	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
PQL Practical Quantitative Limit
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 Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: LCS-50824	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 50824	RunNo: 67011								
Prep Date: 3/3/2020	Analysis Date: 3/4/2020	SeqNo: 2306324 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	84.8	70	130			
Surr: DNOP	5.1		5.000		103	55.1	146			

Sample ID: LCS-50831	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 50831	RunNo: 67011								
Prep Date: 3/3/2020	Analysis Date: 3/4/2020	SeqNo: 2306325 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	36	10	50.00	0	71.7	70	130			
Surr: DNOP	4.9		5.000		98.7	55.1	146			

Sample ID: MB-50824	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 50824	RunNo: 67011								
Prep Date: 3/3/2020	Analysis Date: 3/4/2020	SeqNo: 2306326 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		103	55.1	146			

Sample ID: MB-50831	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 50831	RunNo: 67011								
Prep Date: 3/3/2020	Analysis Date: 3/4/2020	SeqNo: 2306327 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		101	55.1	146			

Sample ID: LCS-50867	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 50867	RunNo: 67066								
Prep Date: 3/4/2020	Analysis Date: 3/6/2020	SeqNo: 2309940 Units: %Rec								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.2		5.000		83.1	55.1	146			

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
PQL Practical Quantitative Limit
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 Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company

Project: Zircon 2 B1 EH St 002H

Sample ID: MB-50867	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 50867	RunNo: 67066								
Prep Date: 3/4/2020	Analysis Date: 3/6/2020	SeqNo: 2309941	Units: %Rec							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	11		10.00		107	55.1	146			

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
- PQL

Practical Quantitative Limit
- 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 Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: mb-50800	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 50800	RunNo: 66977								
Prep Date: 3/2/2020	Analysis Date: 3/3/2020	SeqNo: 2304995 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	810		1000		81.5	66.6	105			

Sample ID: lcs-50800	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 50800	RunNo: 66977								
Prep Date: 3/2/2020	Analysis Date: 3/3/2020	SeqNo: 2304996 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	23	5.0	25.00	0	92.6	80	120			
Surr: BFB	940		1000		94.2	66.6	105			

Sample ID: mb-50804	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 50804	RunNo: 66977								
Prep Date: 3/2/2020	Analysis Date: 3/4/2020	SeqNo: 2305019 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	800		1000		80.4	66.6	105			

Sample ID: lcs-50804	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 50804	RunNo: 66977								
Prep Date: 3/2/2020	Analysis Date: 3/4/2020	SeqNo: 2305020 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.3	80	120			
Surr: BFB	890		1000		89.3	66.6	105			

Sample ID: 2002d01-009ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Wall 3 North	Batch ID: 50804	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/4/2020	SeqNo: 2306629 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.8	23.92	0	82.4	69.1	142			
Surr: BFB	900		956.9		93.6	66.6	105			

Sample ID: 2002d01-009amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Wall 3 North	Batch ID: 50804	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/4/2020	SeqNo: 2306630 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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
PQL Practical Quantitative Limit
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 Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: 2002d01-009amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Wall 3 North	Batch ID: 50804	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/4/2020	SeqNo: 2306630 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.6	23.02	0	84.9	69.1	142	0.883	20	
Surr: BFB	830		920.8		90.4	66.6	105	0	0	

Sample ID: mb-50809	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 50809	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2306656 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	790		1000		79.4	66.6	105			

Sample ID: lcs-50809	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 50809	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2306657 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	5.0	25.00	0	81.7	80	120			
Surr: BFB	880		1000		88.4	66.6	105			

Sample ID: 2002d01-029ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Wall 8 North	Batch ID: 50809	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2306659 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	20	4.8	24.08	0	82.3	69.1	142			
Surr: BFB	870		963.4		90.2	66.6	105			

Sample ID: 2002d01-029amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Wall 8 North	Batch ID: 50809	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2306660 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	24.78	0	87.5	69.1	142	9.00	20	
Surr: BFB	920		991.1		92.4	66.6	105	0	0	

Sample ID: mb-50812	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 50812	RunNo: 67050								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2307805 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual

