

RICE *Operating Company*

112 West Taylor • Hobbs, New Mexico 88240

Phone: (575) 393-9174 • Fax: (575) 397-1471

June 4, 2020

Bradford Billings

New Mexico Energy, Minerals, & Natural Resources

Oil Conservation Division, Environmental Bureau

1220 S. St. Francis Drive

Santa Fe, New Mexico 87505

RE: Termination Request

Rice Operating Company – BD SWD System

BD H-3 (1R426-32): UL/H, Sec. 3, T22S, R37E

Mr. Billings:

RICE Operating Company (ROC) submits the following to address potential environmental concerns at the above referenced site in the BD Saltwater Disposal (SWD) system. ROC is the service provider (agent) for the BD SWD System and has no ownership of any portion of the pipeline, well, or facility. The system is owned by a consortium of oil producers, System Parties, who provide all operating capital on a percentage ownership/usage basis.

Background and Previous Work

The site is located approximately 1 mile southeast of Eunice, New Mexico at UL/H, Sec. 3, T22S, R37E as shown on the Geographical Location Map and the Site Map. NM OSE records indicate that groundwater will likely be encountered at a depth of approximately 27 feet below ground surface (bgs). A junction box disclosure report was submitted to NMOCD with all the 2002 junction box closures and disclosures.

In 2002, ROC initiated work on the former H-3 junction box. The site was delineated using a backhoe to form a 45x35x20-ft deep excavation and soil samples were screened at regular intervals for BTEX (benzene, toluene, ethylbenzene, and xylenes), hydrocarbons and chlorides. From the excavation, a 4-wall composite sample and a bottom composite sample were sent to a commercial laboratory for analysis. The 4-wall composite returned a chloride reading of 1,520 mg/kg, a BTEX reading non-detect, a Gasoline Range Organics (GRO) reading non-detect and a Diesel Range Organics (DRO) reading of non-detect. The bottom composite sample returned a chloride reading of 1,770 mg/kg, a BTEX reading non-detect, and a GRO/DRO reading of non-detect. The excavated soil was blended on site and a representative sample was sent to a commercial laboratory for analysis. The sample returned a chloride reading of 200 mg/kg and a TPH reading of 1,633 mg/kg. A compacted clay liner was installed, and the site was backfilled with the blended soil. A new water-tight junction box was installed at the site.

June 4, 2020

Investigation and Characterization Plan (ICP) Report

An ICP was submitted on August 24, 2017 and approved on the same date. A total of 3 soil bores were drilled at the site on September 19, 2017. As the bores were advanced, soil samples were taken every 3 ft and field tested for chlorides and hydrocarbons. Representative samples from each bore were taken to a commercial laboratory for confirmatory analysis. SB-1 returned a laboratory chloride reading of 80 mg/kg at 6 ft bgs, which decreased to 64 mg/kg at 24 ft bgs. SB-2 returned laboratory chloride readings of 768 mg/kg at 6 ft bgs and decreased to 288 mg/kg at 24 ft bgs. SB-3 returned a laboratory chloride reading of 816 mg/kg at 12 ft bgs, which decreased to 256 mg/kg at 24 ft bgs. GRO and DRO readings at all depth in all bores were non-detect except for the 6 ft bgs sample from SB-1, which resulted in a DRO concentration of 28.9 mg/kg.

To determine if the residual chloride in the vadose zone pose a threat to groundwater quality, Basin ran the U.S. Environmental Protection Agency Exposure Assessment Multimedia Model (MULTIMED Version 1.5, 2005). The model output concludes that the peak concentration of chloride in groundwater contributed by the vadose zone soils would be approximately 153 mg/L in 80 years with the liner installation chloride concentration. Also, the model output concludes that the peak concentration of chloride in groundwater contributed by the vadose zone soils would be approximately 131 mg/L in 89 years with the sidewall chloride concentration. Since the estimated increase in chloride concentrations in groundwater from residual chloride migration is below the WQCC standard of 250 mg/L, no action is warranted for the groundwater at this site.

The former junction box is surrounded by numerous Non-ROC monitoring wells. Groundwater data collected from the Non-ROC monitoring wells suggests a large, non-ROC up-gradient source is contributing to the degradation of groundwater and the former ROC junction box will not impact groundwater above these background concentrations.

