# RICE Operating Company

112 West Taylor • Hobbs, New Mexico 88240 Phone: (575) 393-9174 • Fax: (575) 397-1471

April 12, 2022

**Bradford Billings** 

Environmental Bureau, Oil Conservation Division New Mexico Energy, Minerals, & Natural Resources Department 1220 S. St. Francis Drive Santa Fe, New Mexico 87505

## RE: Termination Request Rice Operating Company – Vacuum SWD System Vacuum Jct. D-31 (1R425-81): UL/D, Sec. 31, T17S, R35E

Mr. Billings:

ROC is the service provider (agent) for the Vacuum 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. The Vacuum system is now abandoned.

## **Background and Previous Work**

The site is located approximately 0.3 miles south of Buckeye, New Mexico at UL/D, Sec. 31, T17S, R35E as shown on the Geographic Location Map. Groundwater sampling at the site indicated the depth to groundwater is approximately 124 feet below ground surface (bgs).

In 2009, ROC initiated work on the former Vacuum D-31 junction box as part of the system abandonment. The former junction box and surrounding soil was removed from an excavation of approximately dimensions 10x30x12-ft deep. Soils samples were field analyzed at regular intervals for chloride and hydrocarbon. Representative samples were sent to a commercial laboratory for analysis. The excavated soil was blended and returned to the excavation. A 1-ft thick compacted clay barrier was installed from 4 to 5 ft bgs. Clean, imported soil was installed above the clay barrier and the surface was returned to the natural contour and seeded. NMOCD was notified of potential groundwater impact on November 11<sup>th</sup>, 2009, and a Junction Box Disclosure Report was submitted with all the 2009 junction box closures and disclosures.

On February 8<sup>th</sup>, 2013, ROC submitted an Investigation and Characterization Plan (ICP) to NMOCD which was approved on March 4<sup>th</sup>, 2013. According to the ICP, field personnel were on site April 9<sup>th</sup>-11<sup>th</sup>, 2013, to conduct soil bore investigation. Six soil bores were drilled with soil samples being collected at regular intervals and field tested for chloride and organic vapors. Representative samples from each bore were sent to a commercial laboratory for analysis of chloride and hydrocarbon. SB-1 returned a laboratory chloride result of 3,200 mg/kg at 50 ft bgs and decreased to 1,020 mg/kg at 85 ft bgs. GRO was non-detect in both samples, and DRO was 17.5 mg/kg at 50 ft bgs and 14.9 mg/kg at 85 ft bgs. In SB-2, lab analysis returned results of

3,320 mg/kg at 20 ft bgs and decreased to 912 mg/kg at 85 ft bgs. GRO and DRO readings were non-detect in both samples. In SB-3, lab analysis returned results of 320 mg/kg at the surface, 624 mg/kg at 15 ft bgs, and 128 mg/kg at 20 ft bgs. GRO and DRO results were non-detect in each sample. Lab results from samples collected from SB-4, resulted in chloride concentrations of 3,760 mg/kg at 20 ft bgs and 1,310 mg/kg at 85 ft bgs. GRO and DRO results were non-detect except for the DRO reading at 20 ft bgs, which was 30.4 mg/kg. SB-5 returned laboratory chloride readings of 2,800 mg/kg at 20 ft bgs and 432 mg/kg at 85 ft bgs. GRO and DRO results were non-detect except for the DRO reading at 20 ft bgs and 432 mg/kg at 85 ft bgs. GRO and DRO results were non-detect except for the DRO reading at 20 ft bgs, which was 10.8 mg/kg. SB-6 returned laboratory chloride readings of 3,360 mg/kg at 20 ft bgs and 1,280 mg/kg at 85 ft bgs. GRO and DRO and DRO results were non-detect in both samples. Each soil bore was plugged to ground surface with bentonite.

On May 31<sup>st</sup>, 2011, an Investigation and Characterization Plan (ICP) Report and Request for Further Investigation was submitted to NMOCD and approved on July 25<sup>th</sup>, 2013. The report requested NMOCD permission to continue to investigate the site to determine the lateral extent of the chloride impact. According to the NMOCD approved report, field personnel were on site December 13<sup>th</sup>-19<sup>th</sup>, 2013 to drill an additional four soil bores. As SB-7 through SB-10 were drilled, soil samples were collected at regular intervals and field tested for chloride and organic vapors. Representative samples were sent to a commercial laboratory for analysis. SB-7 returned a laboratory chloride result of 640 mg/kg at 60 ft bgs and 336 mg/kg at 80 ft bgs. SB-8 returned a laboratory chloride result of 5,440 mg/kg at 15 ft bgs and 2,600 mg/kg at 80 ft bgs. SB-9 returned a laboratory chloride result of 1,360 mg/kg at 40 ft bgs and 2,920 mg/kg at 80 ft bgs. SB-10 returned a laboratory chloride result of 176 mg/kg at 5 ft bgs and 128 mg/kg at 20 ft bgs. A 38 ft north surface sample was taken to a commercial laboratory and returned a chloride result of non-detect. GRO and DRO results at all depths in all bores were non-detect. Each soil bore was plugged to ground surface with bentonite. On February 10th, 2014, SB-11 was drilled at the site to determine depth to groundwater. Groundwater was determined to be located at a depth of 118 ft bgs. Each soil bore was plugged to ground surface with bentonite.

On March 24<sup>th</sup>, 2014, a Corrective Action Plan (CAP) was submitted to the NMOCD and subsequently approved on January 13<sup>th</sup>, 2015. The approved CAP proposed additional vertical delineation to depths greater than 85 ft bgs, based on a depth to groundwater of approximately 118 ft bgs. The additional delineation would be conducted to determine if the residual chloride concentrations in the vadose zone could potentially affect groundwater. In order to protect groundwater quality from potential chloride migration, the report also recommended the installation of a 20-mil, reinforced liner. The site would be excavated 50x90-ft to a depth of 3 ft bgs, due to the presence of hard rock in the area. The liner would cover the existing 10x30-ft clay liner previously installed at 5–4 ft bgs. The liners would provide a barrier that will inhibit the downward migration of chlorides to groundwater. Upon completion of backfilling, the site would be seeded with a native vegetative mix and soil amendments will be added as necessary.

On May 12<sup>th</sup>, 2014, SB-1 and SB-9 were extended and drilled to a depth of 115 ft bgs. SB-1 returned laboratory chloride readings of 2,480 mg/kg at 100 ft bgs and decreased to 1,630 mg/kg at 115 ft bgs. GRO and DRO results were non-detect in both the 100 ft and 115 ft samples. SB-9 returned laboratory chloride readings of 1,960 mg/kg at 95 ft bgs and decreased to 496 mg/kg at 115 ft bgs. GRO, DRO, and BTEX results were non-detect in both the 100 ft and 115 ft samples. Each soil bore was plugged in entirety with bentonite.

On March 4<sup>th</sup>, 2015, ROC began excavating the site to a depth of 3 ft bgs. The excavated soil was rock screened, and approximately 560 yds<sup>3</sup> excavated soil were exported to a NMOCD approved facility. Approximately 840 yds<sup>3</sup> of clean topsoil was imported to the site. A sample of the imported topsoil was analyzed by a commercial laboratory, resulting in a chloride concentration of non-detect. The sample was also field analyzed for hydrocarbon using a PID, resulting in a reading of 0.3 ppm. The bottom of the excavation was padded with approximately six inches of the imported soil, and a 50x90-ft, 20 mil reinforced poly liner was carefully installed and properly seated at the bottom of the excavation. Approximately six inches of clean imported soil was carefully padded overtop the liner. The screened rock was returned to the excavation and the imported topsoil was used to backfill the site to ground surface and to contour the site to the surrounding area. On April 7<sup>th</sup>, 2015, the backfilled site was seeded with approximately 18 pounds of Summer Wheat, 18 pounds Blue Gramma seed, and 34 bags of custom mix amendments. A CAP Report and Soil Closure Request summarizing the liner installation work was submitted to NMOCD on August 7<sup>th</sup>, 2015. NMOCD approved the report and granted 'Soil Closure' on August 14<sup>th</sup>, 2015.

Based on the soil bore data, monitoring wells were warranted at this site. On December 8<sup>th</sup>-9<sup>th</sup>, 2015, a near-source monitoring well (MW-1) and an up-gradient monitoring well (MW-2) were installed at the site. The monitoring wells were installed per EPA and NMOCD standards. The wells were developed and have been sampled regularly since installation. Chloride and TDS concentrations in MW-1 have decreased over time and have remained below WQCC standards for eight consecutive quarters. All other constituents in MW-1 and MW-2 have remained below WQCC standards since installation.

### Recommendations

Based on the eight quarters of monitoring well data being below WQCC standards in both wells, the liner installation approved by NMOCD in the CAP, recovered vegetation, and 'Soil Closure' previously granted by NMOCD, ROC respectfully requests remediation termination or similar closure status for this site. Once NMOCD grants termination, both monitoring wells (MW-1 and MW-2) will be plugged and abandoned using Portland slurry and a three-foot cap of concrete at the surface. ROC acknowledges they have met the requirements of 19.15.29 NMAC and a final C-141 is attached.

Rice Operating Company appreciates the opportunity to work with you on this project. Please contact me at (575) 393-9174 if you have any questions or wish to further discuss this site. Thank you for your time and consideration.