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
PQL Practical Quantitative Limit
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 Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: mb-50812	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 50812	RunNo: 67050								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2307805 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	790		1000		78.6	66.6	105			

Sample ID: lcs-50812	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 50812	RunNo: 67050								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2307806 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	21	5.0	25.00	0	83.4	80	120			
Surr: BFB	850		1000		85.3	66.6	105			

Sample ID: 2002d01-049ams	SampType: MS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Floor 12	Batch ID: 50812	RunNo: 67050								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2307808 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.6	23.15	0	82.2	69.1	142			
Surr: BFB	800		925.9		85.9	66.6	105			

Sample ID: 2002d01-049amsd	SampType: MSD	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: Floor 12	Batch ID: 50812	RunNo: 67050								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2307809 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	19	4.8	23.95	0	77.6	69.1	142	2.42	20	
Surr: BFB	840		957.9		87.2	66.6	105	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
PQL Practical Quantitative Limit
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 Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: mb-50800	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 50800	RunNo: 66977								
Prep Date: 3/2/2020	Analysis Date: 3/3/2020	SeqNo: 2305032 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		88.1	80	120			

Sample ID: LCS-50800	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 50800	RunNo: 66977								
Prep Date: 3/2/2020	Analysis Date: 3/3/2020	SeqNo: 2305033 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	1.000	0	86.7	80	120			
Toluene	0.92	0.050	1.000	0	92.3	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.2	80	120			
Xylenes, Total	2.9	0.10	3.000	0	95.7	80	120			
Surr: 4-Bromofluorobenzene	0.89		1.000		88.7	80	120			

Sample ID: mb-50804	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 50804	RunNo: 66977								
Prep Date: 3/2/2020	Analysis Date: 3/4/2020	SeqNo: 2305056 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		87.9	80	120			

Sample ID: LCS-50804	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 50804	RunNo: 66977								
Prep Date: 3/2/2020	Analysis Date: 3/4/2020	SeqNo: 2305057 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	93.7	80	120			
Toluene	0.96	0.050	1.000	0	96.0	80	120			
Ethylbenzene	0.99	0.050	1.000	0	99.0	80	120			
Xylenes, Total	3.0	0.10	3.000	0	99.5	80	120			
Surr: 4-Bromofluorobenzene	0.93		1.000		92.9	80	120			

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
PQL Practical Quantitative Limit
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 Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: 2002d01-010ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: Wall 3 South	Batch ID: 50804	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/4/2020	SeqNo: 2306672 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.025	0.9843	0	88.5	78.5	119			
Toluene	0.92	0.049	0.9843	0.01464	91.6	75.7	123			
Ethylbenzene	0.94	0.049	0.9843	0	95.5	74.3	126			
Xylenes, Total	2.8	0.098	2.953	0.02095	95.7	72.9	130			
Surr: 4-Bromofluorobenzene	0.90		0.9843		91.6	80	120			

Sample ID: 2002d01-010amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: Wall 3 South	Batch ID: 50804	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/4/2020	SeqNo: 2306673 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.82	0.024	0.9506	0	86.8	78.5	119	5.44	20	
Toluene	0.87	0.048	0.9506	0.01464	90.3	75.7	123	4.82	20	
Ethylbenzene	0.91	0.048	0.9506	0	95.6	74.3	126	3.38	20	
Xylenes, Total	2.8	0.095	2.852	0.02095	95.7	72.9	130	3.49	20	
Surr: 4-Bromofluorobenzene	1.8		0.9506		190	80	120	0	0	S

Sample ID: mb-50809	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 50809	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2306699 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.88		1.000		87.7	80	120			

Sample ID: LCS-50809	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 50809	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2306700 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.3	80	120			
Toluene	1.0	0.050	1.000	0	99.6	80	120			
Ethylbenzene	1.0	0.050	1.000	0	101	80	120			
Xylenes, Total	3.1	0.10	3.000	0	102	80	120			
Surr: 4-Bromofluorobenzene	0.94		1.000		94.0	80	120			