Corrective Action Plan (CAP) Report

Based on the collected soil data, ROC submitted an ICP Report and CAP on September 20, 2018. A subsequent Amendment was submitted on April 2, 2019, which was approved May 21, 2019. The CAP and Amendment recommended that ROC install a 57x22 ft, 20-mil reinforced poly liner at 5 – 4 ft bgs.

In order to inhibit the downward migration of residual constituents through the vadose zone, ROC excavated a 57x22-ft area to a depth of 4.5 ft bgs. A representative composite sample was collected from the 4-walls and was analyzed by a commercial laboratory for chloride and hydrocarbon. The composite sample resulted in a chloride concentration of 672 mg/kg, GRO/DRO/EXT-DRO concentrations below detectable limit, and BTEX concentrations below detectable limit. Based on the 4-wall composite, ROC excavated the site further to dimension of 65x24-ft. A representative composite sample was collected from the 4-walls and was analyzed by a commercial laboratory for chloride and hydrocarbon. The composite sample resulted in a chloride concentration of 416 mg/kg, GRO/DRO/EXT-DRO concentrations below detectable limit, and BTEX concentrations below detectable limit. A total of 456 cubic yards of excavated soil were taken to a NMOCD approved facility for disposal. The top of the liner was padded

June 4, 2020

with imported soil, and the excavation was backfilled to ground surface and contoured to the surrounding area. Four samples of the imported soil were analyzed by a commercial laboratory for chloride and hydrocarbon, resulting in a concentration of chloride of 16 mg/kg, <16 mg/kg, 16 mg/kg, and <16, respectively. Hydrocarbon concentrations, GRO/DRO/EXT-DRO and BTEX, were below detectable limits in each sample. The backfilled site was seeded with a blend of native vegetation. Vegetation above the liner will also provide a natural infiltration barrier for the site, since plants capture water through their roots thereby reducing the volume of water moving through the vadose zone.

Recommendations

ROC has completed the vadose zone remediation as approved by OCD in the CAP. The 20-mil reinforced liner will inhibit the migration of chloride through the vadose zone to groundwater. As such, ROC respectfully requests termination of the regulatory file. ROC acknowledges they have met the requirements of 19.15.29 NMAC and a final C-141 is attached.

ROC appreciates the opportunity to work with you on this project. Please call me at (575) 393-9174 or Edward Hansen at (505) 920-4965 if you have any questions or wish to discuss the site.