Sincerely,

Kati Davis

Katie Davis Environmental Manager RICE Operating Company

Appendix

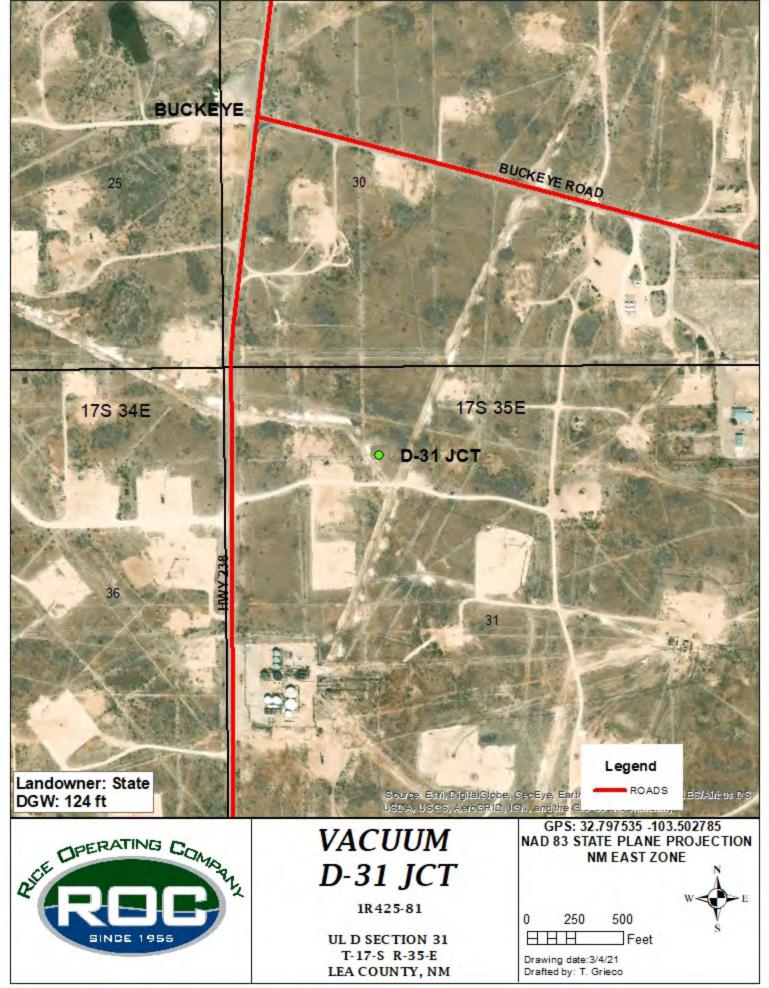
# Figures

**RICE Operating Company** 

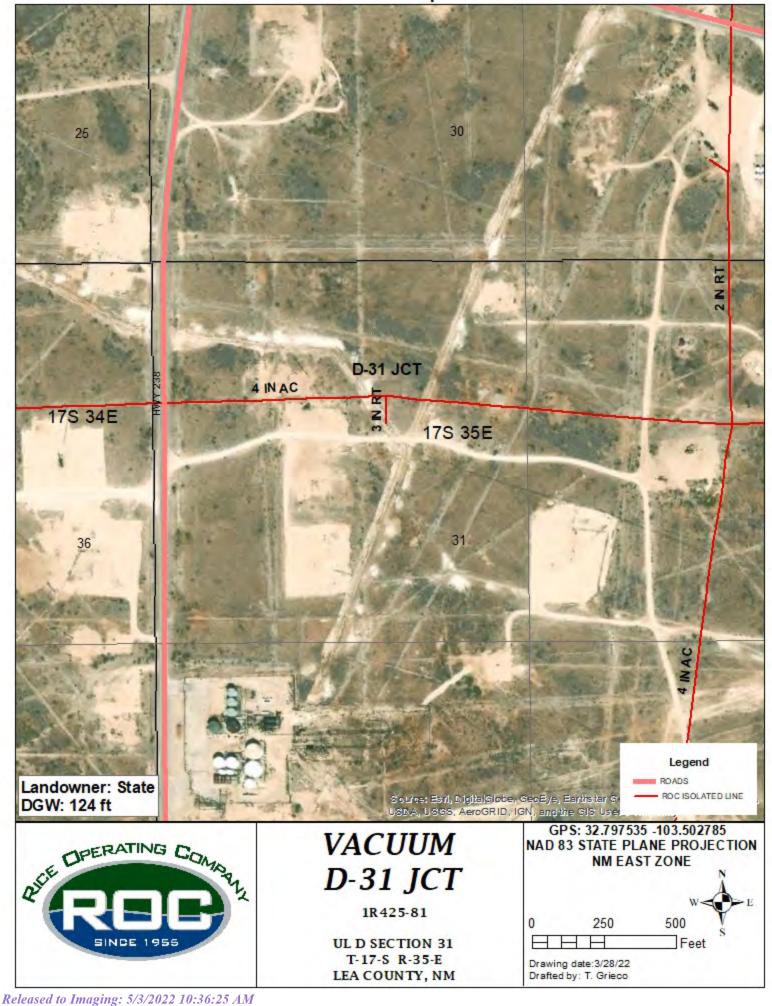
112 West Taylor, Hobbs, NM 88240 Phone 575.393.9174

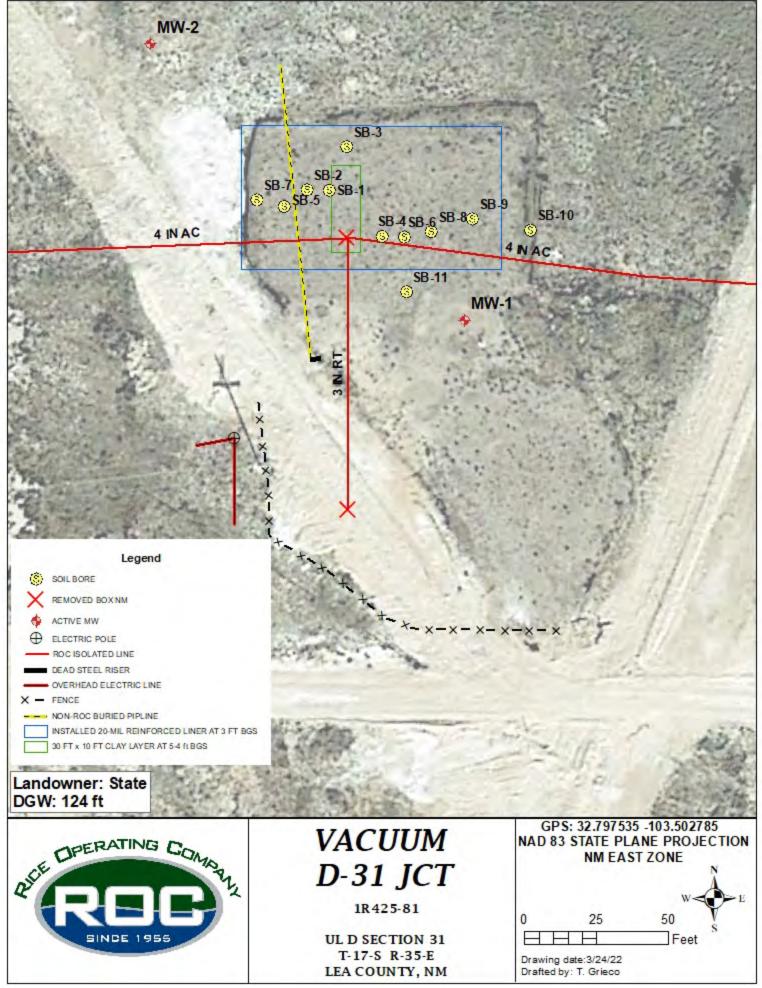
# Received by OCD: 4/12/2022 10:39:01 AMGeographic Location