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
PQL Practical Quantitative Limit
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 Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: 2002d01-030ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: Wall 8 South	Batch ID: 50809	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2306703 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.024	0.9542	0	82.3	78.5	119			
Toluene	0.83	0.048	0.9542	0.01397	85.6	75.7	123			
Ethylbenzene	0.86	0.048	0.9542	0	90.2	74.3	126			
Xylenes, Total	2.6	0.095	2.863	0.02163	90.8	72.9	130			
Surr: 4-Bromofluorobenzene	0.84		0.9542		88.4	80	120			

Sample ID: 2002d01-030amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: Wall 8 South	Batch ID: 50809	RunNo: 67005								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2306704 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.87	0.024	0.9443	0	91.9	78.5	119	9.97	20	
Toluene	0.92	0.047	0.9443	0.01397	95.5	75.7	123	9.69	20	
Ethylbenzene	0.95	0.047	0.9443	0	100	74.3	126	9.40	20	
Xylenes, Total	2.9	0.094	2.833	0.02163	100	72.9	130	8.73	20	
Surr: 4-Bromofluorobenzene	0.89		0.9443		94.0	80	120	0	0	

Sample ID: mb-50812	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 50812	RunNo: 67050								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2307852 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.87		1.000		87.0	80	120			

Sample ID: LCS-50812	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 50812	RunNo: 67050								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2307853 Units: mg/Kg								
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.86	0.025	1.000	0	85.5	80	120			
Toluene	0.88	0.050	1.000	0	88.4	80	120			
Ethylbenzene	0.90	0.050	1.000	0	90.2	80	120			
Xylenes, Total	2.7	0.10	3.000	0	90.9	80	120			
Surr: 4-Bromofluorobenzene	0.90		1.000		90.3	80	120			

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
PQL Practical Quantitative Limit
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 Limit

QC SUMMARY REPORT**Hall Environmental Analysis Laboratory, Inc.**

WO#: 2002D01

10-Mar-20

Client: Mewbourne Oil Company**Project:** Zircon 2 B1 EH St 002H

Sample ID: 2002d01-050ams	SampType: MS	TestCode: EPA Method 8021B: Volatiles								
Client ID: Wall 13 North	Batch ID: 50812	RunNo: 67050								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2307856	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.80	0.025	0.9862	0	81.4	78.5	119			
Toluene	0.84	0.049	0.9862	0	85.1	75.7	123			
Ethylbenzene	0.86	0.049	0.9862	0	86.7	74.3	126			
Xylenes, Total	2.6	0.099	2.959	0	88.1	72.9	130			
Surr: 4-Bromofluorobenzene	0.88		0.9862		89.7	80	120			

Sample ID: 2002d01-050amsd	SampType: MSD	TestCode: EPA Method 8021B: Volatiles								
Client ID: Wall 13 North	Batch ID: 50812	RunNo: 67050								
Prep Date: 3/2/2020	Analysis Date: 3/5/2020	SeqNo: 2307857	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.79	0.024	0.9434	0	83.6	78.5	119	1.81	20	
Toluene	0.83	0.047	0.9434	0	87.9	75.7	123	1.15	20	
Ethylbenzene	0.86	0.047	0.9434	0	90.7	74.3	126	0.0848	20	
Xylenes, Total	2.6	0.094	2.830	0	91.7	72.9	130	0.474	20	
Surr: 4-Bromofluorobenzene	0.86		0.9434		91.1	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
PQL Practical Quantitative Limit
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 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: MEWBOURNE OIL COM

Work Order Number: 2002D01

RcptNo: 1

Received By: Erin Melendrez

2/29/2020 8:00:00 AM

Completed By: Erin Melendrez

2/29/2020 10:10:32 AM

Reviewed By:

mf

03/02/20

Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☒ No ☐ Not Present ☐

2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐4. Were all samples received at a temperature of $>0^{\circ}\text{C}$ to 6.0°C ? Yes ☒ No ☐ NA ☐5. Sample(s) in proper container(s)? Yes ☒ No ☐6. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐7. Are samples (except VOA and ONG) properly preserved? Yes ☒ No ☐8. Was preservative added to bottles? Yes ☐ No ☒ NA ☐9. Received at least 1 vial with headspace $<1/4$ " for AQ VOA? Yes ☐ No ☐ NA ☒10. Were any sample containers received broken? Yes ☐ No ☒11. Does paperwork match bottle labels? Yes ☒ No ☐

(Note discrepancies on chain of custody)

12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐13. Is it clear what analyses were requested? Yes ☒ No ☐14. Were all holding times able to be met? Yes ☒ No ☐

(If no, notify customer for authorization.)