Sincerely,



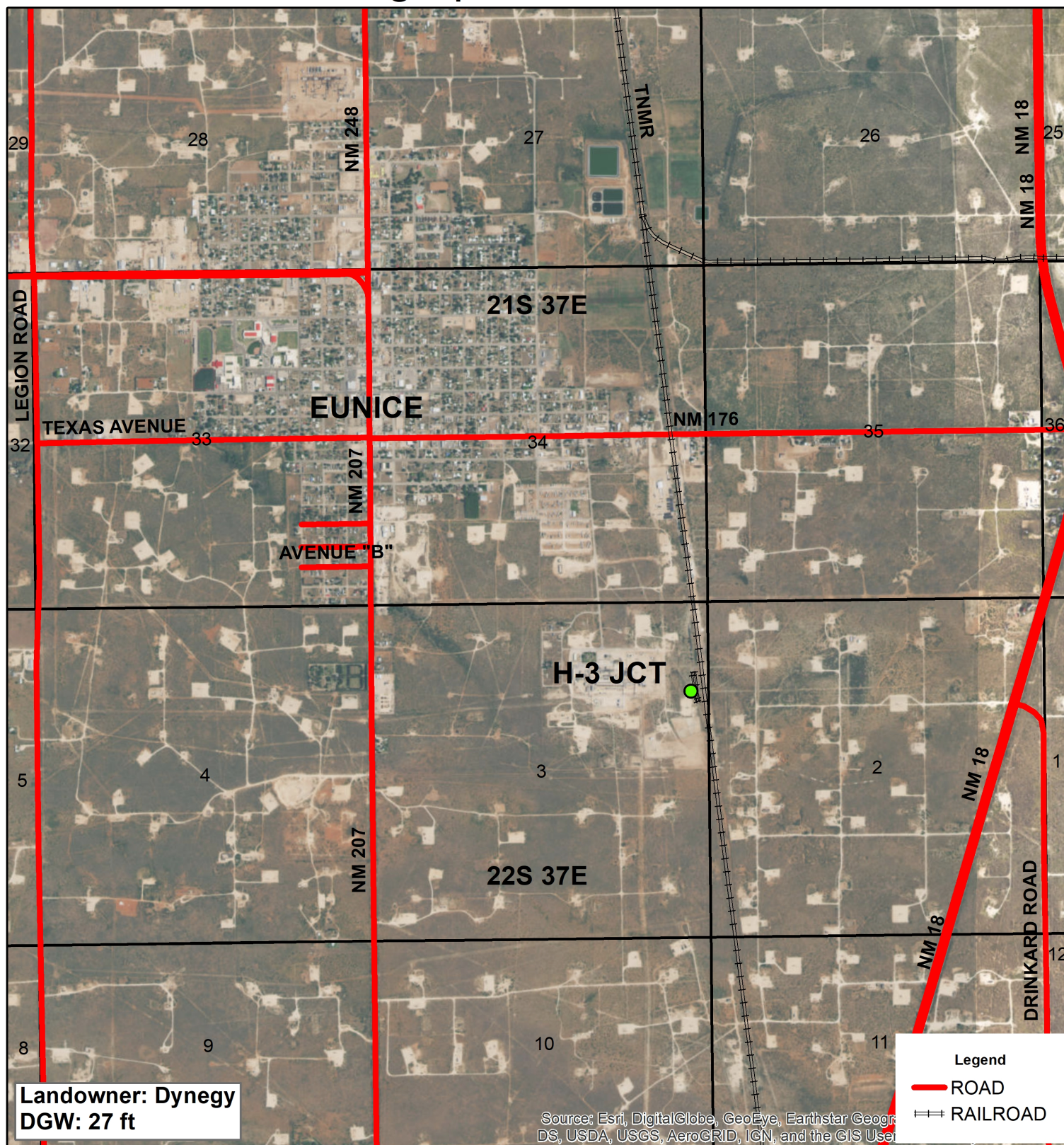
Katie Davis
Environmental Manager
RICE Operating Company

Appendix

Figures

RICE Operating Company