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# Monitoring Well Sampling

RICE Operating Company

112 West Taylor, Hobbs, NM 88240 Phone 575.393.9174

# ROC - Vacuum Jct. D-31 (1R425-81) Unit Letter D, Section 31, T17S, R35E

мw	Depth to	Total	Well	Volume	Comula Data		TDC	Deeree	Taluana	Ethyl	Total	Culfata	Commonto
	Water	Depth	Volume	Purged	Sample Date	Cl	TDS	Benzene	Toluene	Benzene	Xylenes	Sulfate	Comments
1	120.56	157.5	24	100	3/17/2016	450	1,040	<0.001	<0.001	< 0.001	<0.003	50	Clear No odor
1	120.87	157.5	24	100	6/1/2016	600	1,310	<0.001	<0.001	<0.001	<0.003	71	Clear No odor
1	120.92	157.5	24	100	9/16/2016	460	1,100	<0.001	<0.001	<0.001	<0.003	33	Clear No odor
1	120.9	157.5	24	100	11/21/2016	490	1,150	<0.001	<0.001	<0.001	<0.003	76	Clear No odor
1	121.2	157.5	24	100	3/6/2017	540	1,260	<0.001	<0.001	<0.001	<0.003	59	Clear No odor
1	121.29	157.5	24	100	6/5/2017	680	1,530	<0.001	<0.001	<0.001	<0.003	77	Clear No odor
1	121.11	157.5	23	100	9/15/2017	650	1,720	<0.001	<0.001	<0.001	<0.003	71	Clear No odor
1	120.76	157.5	23	100	12/7/2017	284	770	<0.001	<0.001	<0.001	<0.003	45	Clear No odor
1	120.75	157.5	23	100	3/9/2018	256	658	<0.001	<0.001	<0.001	<0.003	20	Clear No odor
1	120.91	157.5	23	100	6/6/2018	312	872	<0.001	<0.001	<0.001	<0.003	61	Clear No odor
1	121.05	157.5	23	100	9/24/2018	128	398	<0.001	<0.001	<0.001	<0.003	27	Clear No odor
1	121.28	157.5	23	100	11/20/2018	268	706	<0.001	<0.001	<0.001	<0.003	31	Clear No odor
1	120.88	157.5	24	100	3/15/2019	144	481	<0.001	<0.001	<0.001	<0.003	30	Clear No odor
1	121.21	157.5	24	100	6/11/2019	68	522	<0.001	<0.001	<0.001	<0.003	190	Clear No odor
1	122.04	157.5	23	100	9/9/2019	436	1,190	<0.001	<0.001	<0.001	<0.003	43	Clear No odor
1	122.07	157.5	23	75	11/25/2019	532	1,140	<0.001	<0.001	<0.001	<0.003	41	Clear No odor
1	122.19	157.5	23	100	3/18/2020	44	345	<0.001	<0.001	<0.001	<0.003	72.3	Clear No odor
1	123.68	157.5	22	100	9/18/2020	40	355	XXX	XXX	XXX	XXX	47.7	Clear No odor
1	123.68	157.5	22	100	11/17/2020	60	414	XXX	XXX	XXX	XXX	58.4	Clear No odor
1	124.18	157.5	22	100	3/17/2021	56	384	XXX	XXX	XXX	XXX	40.7	Clear No odor
1	124.48	157.5	21	100	6/17/2021	68	360	XXX	XXX	XXX	XXX	63.3	Clear No odor
1	124.68	157.5	21	100	9/15/2021	68	368	XXX	XXX	XXX	XXX	39.8	Clear No odor
1	124.75	157.5	21	100	11/17/2021	112	441	XXX	XXX	XXX	XXX	37.4	Clear No odor
1					3/14/2022	92	457	XXX	XXX	XXX	XXX	51.8	

MW	Depth to	Total	Well	Volume	Sample Date	CL	TDS	Benzene	Toluene	Ethyl	Total	Sulfate	Comments	
	Water	Depth	Volume	Purged	Sample Date	C	105	Delizene	Toluelle	Benzene	Xylenes	Juliate	Comments	
2	120.68	129.15	1.4	10	3/17/2016	68	414	<0.001	<0.001	<0.001	<0.003	48	Clear No odor	

# ROC - Vacuum Jct. D-31 (1R425-81) Unit Letter D, Section 31, T17S, R35E

MW	Depth to	Total	Well	Volume	Samula Data	CI	TDC	Donzono	Taluana	Ethyl	Total	Culfata	Commonte
	Water	Depth	Volume	Purged	Sample Date	Cl	TDS	Benzene	Toluene	Benzene	Xylenes	Sulfate	Comments
2	121.12	129.15	1.4	10	6/1/2016	24	476	<0.001	<0.001	<0.001	<0.003	42	Clear No odor
2	121.13	129.15	1.4	10	9/16/2016	32	314	<0.001	<0.001	<0.001	<0.003	25	Clear No odor
2	121.11	129.15	1.4	10	11/21/2016	56	334	<0.001	<0.001	<0.001	<0.003	49	Clear No odor
2	121.44	129.15	1.2	10	3/6/2017	68	378	<0.001	<0.001	<0.001	<0.003	52	Clear No odor
2	121.54	129.15	1.2	10	6/5/2017	84	540	<0.001	<0.001	<0.001	<0.003	58	Clear No odor
2	121.37	129.15	1.2	10	9/15/2017	92	378	<0.001	<0.001	<0.001	<0.003	47	Clear No odor
2	121.03	129.15	1.3	10	12/7/2017	32	366	<0.001	<0.001	<0.001	<0.003	63	Clear No odor
2	121.05	129.15	1.3	10	3/9/2018	60	374	<0.001	<0.001	<0.001	<0.003	65	Clear No odor
2	121.21	129.15	1.3	10	6/6/2018	64	437	<0.001	<0.001	<0.001	<0.003	79	Clear No odor
2	121.75	129.15	1.2	8	9/24/2018	44	348	<0.001	<0.001	<0.001	<0.003	42	Clear No odor
2	122.01	129.15	1.1	8	11/20/2018	72	432	<0.001	<0.001	<0.001	<0.003	44	Clear No odor
2	121.19	129.15	1.3	8	3/15/2019	64	269	<0.001	<0.001	<0.001	<0.003	45	Clear No odor
2	121.51	129.15	1.2	8	6/11/2019	32	127	<0.001	<0.001	<0.001	<0.003	46	Clear No odor
2	122.36	129.15	1.1	8	9/9/2019	48	368	<0.001	<0.001	<0.001	<0.003	43	Clear No odor
2	122.35	129.15	1.1	8	11/25/2019	88	232	<0.001	<0.001	<0.001	<0.003	45	Clear No odor
2	122.5	129.15	1.1	8	3/18/2020	44	311	<0.001	<0.001	<0.001	<0.003	49.1	Clear No odor
2	124.04	129.15	0.8	8	9/18/2020	40	338	XXX	XXX	XXX	XXX	63.8	Clear No odor
2	124.04	129.15	0.8	8	11/17/2020	44	377	XXX	XXX	XXX	XXX	37.2	Clear No odor
2	124.63	129.15	0.7	8	3/17/2021	48	353	XXX	XXX	XXX	XXX	44.7	Clear No odor
2	124.91	129.15	0.7	8	6/17/2021	40	320	XXX	XXX	XXX	XXX	52.4	Clear No odor
2	125.09	129.15	0.7	8	9/15/2021	56	343	XXX	XXX	XXX	XXX	43.5	Clear No odor
2	125.15	129.15	0.6	8	11/17/2021	32	333	XXX	XXX	XXX	XXX	48.7	Clear No odor
2					3/14/2022	28	339	XXX	XXX	XXX	XXX	44.6	



March 21, 2022

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION D-31** 

Enclosed are the results of analyses for samples received by the laboratory on 03/16/22 14:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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.

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



#### Analytical Results For:

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

Received:	03/16/2022	Sampling Date:	03/14/2022
Reported:	03/21/2022	Sampling Type:	Water
Project Name:	VACUUM JUNCTION D-31	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC31 D-LEA CTY, NM		

#### Sample ID: MONITOR WELL #1 (H221051-01)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	92.0	4.00	03/17/2022	ND	100	100	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	51.8	10.0	03/21/2022	ND	19.8	99.2	20.0	2.24	
TDS 160.1	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	457	5.00	03/18/2022	ND	527	105	500	0.0419	

#### Sample ID: MONITOR WELL #2 (H221051-02)

Chloride, SM4500CI-B	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	28.0	4.00	03/17/2022	ND	100	100	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	44.6	10.0	03/21/2022	ND	19.8	99.2	20.0	2.24	
TDS 160.1	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	339	5.00	03/18/2022	ND	527	105	500	0.0419	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **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

#### Cardinal Laboratories

#### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

11 East Marland - Hobbs, NM 88240 Tel (575) 393-2326 Fax (575) 393-2476	lina	all	L	ah	0	ra	te	r	i	PC	1	Ir	10			_	С	HA	IN-C	)F-(	CUS	TO	DY	AN	DA	ANA	LYS	SIS	RE	QU	EST	
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Katie Jones				Ad	dress:				(5	Street		y, Zip	)		-					(Cir	cle o	or Sp	ecify	Met	hod	No.	)					
dress: (Street, City, Zip)		122	W Ta			~ Hobi	bs, N	ew M	lexic	0 882	240						11	1	1	11	T	T	T	1	L	1	11	1	T.	r	11	1
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ect #: Project Name:	(57	5) 397	7-14	71	_												TPH 418.1/TX1005 / TX1005 Extended (C35)	1010	1010													
ect Location: Vacuum Junction	D-31					1	7	1	-		_				1		ded (		BL													
17S-R35E-Sec31 D ~ Lea County New	Maria			San	npler :	Signat	ure:	Ro	zan	ne Jo	hnso	on (5)	75)631	-9310	-		xten	0	b Se													
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21051				M	ATR	X	P			RVA		E	SAM	PLING			1X10	100	B				4	GC/MS Semi. Vol. 8270C/625				2	Anions (CI, SO4, CO3, HCO3)			
LAB #	đ	# CONTAINERS	Г		Π			T	Τ	-	-				~		05/	e Bo	As B.		es	1	GC/MS Vol. 8260B/624	827		608		Cations (Ca. Ma. Na. K)	CO		Total Dissolved Solids	
FIELD CODE	Ô	AIN	1				OV In				1 HDP		(2)		B/60	B/60	1X1	AnA	Ag	Se	des		8260	Vol.	808	81A	-	Ma	04		ed S	
AB USE )	(G)rab or (C)omp	L N	E	Ι.		SLUDGE	HCL (4 40mi VOA)		NaHSO4	4	ICE (1-1Liter HDPE)		DATE (2022)		MTBE 8021B/602	BTEX 8021B/602	11.8	atals	etals	TCLP Volatiles	TCLP Pesticides		Vol.	Semi	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	Ca	CI'S		solv	
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November 29, 2021

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION D-31** 

Enclosed are the results of analyses for samples received by the laboratory on 11/18/21 15:31.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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.