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

Adjusted? _____

Checked by: JR 3/2/20

Special Handling (if applicable)

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

Person Notified: Kenny A

Date: 3/2/2020

By Whom: Erin Melendrez

Via: ☐ eMail ☒ Phone ☐ Fax ☐ In Person

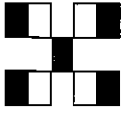
Regarding: Samples for Wall 3 East and Wall 3 West labeled the same on jars.

Client Instructions: Wall 3 West is darker red soil, Wall 3 East is lighter white soil.

16. Additional remarks:

17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.6	Good				
2	5.1	Good				



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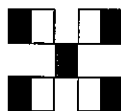
4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Chain-of-Custody Record		Turn-Around Time:	
Client: Mewbourne Oil Company		<input type="checkbox"/> Standard <input type="checkbox"/> Rush	
Mailing Address:		Project Name: Zircon 2 B1 EH St 002H	
Phone #:		Project #:	
email or Fax#:		Project Manager: Robbie Runnels	
QA/QC Package:		Sampler: Kenny Angel	
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other		# of Coolers: 2	
<input type="checkbox"/> EDD (Type)		Cooler Temp (including GF): 3.9-0.3100-3.60C	
			Container Preservative Type and #
Date	Time	Matrix	Sample Name
2/27/20	0800	S	Wall 1 South
2/27/20	0805	S	Wall 1 East
2/27/20	0810	S	Wall 1 West
2/27/20	0815	S	Floor 1
2/27/20	0820	S	Wall 2 South
2/27/20	0825	S	Wall 2 East
2/27/20	0830	S	Wall 2 West
2/27/20	0835	S	Floor 2
2/27/20	0840	S	Wall 3 North
2/27/20	0845	S	Wall 3 South
2/27/20	0850	S	Wall 3 East
2/27/20	0855	S	Wall 3 West
Relinquished by:		Received by:	
Date: 2/27/20	Time: 1500	Date: 2/28/20	
Relinquished by:		Via: Courier	
Date: 2/28/20	Time: 1900	Date: 2/29/20	

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



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4901 Hawkins NE - Albuquerque, NM 87109

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

Analysis Request

Chain-of-Custody Record						
Client: Mewbourne Oil Company		Turn-Around Time: <input type="checkbox"/> Standard <input type="checkbox"/> Rush				
Mailing Address:		Project Name: Zircon 2 B1 EH St 002H				
		Project #:				
Phone #:		Project Manager: Robbie Runnels				
email or Fax#:		Sampler: Kenny Angel				
QA/QC Package:		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		# of Coolers: 2				
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> Other		Cooler Temp (including CP): 3.9 - 0.3 (CP) = 3.6°C				
<input type="checkbox"/> NELAC <input type="checkbox"/> EDD (Type) _____		5.4 - 0.3 (CP) = 5.1°C				
		HEAL No				
		2002 D01				
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	Ice
2/27/20	0900	S	Floor 3	1	Ice	-013
2/27/20	0905	S	Wall 4 North	1	Ice	-014
2/27/20	0910	S	Wall 4 South	1	Ice	-015
2/27/20	0915	S	Wall 4 East	1	Ice	-016
2/27/20	0920	S	Floor 4	1	Ice	-017
2/27/20	0925	S	Wall 5 North	1	Ice	-018
2/27/20	0930	S	Wall 5 South	1	Ice	-019
2/27/20	0935	S	Wall 5 East	1	Ice	-020
2/27/20	0940	S	Floor 5	1	Ice	-021
2/27/20	0945	S	Wall 6 North	1	Ice	-022
2/27/20	0950	S	Wall 6 South	1	Ice	-023
2/27/20	0955	S	Floor 6	1	Ice	-024
Relinquished by: Kenny Angel		Via: _____		Date: 2/28/20		Time: 1600
Time: 1200		Received by: _____		Date: 2/28/20		Time: 1800
Relinquished by: _____		Via: Courier		Date: 2/28/20		Time: 1800
Time: 1900		Received by: _____		Date: 2/28/20		Time: 1800