112 West Taylor, Hobbs, NM 88240
Phone 575.393.9174

Geographic Location



BD
H-3 JCT
1R426-32

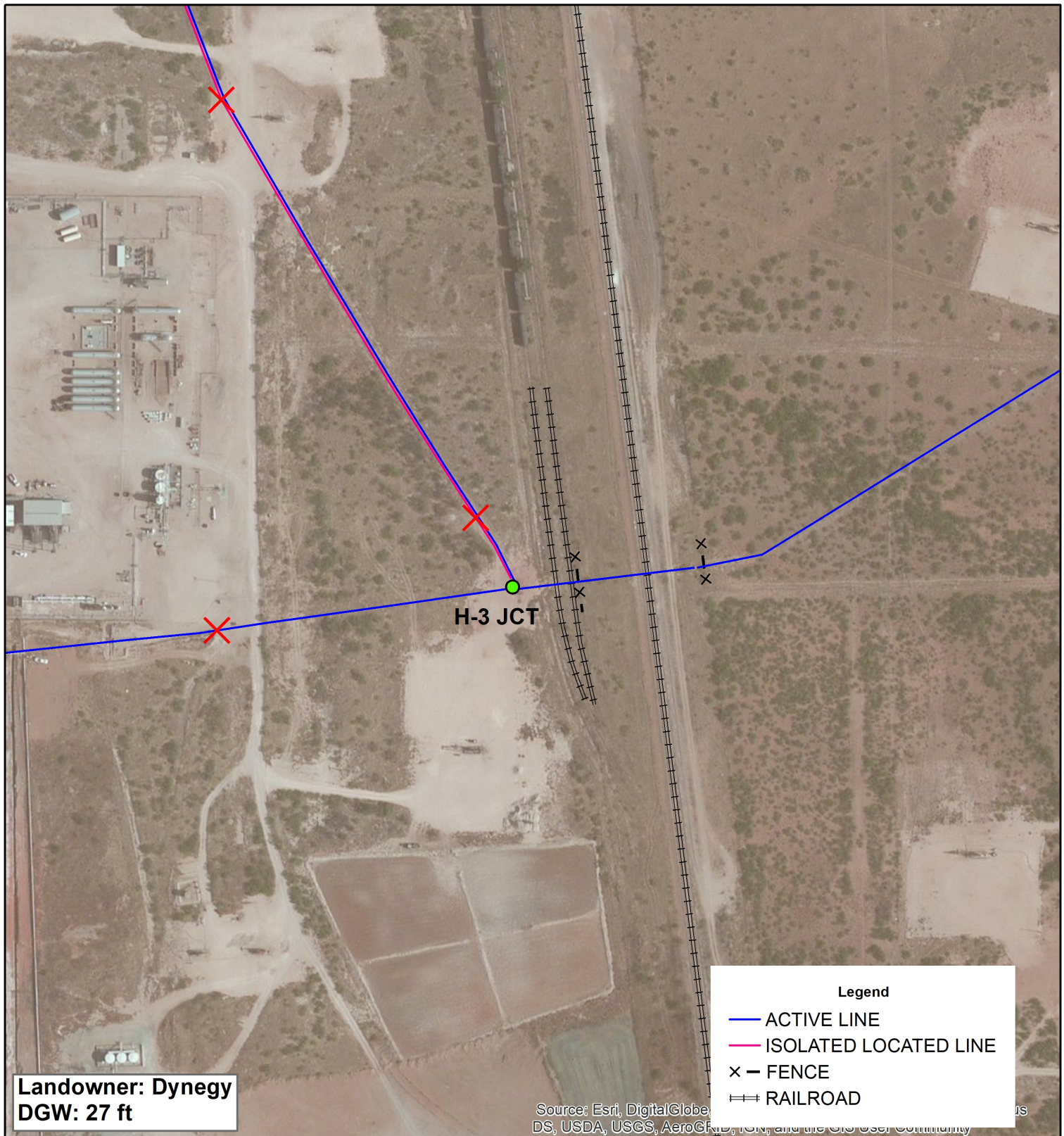
UL H3 SECTION 3
T-22-S R-37-E
LEA COUNTY, NM