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



#### Analytical Results For:

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

Received:	11/18/2021	Sampling Date:	11/17/2021
Reported:	11/29/2021	Sampling Type:	Water
Project Name:	VACUUM JUNCTION D-31	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T17S-R35E-SEC31 D-LEA CTY, NM		

#### Sample ID: MONITOR WELL #1 (H213324-01)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	112	4.00	11/19/2021	ND	100	100	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	37.4	10.0	11/22/2021	ND	24.0	120	20.0	0.418	
TDS 160.1	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	441	5.00	11/23/2021	ND	528	106	500	2.46	

#### Sample ID: MONITOR WELL #2 (H213324-02)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	32.0	4.00	11/19/2021	ND	100	100	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	48.7	10.0	11/22/2021	ND	24.0	120	20.0	0.418	
TDS 160.1	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	333	5.00	11/23/2021	ND	528	106	500	2.46	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



### **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

#### Cardinal Laboratories

#### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

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September 24, 2021

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION D-31** 

Enclosed are the results of analyses for samples received by the laboratory on 09/20/21 15:41.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-21-14. 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 <a href="https://www.tceq.texas.gov/field/qa/lab\_accred\_certif.html">www.tceq.texas.gov/field/qa/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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.

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



#### Analytical Results For:

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

Received:	09/20/2021	Sampling Date:	09/15/2021
Reported:	09/24/2021	Sampling Type:	Water
Project Name:	VACUUM JUNCTION D-31	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T17S-R35E-SEC31 D-LEA CTY, NM		

#### Sample ID: MONITOR WELL #1 (H212610-01)

Chloride, SM4500Cl-B	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	68.0	4.00	09/21/2021	ND	100	100	100	3.92	
Sulfate 375.4	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	39.8	10.0	09/24/2021	ND	20.0	100	20.0	1.10	
TDS 160.1	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	368	5.00	09/23/2021	ND	268	89.3	300	1.07	

#### Sample ID: MONITOR WELL #2 (H212610-02)

Chloride, SM4500Cl-B	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	56.0	4.00	09/21/2021	ND	100	100	100	3.92	
Sulfate 375.4	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	43.5	10.0	09/24/2021	ND	20.0	100	20.0	1.10	
TDS 160.1	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	343	5.00	09/23/2021	ND	268	89.3	300	1.07	

#### **Cardinal Laboratories**

\*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

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June 25, 2021

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION D-31** 

Enclosed are the results of analyses for samples received by the laboratory on 06/22/21 12:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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.

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



#### Analytical Results For:

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

Received:	06/22/2021	Sampling Date:	06/17/2021
Reported:	06/25/2021	Sampling Type:	Water
Project Name:	VACUUM JUNCTION D-31	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC31 D-LEA CTY, NM		

#### Sample ID: MONITOR WELL #1 (H211610-01)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	68.0	4.00	06/22/2021	ND	104	104	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	63.3	10.0	06/22/2021	ND	23.5	117	20.0	9.79	
TDS 160.1	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	360	5.00	06/24/2021	ND	515	103	500	0.0280	

#### Sample ID: MONITOR WELL #2 (H211610-02)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	40.0	4.00	06/22/2021	ND	104	104	100	0.00	
Sulfate 375.4	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	52.4	10.0	06/22/2021	ND	23.5	117	20.0	9.79	
TDS 160.1	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	320	5.00	06/24/2021	ND	515	103	500	0.0280	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **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

#### Cardinal Laboratories

#### \*=Accredited Analyte

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Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

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March 26, 2021

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION D-31** 

Enclosed are the results of analyses for samples received by the laboratory on 03/22/21 14:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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.

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



#### Analytical Results For:

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

Received:	03/22/2021	Sampling Date:	03/17/2021
Reported:	03/26/2021	Sampling Type:	Water
Project Name:	VACUUM JUNCTION D-31	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC31 D-LEA CTY, NM		

#### Sample ID: MONITOR WELL #1 (H210717-01)

Chloride, SM4500Cl-B	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	56.0	4.00	03/23/2021	ND	92.0	92.0	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	40.7	10.0	03/24/2021	ND	21.0	105	20.0	2.65	
TDS 160.1	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	384	5.00	03/24/2021	ND	546	109	500	2.49	

#### Sample ID: MONITOR WELL #2 (H210717-02)

Chloride, SM4500Cl-B	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	48.0	4.00	03/23/2021	ND	92.0	92.0	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	44.7	10.0	03/24/2021	ND	21.0	105	20.0	2.65	
TDS 160.1	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	353	5.00	03/25/2021	ND	546	109	500	2.49	

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **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

#### Cardinal Laboratories

#### \*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

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LAB # FIELD CODE LAB USE ONLY	(G)rab or (C)omp	# CONTAINERS	WATER	SOIL	AIR	SLUDGE		HUCL (4 40ml VOA) HNO3	NaHSO4	H₂SO₄	ICE (1-1Liter HDPE)	NONE	DATE (2021)	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005 / TX1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 TCI P Metals Ag As Ba Cd Cr Pb So Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH Moisture Content	Cations (Ca, Mg, Na, K)	Anions (CI, SO4, CO3, HCO3)	Total Dissolved Solids	Chlorides	Turn Around Time
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December 01, 2020

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION D-31** 

Enclosed are the results of analyses for samples received by the laboratory on 11/20/20 16:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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 <a href="https://www.tceq.texas.gov/field/qa/lab\_accred\_certif.html">www.tceq.texas.gov/field/qa/lab\_accred\_certif.html</a>.

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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.

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



#### Analytical Results For:

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

Received:	11/20/2020	Sampling Date:	11/17/2020
Reported:	12/01/2020	Sampling Type:	Water
Project Name:	VACUUM JUNCTION D-31	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC31 D-LEA CTY, NM		

#### Sample ID: MONITOR WELL #1 (H003086-01)

Chloride, SM4500Cl-B	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	60.0	4.00	11/23/2020	ND	100	100	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	58.4	10.0	11/23/2020	ND	23.4	117	20.0	2.07	
TDS 160.1	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	414	5.00	11/23/2020	ND	494	98.8	500	0.971	

#### Sample ID: MONITOR WELL #2 (H003086-02)

Chloride, SM4500CI-B	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	44.0	4.00	11/23/2020	ND	100	100	100	0.00	
Sulfate 375.4	fate 375.4 mg/L								
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	37.2	10.0	11/23/2020	ND	23.4	117	20.0	2.07	
TDS 160.1	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	377	5.00	11/24/2020	ND	494	98.8	500	0.971	

#### **Cardinal Laboratories**

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the sample identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **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

#### Cardinal Laboratories

#### \*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and clent's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatscever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including whose of use, or loss of profits incurred by client, its subsidiaries, affiliates or successor arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

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September 29, 2020

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION D-31** 

Enclosed are the results of analyses for samples received by the laboratory on 09/23/20 10:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-20-13. 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 <a href="https://www.tceq.texas.gov/field/qa/lab\_accred\_certif.html">www.tceq.texas.gov/field/qa/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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.

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



#### Analytical Results For:

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

Received:	09/23/2020	Sampling Date:	09/18/2020
Reported:	09/29/2020	Sampling Type:	Water
Project Name:	VACUUM JUNCTION D-31	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	T17S-R35E-SEC31 D-LEA CTY, NM		

#### Sample ID: MONITOR WELL #1 (H002522-01)

Chloride, SM4500Cl-B	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	40.0	4.00	09/23/2020	ND	100	100	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	47.7	10.0	09/25/2020	ND	19.4	97.0	20.0	0.258	
TDS 160.1	mg	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	355	5.00	09/25/2020	ND	827	82.7	1000	23.8	

#### Sample ID: MONITOR WELL #2 (H002522-02)

Chloride, SM4500Cl-B	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	40.0	4.00	09/23/2020	ND	100	100	100	0.00	
Sulfate 375.4	mg,	/L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	63.8	10.0	09/25/2020	ND	19.4	97.0	20.0	0.258	
TDS 160.1	mg,	/L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	338	5.00	09/25/2020	ND	827	82.7	1000	23.8	

#### **Cardinal Laboratories**

\*=Accredited Analyte

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **Notes and Definitions**

QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
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

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager

Tel (575) 393-2326 Fax (575) 393-2476 Manual Control (575) 393-2476	al	L	a	J	r	at	0	r	le	s,	1	nc		ł		_							T A	IND	AN	AL	SIS	S RE	EQU	ES1	
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March 26, 2020

KATIE JONES Rice Operating Company 112 W. Taylor Hobbs, NM 88240

**RE: VACUUM JUNCTION D-31** 

Enclosed are the results of analyses for samples received by the laboratory on 03/20/20 12:36.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-19-12. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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,

Whe Singh

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



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

Received:	03/20/2020	Sampling Date:	03/18/2020
Reported:	03/26/2020	Sampling Type:	Water
Project Name:	VACUUM JUNCTION D-31	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T17S-R35E-SEC31 D-LEA CTY, NM		