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

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4901 Hawkins NE - Albuquerque, NM 87110

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

Analysis Request

Chain-of-Custody Record									
Client: Mewbourne Oil Company		Turn-Around Time: <input type="checkbox"/> Standard <input type="checkbox"/> Rush							
Mailing Address:		Project Name: Zircon 2 B1 EH St 002H							
Phone #:		Project #:							
email or Fax#:		Project Manager: Robbie Runnels							
QA/QC Package: <input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)		Sampler: Kenny Angel							
Accreditation: <input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
<input type="checkbox"/> EDD (Type)		# of Coolers: 2							
		Cooler Temp (including CP): 39-03000 = 3.6°C							
		54-03000 = 5.0°C HEAL No							
		2002DD1							
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type				
2/27/20	1000	S	Wall 7 North	1	Ice	-025			
2/27/20	1005	S	Wall 7 South	1	Ice	-026			
2/27/20	1010	S	Wall 7 West	1	Ice	-027			
2/27/20	1015	S	Floor 7	1	Ice	-028			
2/27/20	1020	S	Wall 8 North	1	Ice	-029			
2/27/20	1025	S	Wall 8 South	1	Ice	-030			
2/27/20	1030	S	Wall 8 East	1	Ice	-031			
2/27/20	1035	S	Floor 8	1	Ice	-032			
2/27/20	1040	S	Wall 9 North	1	Ice	-033			
2/27/20	1045	S	Wall 9 South	1	Ice	-034			
2/27/20	1050	S	Wall 9 West	1	Ice	-035			
2/27/20	1055	S	Floor 9	1	Ice	-036			
Date: 2/28/20	Time: 1200	Relinquished by: [Signature]		Received by: [Signature]		Via: Courier		Date: 2/28/20	Time: 1600
Date: 2/28/20	Time: 1900	Relinquished by: [Signature]		Received by: [Signature]		Via: Courier		Date: 2/28/20	Time: 0800

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

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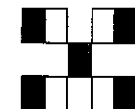
Tel. 505-345-3975 Fax 505-345-4117

Analysis Request

Chain-of-Custody Record				Turn-Around Time:	
Client: Mewbourne Oil Company		<input type="checkbox"/> Standard <input type="checkbox"/> Rush		Project Name:	
Mailing Address:				Zircon 2 B1 EH St 002H	
Phone #:				Project #:	
email or Fax#:				Project Manager:	
QA/QC Package:				Robbie Runnels	
<input type="checkbox"/> Standard <input type="checkbox"/> Level 4 (Full Validation)				Sampler: Kenny Angel	
Accreditation:		<input type="checkbox"/> Az Compliance <input type="checkbox"/> NELAC <input type="checkbox"/> Other		On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
<input type="checkbox"/> EDD (Type)				# of Coolers: 2	
				Cooler Temp (including CP): 3.9-0.3(CF)=3.6°C	
				5.4-0.3(CF)=5.1°C	
				HEAL No	
				2007201	
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type
2/27/20	1100	S	Wall 10 North	1	Ice
2/27/20	1105	S	Wall 10 South	1	Ice
2/27/20	1111	S	Wall 10 West	1	Ice
2/27/20	1115	S	Floor 10	1	Ice
2/27/20	1120	S	Wall 11 South	1	Ice
2/27/20	1125	S	Wall 11 East	1	Ice
2/27/20	1130	S	Wall 11 West	1	Ice
2/27/20	1135	S	Floor 11	1	Ice
2/27/20	1140	S	Wall 12 North	1	Ice
2/27/20	1145	S	Wall 12 South	1	Ice
2/27/20	1150	S	Wall 12 East	1	Ice
2/27/20	1155	S	Wall 12 West	1	Ice
Date:	Time:	Relinquished by:		Received by:	
2/28	8:00	[Signature]		[Signature]	
Date:	Time:	Relinquished by:		Received by:	
2/28/20	1900	[Signature]		[Signature]	
Date:	Time:	Relinquished by:		Received by:	
2/28/20	1600	[Signature]		[Signature]	

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.