GPS: 32.424277 -103.143221

0 1,000 2,000
Feet

Drawing date: 8/23/17
Drafted by: T. Grieco





BD
H-3 JCT
1R426-32

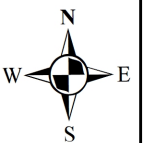
UL H3 SECTION 3
T-22-S R-37-E
LEA COUNTY, NM

Underground facilities are
spatially projected
and need to be field verified.

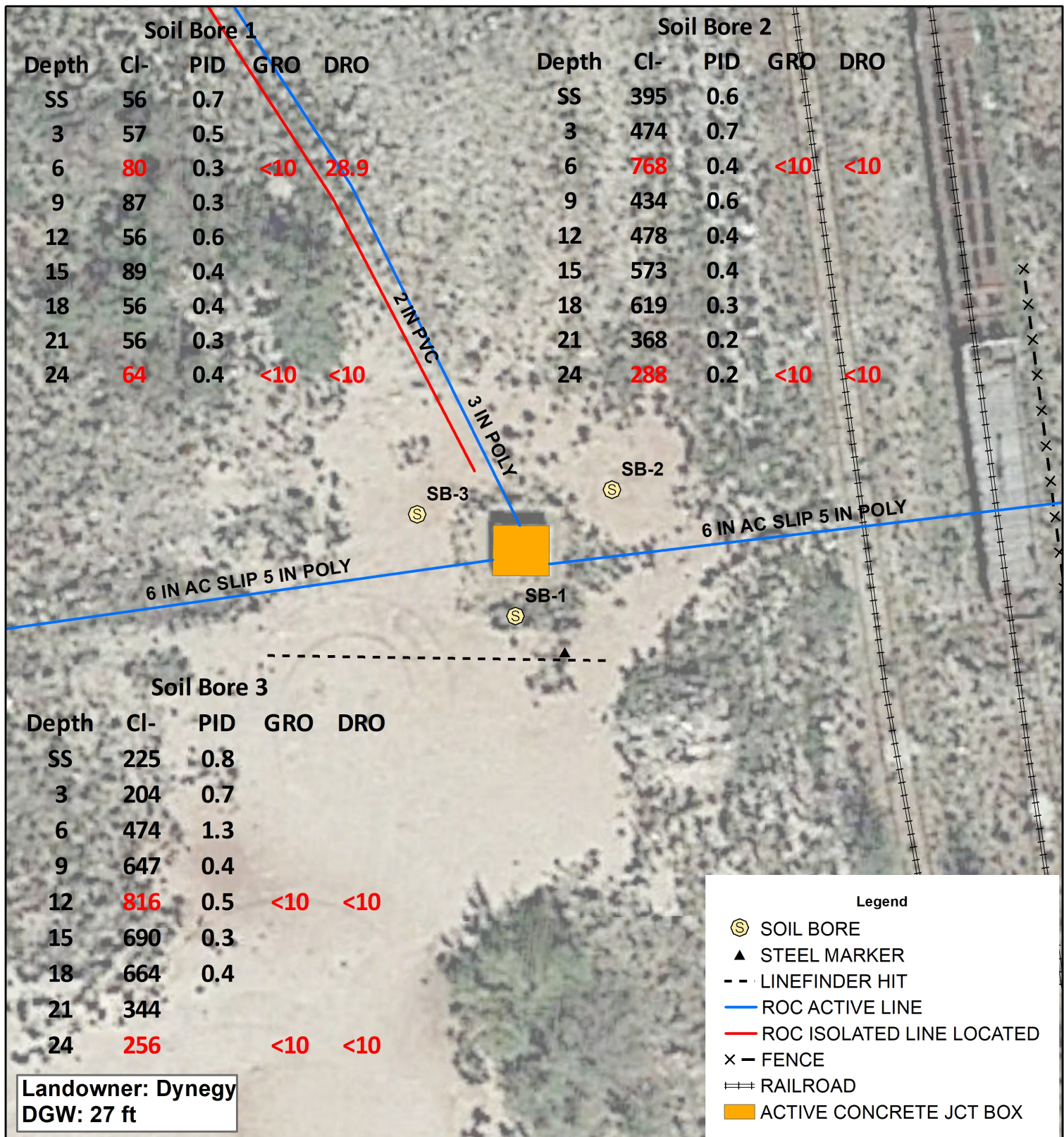
GPS: 32.424277 -103.143221

0 100 200
Feet

Drawing date: 8/23/17
Drafted by: T. Grieco



Soil Bore Installation



BD
H-3 JCT
1R426-32

UL H3 SECTION 3
T-22-S R-37-E
LEA COUNTY, NM

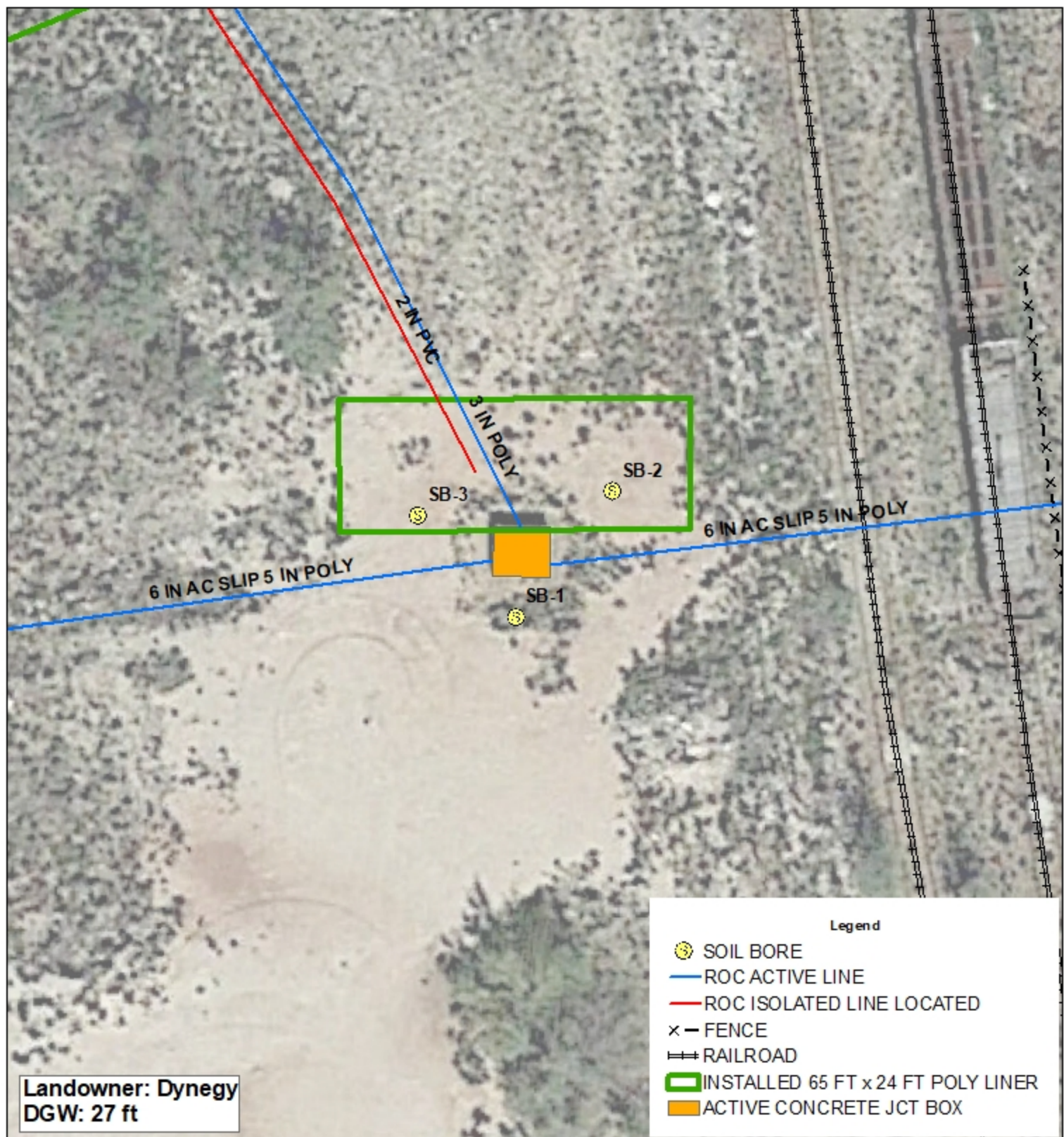
Underground facilities are
spatially projected
and need to be field verified.

GPS: 32.424277 -103.143221

0 10 20
Feet

GPS date: 6/30/17, 9/7/17 TG
Drawing date: 10/16/17
Drafted by: T. Grieco





BD
H-3 JCT
1R426-32

UL H3 SECTION 3
T-22-S R-37-E
LEA COUNTY, NM

GPS: 32.424277 -103.143221
NAD 83 STATE PLANE PROJ
NM EAST ZONE

0 10 20
Feet

GPS date: 6/30/17, 9/7/17, 7/19/19
8/12/19 TG
Drawing date: 4/6/20
Drafted by: T. Grieco



Excavation and Liner Installation

RICE Operating Company
112 West Taylor, Hobbs, NM 88240
Phone 575.393.9174



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 24, 2019

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD H-3

Enclosed are the results of analyses for samples received by the laboratory on 07/19/19 15:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

Rice Operating Company
 KATIE JONES
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received: 07/19/2019
 Reported: 07/24/2019
 Project Name: BD H-3
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 07/18/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: 4 WALL COMPOSITE (H902493-01)

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2019	ND	2.14	107	2.00	1.42	
Toluene*	<0.050	0.050	07/24/2019	ND	2.14	107	2.00	0.661	