#### Sample ID: MONITOR WELL #1 (H000866-01)

BTEX 8021B	mg/	L	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.001	0.001	03/25/2020	ND	0.021	106	0.0200	0.675	
Toluene*	<0.001	0.001	03/25/2020	ND	0.021	105	0.0200	1.05	
Ethylbenzene*	<0.001	0.001	03/25/2020	ND	0.021	107	0.0200	1.78	
Total Xylenes*	<0.003	0.003	03/25/2020	ND	0.062	103	0.0600	1.69	
Total BTEX	<0.006	0.006	03/25/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	102 %	6 58.2-13	3						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	44.0	4.00	03/23/2020	ND	100	100	100	0.00	
Sulfate 375.4	mg/	L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	72.3	10.0	03/23/2020	ND	21.5	108	20.0	0.980	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	345	5.00	03/25/2020	ND	554	111	500	1.23	

**Cardinal Laboratories** 

\*=Accredited Analyte

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



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

Received:	03/20/2020	Sampling Date:	03/18/2020
Reported:	03/26/2020	Sampling Type:	Water
Project Name:	VACUUM JUNCTION D-31	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	T17S-R35E-SEC31 D-LEA CTY, NM		

#### Sample ID: MONITOR WELL #2 (H000866-02)

BTEX 8021B	mg/	L	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	< 0.001	0.001	03/25/2020	ND	0.021	106	0.0200	0.675	
Toluene*	< 0.001	0.001	03/25/2020	ND	0.021	105	0.0200	1.05	
Ethylbenzene*	< 0.001	0.001	03/25/2020	ND	0.021	107	0.0200	1.78	
Total Xylenes*	<0.003	0.003	03/25/2020	ND	0.062	103	0.0600	1.69	
Total BTEX	<0.006	0.006	03/25/2020	ND					
Surrogate: 4-Bromofluorobenzene (PID	103 %	6 58.2-13	3						
Chloride, SM4500Cl-B	mg/	L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride*	44.0	4.00	03/23/2020	ND	100	100	100	0.00	
Sulfate 375.4	mg/	L	Analyze	d By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Sulfate*	49.1	10.0	03/23/2020	ND	21.5	108	20.0	0.980	
TDS 160.1	mg/	L	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
TDS*	311	5.00	03/25/2020	ND	554	111	500	1.23	

Cardinal Laboratories

\*=Accredited Analyte

mite Sugar

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



#### **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

#### Cardinal Laboratories

#### \*=Accredited Analyte

Mite Sugar

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

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# NMOCD Approval and Soil Closure Request

**RICE Operating Company** 

112 West Taylor, Hobbs, NM 88240 Phone 575.393.9174

From:	Oberding, Tomas, EMNRD
To:	<u>L Peter Galusky Jr</u>
Cc:	Katie Jones; Edward Hansen (ehansen@basinenv.com)
Subject:	RE: Rice Operating Company - Vacuum Jct D-31 (1R425-81) - CAP Report and Soil Closure Request
Date:	Friday, August 14, 2015 9:42:52 AM

Aloha all,

Based on the documentation provided and the meeting, the OCD approves the soil closure request for Vacuum Jct D-31 (1R425-81). In addition the OCD approves the CAP.

Please keep us informed.

Mahalo

-Doc

Tomáš 'Doc' Oberding PhD Hydrologist, Adv-District 1 Oil Conservation Division, EMNRD (505) 476-3403 E-Mail: <u>tomas.oberding@state.nm.us</u> 一期一会

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

Please note:

-The OCD is no longer granting "risk-based," or standard closure of events/RPs with remediation deferred to site abandonment/sale/closure. The RP will remain open until such time as historic contamination is addressed.

-Geotagged photographic documentation is stipulated for all events involving liquids.

If you have any questions or concerns, and for notification, please contact me.

From: L Peter Galusky Jr [mailto:lpgalusky@outlook.com]
Sent: Friday, August 07, 2015 3:53 PM
To: Oberding, Tomas, EMNRD
Cc: Katie Jones
Subject: Rice Operating Company - Vacuum Jct D-31 (1R425-81) - CAP Report and Soil Closure Request

Dr. Oberding,

Please find attached a Corrective Action Plan (CAP) Report and Soil Closure Request for Rice Operating Company's Vacuum Jct D-31 project in Lea County. Also attached is a project flow chart. Please contact either myself or Katie Jones, with Rice, if you have any questions or need additional information.

Thank you.

Sincerely,

Pete G.

## L Peter Galusky, Jr PE

**Texerra** E-mail: <u>lpg@texerra.com</u> Personal E-mail: <u>lpgalusky@outlook.com</u> Cell: 719-339-6791 Web: <u>texerra.com</u>

## L Peter Galusky, Jr PE

## Texerra LLC

August 7<sup>th</sup>, 2015

## **Dr. Tomas Oberding**

New Mexico Energy, Minerals, & Natural Resources Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Drive Santa Fe, New Mexico 87504

## Re: Corrective Action Plan Report & Soil Closure Request Rice Operating Company – Vacuum SWD System Vacuum Jct. D-31 (1R425-81): UL/D, Sec. 31, T17S, R35E

Sent via E-mail

## Dr. Oberding:

Texerra LLC (Texerra) is submitting this Corrective Action Plan Report & Soil Closure Request on behalf of Rice Operating Company (ROC). This report documents remedial and corrective actions completed per the NMOCD approved Corrective Action Plan of March 24<sup>th</sup>, 2014 for this former junction box. This site is located approximately 0.3 miles south of Buckeye, New Mexico in UL/D, Sec. 31, T17S, R35E as shown in the Site Location Map (Figure 1). NM OSE records indicate that groundwater will likely be encountered at a depth of approximately 118 +/- feet.

## **Background and Previous Work**

In 2009, ROC initiated work on the former Vacuum D-31 junction as part of the system abandonment. The site was delineated using a backhoe to form an excavation with dimensions 10x30x12-ft deep and soil samples were screened at regular intervals for both hydrocarbons and chlorides. Representative composite samples were sent to a commercial laboratory for analysis of chloride and TPH. Laboratory analysis of the four-wall composite resulted in a chloride concentration of 3,320 mg/kg, a gasoline range organics (GRO) concentration below detectable limit and a diesel range organics (DRO) concentration of 966 mg/kg. Laboratory analysis of the bottom composite resulted in a chloride concentration of 2,840 mg/kg, a GRO concentration below detectable limit and a bRO concentration of 1,130 mg/kg. The excavated soil was blended on site and a sample of the blended soil returned a laboratory chloride concentration of 1,070 mg/kg, a GRO concentration below detectable limit and a DRO concentration of 1,180 mg/kg. The blended backfill was returned to the excavation up to 5 ft below ground surface (bgs). At 5-4 ft bgs, a 1-ft thick clay

20055 Laredo Ln Web: <u>www.texerra.com</u> Tel: 719-339-6791 Monument, CO 80132 E-mail: lpg@texerra.com

liner was installed and a clay compaction test performed on April 17<sup>th</sup>, 2009. Clean, imported soil was used to backfill the excavation to ground surface and to contour the site to the surrounding area. On June 8<sup>th</sup>, 2009, the site was seeded with a blend of native vegetation. NMOCD was notified of potential groundwater impact on November 11<sup>th</sup>, 2009, and a junction box disclosure report was submitted to NMOCD with all the 2009 junction box closures and disclosures.

### **ICP Results**

On February 8th, 2013, ROC submitted an Investigation and Characterization Plan (ICP) to NMOCD which was approved on March 4<sup>th</sup>, 2013. As part of the ICP, RECS personnel were on site April 9<sup>th</sup> through 11<sup>th</sup> to conduct soil bore installations. Six soil bores were installed and as the bores were advanced, samples were field tested for chlorides and hydrocarbons. Representative samples from each bore were taken to a commercial laboratory for analysis of chlorides and hydrocarbons. SB-1 returned laboratory chloride readings of 3,200 mg/kg at 50 ft bgs and decreased to 1,020 mg/kg at 85 ft bgs. GRO in SB-1 was non-detect for both samples and DRO was 17.5 mg/kg at 50 ft bgs and 14.9 mg/kg at 85 ft bgs. In SB-2, chloride readings returned results of 3,320 mg/kg at 20 ft bgs and decreased to 912 mg/kg at 85 ft bgs. GRO and DRO readings were non-detect. In SB-3, the chloride readings returned results of 320 mg/kg at the surface, 624 mg/kg at 15 ft bgs and 128 mg/kg at 20 ft bgs. GRO and DRO reading were non-detect. In SB-4, chloride readings returned results of 3,760 mg/kg at 20 ft bgs and decreased to 1,310 mg/kg at 85 ft bgs. GRO and DRO results were nondetect except for the DRO reading at 20 ft bgs, which was 30.4 mg/kg. In SB-5, chloride readings returned results of 2,800 mg/kg at 20 ft bgs and decreased to 432 mg/kg at 85 ft bgs. GRO and DRO results were non-detect except for the DRO reading at 20 ft bgs, which was 10.8 mg/kg. In SB-6, chloride readings returned results of 3,360 mg/kg at 20 ft bgs and decreased to 1,280 mg/kg at 85 ft bgs. GRO and DRO results were non-detect throughout the bore. Each soil bore was plugged in entirety with bentonite.