Chain-of-Custody Record		Turn-Around Time:
Client:	Mewbourne Oil Company	<input type="checkbox"/> Standard <input type="checkbox"/> Rush
Mailing Address:		Project Name: Zircon 2 B1 EH St 002H



HALL ENVIRONMENTAL ANALYSIS LABORATORY

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4901 Hawkins NE - Albuquerque, NM 87111

Tel. 505-345-3975 Fax 505-345-4117

Analysis Request

email or Fax#:	Project Manager: Robbie Runnels					
QA/QC Package:						
<input type="checkbox"/> Standard	<input type="checkbox"/> Level 4 (Full Validation)					
Accreditation:	<input type="checkbox"/> Az Compliance					
<input type="checkbox"/> NELAC	<input type="checkbox"/> Other _____					
<input type="checkbox"/> EDD (Type) _____						
Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	Heal No.
2/27/20	1200	S	Floor 12	1	Ice	-049
2/27/20	1300	S	Wall 13 North	1	Ice	-050
2/27/20	1305	S	Wall 13 South	1	Ice	-051
2/27/20	1310	S	Wall 13 East	1	Ice	-052
2/27/20	1315	S	Floor 13	1	Ice	-053
2/28/20	0800	S	Wall 14 North	1	Ice	-054
2/28/20	0805	S	Wall 14 South	1	Ice	-055
2/28/20	0810	S	Wall 14 East	1	Ice	-056
2/28/20	0815	S	Wall 14 West	1	Ice	-057
2/28/20	0820	S	Floor 14	1	Ice	-058
2/28/20	0825	S	Wall 15 North	1	Ice	-059
2/28/20	0830	S	Wall 15 South	1	Ice	-060

Remarks: Please email results to runeels@trinityoilfield.com & josh@trinityoilfield.com

Please contact Josh Halcomb at (575)441-1599 or Kenny Anger at (575)263-5702 for any questions or problems with this COC.

if necessary, samples submitted to Hal 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.

APPENDIX – C

C-141

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

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Mewbourne Oil Company	OGRID 14744
Contact Name Robbie Runnels	Contact Telephone 575-393-5905
Contact email rrunnels@mewbourne.com	Incident # (assigned by OCD)
Contact mailing address P.O. Box 5270, Hobbs, NM 88241	

Location of Release Source

Latitude 32.690532

Longitude -104.052694

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Zircon 2 B1 EH State #2H	Site Type Production
Date Release Discovered 2/8/2020 @ 14:20	API# (if applicable) 30-015-42028

Unit Letter	Section	Township	Range	County
E	2	19S	29E	Eddy

Surface Owner: State ☒ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls) Estimated	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) Estimated 20	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	x Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)


Poly line pulled loose from metal transition.

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why: N/A
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.
Printed Name: <u>Robbie Runnels</u> Title: <u>Environmental Specialist</u>
Signature:  Date: <u>2/10/2020</u>
email: <u>rrunnels@mewbourne.com</u> Telephone: <u>575-393-5905</u>
<u>OCD Only</u> Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes x <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes x <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes x <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes x <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes x <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes x <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes x <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes x <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes x <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes x <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes x <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes x <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: Each of the following items must be included in the report.

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: _Robbie Runnels_____ Title: Environmental Specialist_____

Signature: _____ Date: _____

email: _runnels@mewbourne.com_____ Telephone: _575-393-5905_____

OCD Only

Received by: _____ Date: _____

Incident ID	
District RP	
Facility ID	
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Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☒ Extents of contamination must be fully delineated.
- ☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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.

Printed Name: Robbie Runnels Title: Environmental Specialist

Signature:  Date: 6/23/2020

email: rrunnels@mewbourne.com Telephone: 575-393-5905

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD 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 OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD 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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Robbie Runnels Title: Environmental Specialist

Signature:  Date: 6/23/2020

email: rrunnels@mewbourne.com Telephone: 575-393-5905

OCD Only

Received by: _____ Date: _____

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____