Ethylbenzene*	<0.050	0.050	07/24/2019	ND	2.04	102	2.00	0.118	
Total Xylenes*	<0.150	0.150	07/24/2019	ND	6.14	102	6.00	0.513	
Total BTEX	<0.300	0.300	07/24/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	07/22/2019	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/23/2019	ND	199	99.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	07/23/2019	ND	194	96.8	200	1.23	
EXT DRO >C28-C36	<10.0	10.0	07/23/2019	ND					

Surrogate: 1-Chlorooctane 83.4 % 41-142

Surrogate: 1-Chlorooctadecane 87.2 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

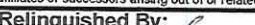
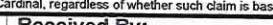


**ARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

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Relinquished By: 		Date: 7-18-19 Time: 15:05		Received By: 		Phone Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:	
Relinquished By:		Date:		Received By:		Fax Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Fax #:	
Delivered By: (Circle One) 2.3: 		Date:		Received By:		REMARKS:	
Sampler - UPS - Bus - Other: Corrected 2.78		Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		CHECKED BY: (Initials) 		email results: kjones@riceswd.com knorman@tasman-geo.com tgrieco@basinenv.com	

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

August 08, 2019

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD H-3

Enclosed are the results of analyses for samples received by the laboratory on 08/02/19 14:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

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This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder". The signature is fluid and cursive, with the first name "Mike" and last name "Snyder" clearly distinguishable.