On May 31<sup>st</sup>, 2011, an Investigation and Characterization Plan (ICP) Report and Request for Further Investigation was submitted to NMOCD and approved on July 25<sup>th</sup>, 2013. The ICP Report and Request for Further Investigation asked NMOCD permission to continue to investigate the site to determine the lateral extent of the chloride contamination. As part of this report, RECS personnel were on site December 13<sup>th</sup> and 19<sup>th</sup> to install an additional four soil bores. As SB 7-10 were installed, soil samples were taken at regular intervals and field tested for chlorides and hydrocarbons. Representative samples were taken to a commercial laboratory for confirmatory analysis. SB-7 returned a laboratory chloride result of 640 mg/kg at 60 ft bgs and 336 mg/kg at 80 ft bgs. SB-8 returned a laboratory chloride result of 1,360 mg/kg at 40 ft bgs and 2,600 mg/kg at 80 ft bgs. SB-10 returned a laboratory chloride result of 176 mg/kg at 5 ft bgs and 128 mg/kg at 20 ft bgs. A 38 ft north surface sample was taken to a commercial laboratory and returned a chloride result of non-detect. GRO and DRO results at all depths in all bores were non-detect. Each soil bore was plugged in entirety with bentonite.

On February 10<sup>th</sup>, 2014, SB-11 was installed at the site to determine depth to groundwater at the site. Groundwater was determined to be located at a depth of 118 ft bgs. The soil bore was plugged in entirety with bentonite.

### **Texerra LLC**

## **Corrective Action Plan (CAP)**

On March 24<sup>th</sup>, 2014, a Corrective Action Plan (CAP) was submitted to the NMOCD and subsequently approved on January 13<sup>th</sup>, 2015. The approved CAP proposed additional vertical delineation to depths greater than 85 ft bgs, based on a depth to groundwater of 118 ft bgs. The additional delineation would be conducted to determine if the residual chloride concentrations in the vadose zone could potentially affect groundwater.

In order to protect groundwater quality from potential chloride migration, the report also recommended the installation of a 20-mil, reinforced liner. The site would be excavated 50 ft x 90 ft to a depth of 3 ft bgs, due to the presence of hard rock in the area (Figure 2). The excavation would cover the 38 ft North Surface Sample and would extend 5 ft beyond the 5 ft south vertical taken during the junction box delineation phase. Chloride concentrations in the south vertical remained low with a concentration of 165 mg/kg at 12 ft bgs. To the west, the edge of the excavation is located 5 ft beyond SB-7. To the east, the edge of the excavation is located half way between SB-9 and SB-10. The soils placed above the liner would have a laboratory chloride reading no greater than 500 mg/kg and a field PID reading below 100 ppm. Excavated soil would be evaluated for use as backfill and any soils requiring disposal would be properly disposed of at a NMOCD approved facility. At the base of the excavation, a 20-mil reinforced poly liner would be installed and properly seated. The liner would overlay the previously installed 30 ft x 10 ft clay liner at 5 - 4 ft bgs. The poly liner would provide a barrier that will inhibit the downward migration of chlorides to groundwater. Upon completion of backfilling, the site would be seeded with a native vegetative mix and soil amendments will be added as necessary.

## **Corrective Actions Completed**

On May 12<sup>th</sup>, 2014, SB-1 and the bore with the highest chloride concentration at depth, SB-9, were extended and drilled to a depth of 115 ft bgs. SB-1 returned laboratory chloride readings of 2,480 mg/kg at 100 ft bgs and decreased to 1,630 mg/kg at 115 ft bgs. GRO and DRO results were non-detect in both the 100 ft and 115 ft samples. SB-9 returned laboratory chloride readings of 1,960 mg/kg at 95 ft bgs and decreased to 496 mg/kg at 115 ft bgs. GRO, DRO, and BTEX results were non-detect in both the 100 ft and 115 ft samples. Each soil bore was plugged in entirety with bentonite. This additional investigation is included in Appendix A.

Based on the extended soil bore data, monitoring wells are warranted for this site. A near-source and up-gradient monitoring well will be installed as shown on the attached plat (Figure 2). The monitoring wells will be installed per EPA and NMOCD standards. The monitor wells will be sampled quarterly and once appropriate groundwater analysis data has been obtained, a remedy for groundwater will be proposed to NMOCD. Additional monitoring wells may be required to fully delineate groundwater quality.

ROC began excavation for the installation of the subsurface liner on March 4<sup>th</sup>, 2015. The depth of excavation was 3 ft bgs and the areal dimensions were 50 by 90 ft per the specifications in the CAP. The excavated soil was rock screen, and approximately 560 yds<sup>3</sup> of excavated soil were exported to a NMOCD facility. Approximately 840 yds<sup>3</sup> of clean top soil was imported to the site. A sample of the imported top soil was analyzed by a commercial laboratory, resulting in a chloride concentration

## Texerra LLC

of non-detect. The sample was also field analyzed for hydrocarbon using a PID, resulting in a reading of 0.3 ppm. The bottom of the excavation was padded with approximately six inches of the imported soil material and a 20 mil reinforced poly liner was carefully installed and properly seated over this. Approximately six inches of clean imported soil material was carefully padded overtop of the liner. The screened rock was returned to the excavation and the imported top soil was carefully added to bring the excavation to natural, surrounding elevation. The seedbed was prepared and approximately 18 pounds of Summer Wheat, 18 pounds Blue Gramma seed, and 34 bags of custom mix amendments were disked in to the top soil layer on April 7<sup>th</sup>, 2015. Photo documentation, laboratory analysis results, PID sheet, and a revegetation form are included in Appendix B.

Given that ROC has completed remedial work to protect groundwater from the potential leaching of residual soil contaminants and that the protection of groundwater quality is thus ensured, we respectfully request 'soil closure' or similar regulatory closure status of this project for the vadose zone. We plan to install monitoring wells and conduct groundwater sampling in the foreseeable future and we will correspond with NMOCD as to the outcome and in the planning of any subsequent actions.

ROC is the service provider (agent) for the Vacuum 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. We thus submit this CAP Report and Soil Closure Request for your review and consideration.

Please call Rice Operating Company or me if you have any questions or need additional information.

Thank you.

Sincerely,

L. Peter (Pete) Galusky, Jr PE NM Prof. Engineer No. 22561

Copy: Rice Operating Company

## **Texerra LLC**

## **Attachment List**

<u>Figures</u> Figure 1 - Site Location Map Figure 2 - Plan View of Installed Liner

Appendix A SB Log Lab Analysis Field PID Analysis

<u>Appendix B</u> Lab Analysis of Fill Material Chloride Concentration Field PID Analysis of Fill Material Petroleum Hydrocarbon Concentration Photographs of Liner Installation, Revegetation Form

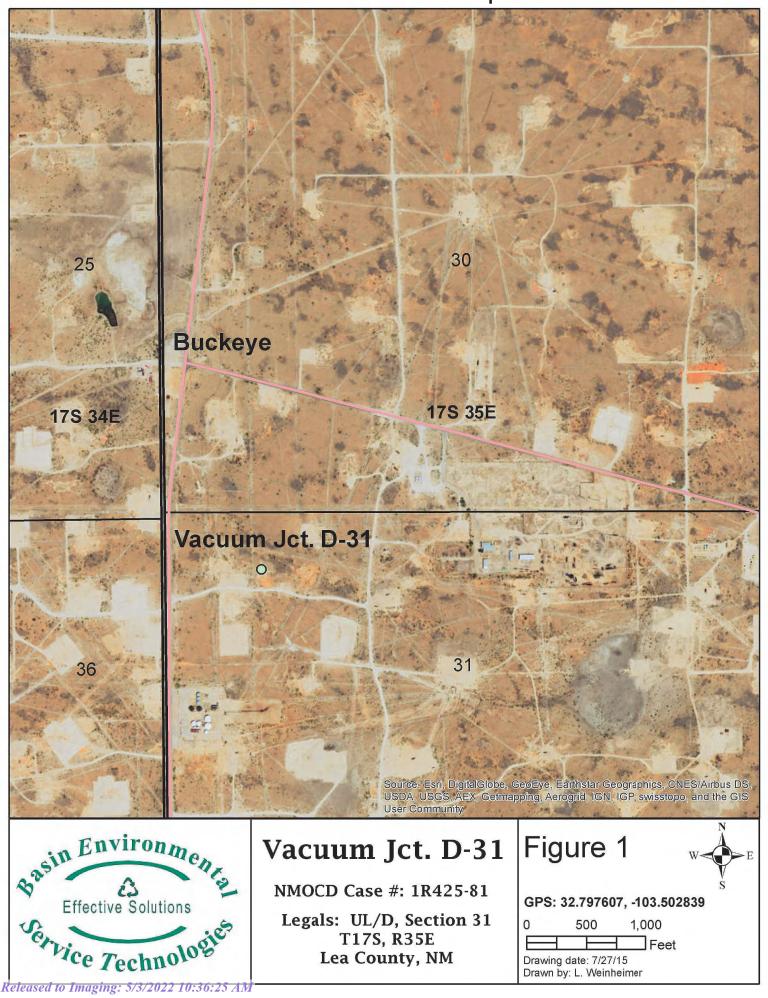
## **Texerra LLC**

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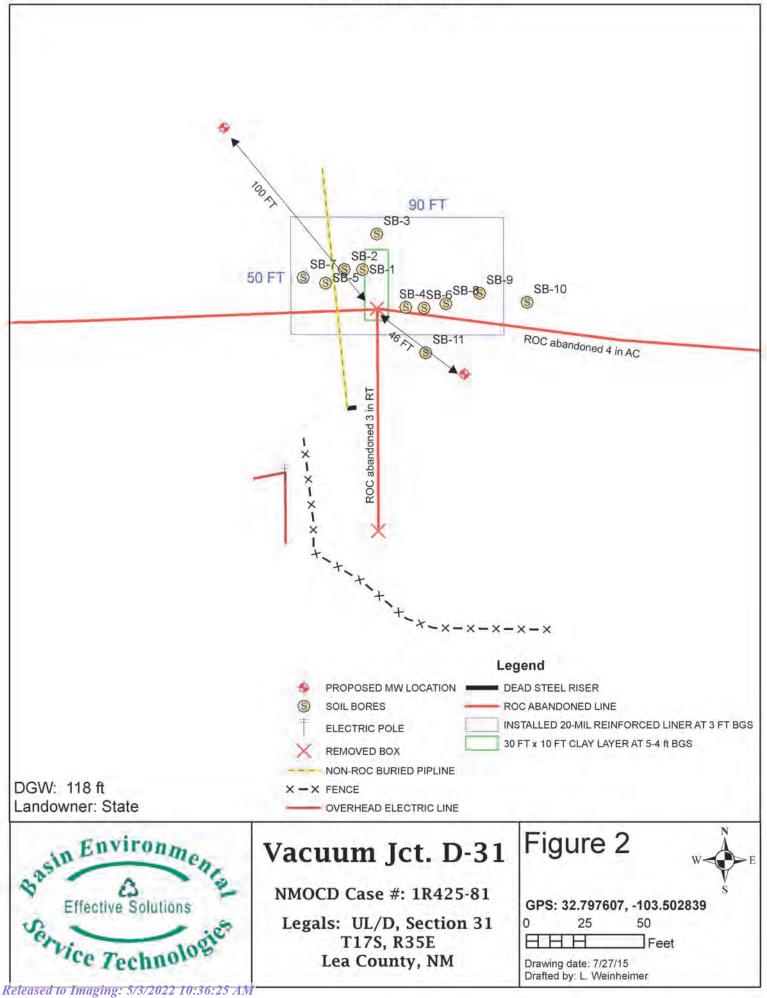
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# Site Location Map





## Installed Liner





Additional Soil Investigation

	Method: e: e: ts: All samples we	B-1 drilled DRAFT	ooper y 4 4 rom cuttir to 85' 4/9	SB-7 SB-7 SB-7 SB-7 SB-8 SB-4 SB-4 SB-4 SB-9 SB-9 SB-10 SB-9 SB-10 SB-11	Project Name: Vacuum Jct. Project Consult Location: U/L I Lat: 32°47'51.25 Long:103°30'10	ant: RECS D, Sec. 31, T17S, R35E 33"N County:Lea
Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
SS 5 ft 10 ft				REGOLITH BROWN SAND		
15 ft	954		2.1	CALICHE/SANDSTONE		Bentonite Seal
20 ft	1936		0.6			
25 ft	2517		2.1	TAN SAND		
30 ft	2398		1.7			
35 ft	2478		1.3			

40 ft 45 ft 50 ft	2302 1986 2699	CI- 3200 GRO	0.8	TAN SAND		
55.4	1965	<10 DRO <17.5	0.0		-	
55 ft	1865		0.2			
60 ft	2392		0.4			Bentonite Seal
65 ft	1628		0.4			
70 ft	970		0.3	MOIST RED SAND		
75 ft	1046		0.2			
80 ft	1271		0.2			
85 ft	961	CI- 1020	0.8			
		GRO <10	DRO 14.9			

90 ft	1890		9.8	TAN SAND/NO ODOR		
95 ft	1947		97.5			
100 ft	2475	CI- 2480 GRO <10 DRO	18.4			Bentonite Seal
105 ft	1945	<10	16	TAN SAND/NO ODOR		
110 ft	1788		12.3			
115 ft	1611	CI- 1630 GRO <10	8.5			
		DRO <10				

Logger:		dward Ces		SB-3 SB-7 SB-7 SB-7 SB-7 SB-7 SB-7 SB-2 SB-1	RE	
	Method: ae: b: ts: All samples	9 drilled to DRAF	y 4 4 n from cu 80' 12/1	SB-4SB SB-8 SB-9 SB-10 Roc abandoned 4 in AC SB-11 ttings. SB-9 was installed 44' east of the 3/2013 and extended to 115' on 5/12/2014. Catherine Uršanić GW = 118'	Project Name: Vacuum Jct. D Project Consultar	nt: RECS Sec. 31, T17S, R35E 'N <b>County</b> :Lea
Depth (feet)	Chloride field tests	LAB	PID	Description	Lithology	Well Construction
SS	187		1.7	DARK BROWN SAND		
5 ft	293		2.4	TAN SAND/ROCK		
10 ft	1,064		2.6	TAN SILTY SAND		
15 ft	2,173		7.0			Bentonite
20 ft	586		2.9	TAN SAND/GRAVEL	**********	
25 ft	1,054		3.2			
30 ft	959		3.7	TAN SAND		
35 ft	1,250		3.0			

40 ft	3,580	CI- 1360	3.5		
		GRO <10			
		DRO <10			
45 ft	2,128		2.8		
50 ft	2,399		2.0		
55 ft	2,497		4.7		
60 ft	2,503		1.6		Ber
				TAN SAND	S S S S S S S S S S S S S S S S S S S
65 ft	2,399		1.4		
70 ft	2,617		3.4		
7010	2,017		0.4		
75 ft	2,960		2.1		
		CI-			
80 ft	3,003	2920	3.7		
		GRO <10			
		DRO <10			

	1				111	1
85 ft	634		19.6		💋	
	4 000					
90 ft	1,883		380.0			
95 ft	1,957	CI- 1960	384.0			
	ВТ	GRO				
	<0.05 <0.05 E X	<10 DRO				
	<0.05 <0.15	<10				
100 ft	888		372.0			Bentonite
				TAN SAND/NO ODOR		Seal
405.6	4.070		000.0			
105 ft	1,370		392.0			
110 ft	1,087		130.0			
		CI-				
115 ft	512 <b>B</b> T	496 GRO	63.9			
	<0.05 <0.05	<10				
	E X <0.05 <0.15	DRO <10				



May 19, 2014

Hack Conder Rice Operating Company 112 W. Taylor Hobbs, NM 88240

RE: VACUUM JCT. D-31 17S-35E

Enclosed are the results of analyses for samples received by the laboratory on 05/12/14 16:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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,

Celeg D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	05/12/2014	Sampling Date:	05/12/2014
Reported:	05/19/2014	Sampling Type:	Soil
Project Name:	VACUUM JCT. D-31 17S-35E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: SB #1 100' (H401441-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2480	16.0	05/14/2014	ND	400	100	400	14.8	
TPH 8015M	mg	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	05/16/2014	ND	203	101	200	4.36	
DRO >C10-C28	<10.0	10.0	05/16/2014	ND	230	115	200	6.27	
Surrogate: 1-Chlorooctane	101	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	100	% 63.6-15	4						

#### Sample ID: SB #1 115' (H401441-02)

Chloride, SM4500Cl-B	mg/	mg/kg		Analyzed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1630	16.0	05/14/2014	ND	400	100	400	14.8	
TPH 8015M	mg/	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	05/16/2014	ND	203	101	200	4.36	
DRO >C10-C28	<10.0	10.0	05/16/2014	ND	230	115	200	6.27	
Surrogate: 1-Chlorooctane	106 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	104 9	63.6-15	4						

#### **Cardinal Laboratories**

#### \*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/12/2014	Sampling Date:	05/12/2014
Reported:	05/19/2014	Sampling Type:	Soil
Project Name:	VACUUM JCT. D-31 17S-35E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: SB #9 95' (H401441-03)

BTEX 8260B	mg	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2014	ND	2.28	114	2.00	0.684	
Toluene*	<0.050	0.050	05/16/2014	ND	2.23	112	2.00	3.55	
Ethylbenzene*	<0.050	0.050	05/16/2014	ND	2.07	104	2.00	3.35	
Total Xylenes*	<0.150	0.150	05/16/2014	ND	6.30	105	6.00	2.33	
Total BTEX	<0.300	0.300	05/16/2014	ND					
Surrogate: Dibromofluoromethane	96.4	% 61.3-14	2						
Surrogate: Toluene-d8	103	% 71.3-12	9						
Surrogate: 4-Bromofluorobenzene	103	65.7-14	1						
Chloride, SM4500Cl-B	mg	′kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1960	16.0	05/14/2014	ND	400	100	400	14.8	
TPH 8015M	mg	′kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/16/2014	ND	203	101	200	4.36	
DRO >C10-C28	<10.0	10.0	05/16/2014	ND	230	115	200	6.27	
Surrogate: 1-Chlorooctane	111 9	65.2-14	0						
Surrogate: 1-Chlorooctadecane	111 9	63.6-15	4						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

Received:	05/12/2014	Sampling Date:	05/12/2014
Reported:	05/19/2014	Sampling Type:	Soil
Project Name:	VACUUM JCT. D-31 17S-35E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: SB #9 115' (H401441-04)