Mike Snyder For Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Rice Operating Company
 KATIE JONES
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received: 08/02/2019
 Reported: 08/08/2019
 Project Name: BD H-3
 Project Number: NONE GIVEN
 Project Location: NONE GIVEN

Sampling Date: 07/31/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: 4 WALL (H902658-01)

BTX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/07/2019	ND	1.97	98.6	2.00	0.0670	
Toluene*	<0.050	0.050	08/07/2019	ND	2.00	100	2.00	0.0988	
Ethylbenzene*	<0.050	0.050	08/07/2019	ND	1.96	97.9	2.00	1.29	
Total Xylenes*	<0.150	0.150	08/07/2019	ND	5.99	99.8	6.00	1.39	
Total BTX	<0.300	0.300	08/07/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	08/06/2019	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/05/2019	ND	205	103	200	2.05	
DRO >C10-C28*	<10.0	10.0	08/05/2019	ND	205	102	200	3.94	
EXT DRO >C28-C36	<10.0	10.0	08/05/2019	ND					

Surrogate: 1-Chlorooctane 62.0 % 41-142

Surrogate: 1-Chlorooctadecane 61.3 % 37.6-147

Cardinal Laboratories

*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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*=Accredited Analyte

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

Mike Snyder For Celey D. Keene, Lab Director/Quality Manager

**ARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603
(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

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Relinquished By:		Date:		Received By:		Phone Result:		Fax Result:		Add'l Phone #:	
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		Time:									
Relinquished By:		Date:		Received By:		email results: kjones@riceswd.com knorman@tasman-geo.com		REMARKS:			
		Time:									
Delivered By: (Circle One)		#97		Sample Condition		CHECKED BY:					
Cool Intact						(Initials)					
Sampler - UPS - Bus - Other:		Corrected 6.0°C		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

July 24, 2019

KATIE JONES

Rice Operating Company

112 W. Taylor

Hobbs, NM 88240

RE: BD H-3

Enclosed are the results of analyses for samples received by the laboratory on 07/19/19 15:05.

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Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

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Sincerely,

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Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Rice Operating Company
 KATIE JONES
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received: 07/19/2019
 Reported: 07/24/2019
 Project Name: BD H-3
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 07/18/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: IMPORTED SOIL SAMPLE 1 (H902494-01)

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2019	ND	2.14	107	2.00	1.42	
Toluene*	<0.050	0.050	07/24/2019	ND	2.14	107	2.00	0.661	
Ethylbenzene*	<0.050	0.050	07/24/2019	ND	2.04	102	2.00	0.118	
Total Xylenes*	<0.150	0.150	07/24/2019	ND	6.14	102	6.00	0.513	
Total BTEX	<0.300	0.300	07/24/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.3-129

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/22/2019	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/23/2019	ND	199	99.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	07/23/2019	ND	194	96.8	200	1.23	
EXT DRO >C28-C36	<10.0	10.0	07/23/2019	ND					

Surrogate: 1-Chlorooctane 86.0 % 41-142

Surrogate: 1-Chlorooctadecane 91.4 % 37.6-147

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

Analytical Results For:

Rice Operating Company
 KATIE JONES
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received: 07/19/2019
 Reported: 07/24/2019
 Project Name: BD H-3
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 07/18/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: IMPORTED SOIL SAMPLE 2 (H902494-02)

BTEx 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/24/2019	ND	2.14	107	2.00	1.42	
Toluene*	<0.050	0.050	07/24/2019	ND	2.14	107	2.00	0.661	
Ethylbenzene*	<0.050	0.050	07/24/2019	ND	2.04	102	2.00	0.118	
Total Xylenes*	<0.150	0.150	07/24/2019	ND	6.14	102	6.00	0.513	
Total BTEx	<0.300	0.300	07/24/2019	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/22/2019	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/23/2019	ND	199	99.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	07/23/2019	ND	194	96.8	200	1.23	
EXT DRO >C28-C36	<10.0	10.0	07/23/2019	ND					

Surrogate: 1-Chlorooctane 85.3 % 41-142

Surrogate: 1-Chlorooctadecane 91.5 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Rice Operating Company
 KATIE JONES
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received: 07/19/2019
 Reported: 07/24/2019
 Project Name: BD H-3
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 07/18/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: IMPORTED SOIL SAMPLE 3 (H902494-03)

BTX 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/24/2019	ND	2.14	107	2.00	1.42		
Toluene*	<0.050	0.050	07/24/2019	ND	2.14	107	2.00	0.661		
Ethylbenzene*	<0.050	0.050	07/24/2019	ND	2.04	102	2.00	0.118		
Total Xylenes*	<0.150	0.150	07/24/2019	ND	6.14	102	6.00	0.513		
Total BTEX	<0.300	0.300	07/24/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	07/22/2019	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/23/2019	ND	199	99.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	07/23/2019	ND	194	96.8	200	1.23	
EXT DRO >C28-C36	<10.0	10.0	07/23/2019	ND					

Surrogate: 1-Chlorooctane 81.2 % 41-142

Surrogate: 1-Chlorooctadecane 90.9 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

Rice Operating Company
 KATIE JONES
 112 W. Taylor
 Hobbs NM, 88240
 Fax To: (575) 397-1471

Received: 07/19/2019
 Reported: 07/24/2019
 Project Name: BD H-3
 Project Number: NONE GIVEN
 Project Location: NOT GIVEN

Sampling Date: 07/18/2019
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Tamara Oldaker

Sample ID: IMPORTED SOIL SAMPLE 4 (H902494-04)

BTEx 8021B		mg/kg		Analyzed By: ms						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	07/24/2019	ND	2.14	107	2.00	1.42		
Toluene*	<0.050	0.050	07/24/2019	ND	2.14	107	2.00	0.661		
Ethylbenzene*	<0.050	0.050	07/24/2019	ND	2.04	102	2.00	0.118		
Total Xylenes*	<0.150	0.150	07/24/2019	ND	6.14	102	6.00	0.513		
Total BTEX	<0.300	0.300	07/24/2019	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 73.3-129

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	07/22/2019	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/23/2019	ND	199	99.6	200	1.14	
DRO >C10-C28*	<10.0	10.0	07/23/2019	ND	194	96.8	200	1.23	
EXT DRO >C28-C36	<10.0	10.0	07/23/2019	ND					

Surrogate: 1-Chlorooctane 85.9 % 41-142

Surrogate: 1-Chlorooctadecane 91.4 % 37.6-147

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Celey D. Keene, Lab Director/Quality Manager

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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

**ARDINAL LABORATORIES**

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

BD H-3 (1R426-32)

Unit H, Section 3, T22S, R37E



Initial photo, facing north

3/16/2018



E5 excavating site, facing northwest

7/17/2019



Exporting excavated soil, facing north

7/17/2019



Importing blowsand, facing east

7/18/2019



Padding excavation with imported blow sand, facing southeast

9/30/2019



Installing and properly seating a 20-mil reinforced liner at 4.5 ft bgs, facing east

10/1/2019

BD H-3 (1R426-32)

Unit H, Section 3, T22S, R37E



Padding above liner, facing southwest 10/1/2019



Backfill complete, facing north 10/2/2019



Tilling, facing southeast 10/25/2019



Adding seed to the spreader, facing east 10/25/2019



Seeding the backfilled site, facing northwest 10/25/2019



Site complete, facing northeast 10/25/2019

Final C-141

RICE Operating Company
112 West Taylor, Hobbs, NM 88240
Phone 575.393.9174

State of New Mexico
Oil Conservation Division

Incident ID	nAOTUfEEM00479
District RP	1R426-32
Facility ID	
Application ID	pEEM0432455159

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: Katie Jones Davis Title: Environmental Manager

Signature: Katie Jones Davis Date: 4/6/2020

email: kjones@riceswd.com Telephone: (575) 393-9174

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: Bradford Billings Date: 12/08/2021

Printed Name: Bradford Billings Title: Env.Spec.A

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 8586

CONDITIONS

Operator: RICE OPERATING COMPANY 122 W Taylor Hobbs, NM 88240	OGRID: 19174
	Action Number: 8586
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	None	12/8/2021