BTEX 8260B	mg	/kg	Analyze	d By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	05/16/2014	ND	2.28	114	2.00	0.684	
Toluene*	<0.050	0.050	05/16/2014	ND	2.23	112	2.00	3.55	
Ethylbenzene*	<0.050	0.050	05/16/2014	ND	2.07	104	2.00	3.35	
Total Xylenes*	<0.150	0.150	05/16/2014	ND	6.30	105	6.00	2.33	
Total BTEX	<0.300	0.300	05/16/2014	ND					
Surrogate: Dibromofluoromethane	93.1	% 61.3-14	2						
Surrogate: Toluene-d8	101	% 71.3-12	9						
Surrogate: 4-Bromofluorobenzene	98.5	% 65.7-14	1						
Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	496	16.0	05/14/2014	ND	416	104	400	0.00	
TPH 8015M	mg	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10	<10.0	10.0	05/16/2014	ND	203	101	200	4.36	
DRO >C10-C28	<10.0	10.0	05/16/2014	ND	230	115	200	6.27	
Surrogate: 1-Chlorooctane	109	% 65.2-14	0						
Surrogate: 1-Chlorooctadecane	108	63.6-15	4						

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **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 SM4500CI-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

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager

Page 6 of 6

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SEIROTAROBAL LANIGRA

0207-273(205) X 43 1007-273 (30 101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

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

Magand Luce Ces. Longecesareo@rice-ecs.com kjones@riceswd.com; Lpena@riceswd.com; hconder@rice-ecs.com; Lweinheimer@rice-ecs.com; email results

# RICE ENVIRONMENTAL CONSULTING & SAFETY

#### 122 West Taylor Hobbs, NM 88240 PHONE: (505) 393-9174 FAX: (505) 397-1471 PID METER CALIBRATION & FIELD REPORT FORM

CK.	Х
MODEL	
NO.	

MODEL: PGM 7300 X
MODEL: PGM 7300
MODEL: PGM 7320
MODEL: PGM 7300

SERIAL NO: 590-000183 SERIAL NO: 590-000504 SERIAL NO: 592-903318 SERIAL NO: 590-902553

#### GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO: HAL-248-100-1			7/1/2015
	METER READING A	CCURACY: 100PPM	

ACCURACY : +/- 2%

COMPANY						
ROC						

SITE	UNIT	SECTION	<b>TOWN SHIP</b>	RANGE
VACUUM JCT. D-31	D	31	T17S	R35E

PID	SAMPLE ID	PID
19.6	SB# 1 90'	9.8
380	SB# 1 95'	97.5
384	SB# 1 100'	18.4
372	SB# 1 105'	16
392	SB# 1 110'	12.3
130	SB# 1 115'	8.5
63.9		
	19.6       380       384       372       392       130	19.6         SB# 1 90'           380         SB# 1 95'           384         SB# 1 100'           372         SB# 1 105'           392         SB# 1 110'           130         SB# 1 115'

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATURE: Edward Cesareo (signature not available)

DATE: 5/12/2014



**Excavation and Liner Installation** 



March 20, 2015

Hack Conder Rice Operating Company 112 W. Taylor Hobbs, NM 88240

RE: VACUUM JCT. D-31 17S-35E

Enclosed are the results of analyses for samples received by the laboratory on 03/13/15 16:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. 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 <a href="https://www.tceq.texas.gov/field/ga/lab\_accred\_certif.html">www.tceq.texas.gov/field/ga/lab\_accred\_certif.html</a>.

Cardinal Laboratories is accreditated 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,

Celey D. Keine

Celey D. Keene Lab Director/Quality Manager



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

Received:	03/13/2015	Sampling Date:	03/13/2015
Reported:	03/20/2015	Sampling Type:	Soil
Project Name:	VACUUM JCT. D-31 17S-35E	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

#### Sample ID: IMPORTED TOPSOIL (H500710-01)

Chloride, SM4500Cl-B	mg	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	03/18/2015	ND	416	104	400	0.00	

#### Cardinal Laboratories

\*=Accredited Analyte

Celez D. Keine

Celey D. Keene, Lab Director/Quality Manager



#### **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

#### Cardinal Laboratories

#### \*=Accredited Analyte

Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

## TRAUDAR AND AND AND ANALYSIS REQUEST

Simol

sedwards@rice-ecs.com; cursanic@rice-ecs.com Environmental Tech: الالوساخ الع

knorman@rice-ecs.com; jkamplain@rice-ecs.com;

## SEIROTAROBAL LANIGRA

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

Simon Lewis Relinquished By:	Date: Time:	Qec	viec	éd By	0												ies@rice-e				
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(siebin) CHECKED BA:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-395-2476

Sampler - UPS - Bus - Other:

Delivered By: (Circle One)

22.5

Cool Intact

Sample Condition

@rice-ecs.com

## RICE ENVIRONMENTAL CONSULTING & SAFETY

#### 122 West Taylor Hobbs, NM 88240 PHONE: (505) 393-9174 FAX: (505) 397-1471 PID METER CALIBRATION & FIELD REPORT FORM

CK.	
MODEL	
NO.	
	X

MODEL: PGM 7300	
MODEL: PGM 7300	
MODEL: PGM 7320	
MODEL: PGM 7300	

SERIAL NO: 590-000508 SERIAL NO: 590-000504 SERIAL NO: 592-903318 SERIAL NO: 590-001413

#### GAS COMPOSITION: ISOBUTYLENE 100PPM / AIR: BALANCE

LOT NO : HAL-248-100-1	EXPIRATION DATE: 07/01/2015	
MET	ER READING ACCURACY: 100.0 ppm	

ACCURACY : +/- 2%

	COMPANY		
RICE	Operating Company	(ROC)	

SITE	UNIT	SECTION	<b>TOWN SHIP</b>	RANGE
Vacuum Jct. D-31	D	31	175	35E

SAMPLE ID	PID	SAMPLE ID	PID
Imported topsoil	0.3		
			1.1
			-

I verify that I have calibrated the above instrument in accordance to the manufacture operation manual.

SIGNATURE

DATE: 3/13/2015

## Vacuum Jct. D-31 (1R425-81) Unit Letter D, Section 31, T17S, R35E



Site prior to excavation, facing south

3/2/2015



Exporting spoiled material, facing northwest

3/11/2015



6" padding of topsoil, facing southwest

3/26/2015



Digging excavation,

3/9/2015



Importing topsoil, facing west

3/13/2015



20-mil poly liner installed at 2.5 ft bgs, facing west 3/26/2015

Released to Imaging: 5/3/2022 10:36:25 AM



Backfilling above the liner, facing southwest

3/27/2015



Contouring the site, Facing west

3/20/2015



Seeding and disking the site, facing northeast

4/7/2015



Backfilling the site with caliche rock, facing southeast

3/27/2015



Spreading amendments, facing northwest

4/7/2015



Site complete, facing southeast

4/7/2015

Phone: (575) 393-2967 Fax: (575) 393-0293

## **VEGETATION FORM**

U/L D Contact Name: Hack Co Email: hconder( Site size: 2. Soils Salvaged from site	<u>Arice-ecs.com</u>	Contraction of the second			ea N 32.797		
D Contact Name: Hack Co Email: hconderd Site size: 2. Soils Salvaged from site	31 nder <u>@rice-ecs.com</u> *Do no	175	35E square feet: 17,183	I	Lea N 32.797		
Email: hconderd Site size: 2. Soils Salvaged from site	<u>arice-ecs.com</u> *Do no	Contraction of the second		square fe	et		
Site size: 2. Soils Salvaged from site	*Do no	Contraction of the second		square fe	et		
2. Soils Salvaged from site	and the second se	Contraction of the second		square fe	et		
Salvaged from site	and the second se	t rip caliche subsoils; cal	And the second second				
	Bioremediated	the second se	iche rocks brought to	he surfac	e by ripping shall be remov	red.	
Texture: Mc		X Imported	Blende	d	Depth (in)		
1/8/1	pist sand	Describe	soil & subsoil: T	op soil at	oove caliche		
Soil prep methods:	Rip	Depth (in)	1	Disc X	Depth (in)	6 Rollerpack	
Date completed:	4/7/2015						
3. Bioremediation Fertilizer		Hay		1	Other	X	
Гуре:				-	Describe: 3 Bags N	Manure and 34 bags	
Lbs/acre:					of custom bioremediation.		
the second s	Prescribed Mix		Name: 18 lbs. Summ Method:	ner Whea	and the second sec	ate: 4/7/2015	
	adcasting Seeder and T : Dry	X Damp We	t				

5. Certification I hereby certify that the information in this form and attachments is true and complete to the best of my knowledge and belief.

Name:	Jose Flores		Title:	Environmental Technician	Date:	4/7/2015
Signature		Jose	Flores			

# Final C-141

**RICE Operating Company** 

112 West Taylor, Hobbs, NM 88240 Phone 575.393.9174 Page 6

Oil Conservation Division

Incident ID	nAPP2110349043
District RP	1R425-81
Facility ID	
Application ID	pEJH1015949962

Page 78 of 80

## 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 Davis       Title:       Environmental Manager         Signature:       Juite:       4/12/2022         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: <u>Jennifer Nobui</u> Date: <u>05/03/2022</u>
Printed Name: Jennifer Nobui Title: Environmental Specialist A

Vacuum Jct. D-31 (1R425-81) Unit D, Section 31, T17S, R35E



Facing South

11/3/2021

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

Operator:	OGRID:
RICE OPERATING COMPANY	19174
122 W Taylor	Action Number:
Hobbs, NM 88240	97797
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By		Condition Date
jnobui	Termination Request Approved.	5/3/2022

CONDITIONS

Action 97797

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