

P.O. Box 1708 • Artesia, NM 88211 www.hrlcomp.com

July 28, 2018

NMOCD District I Olivia Yu 1625 North French Drive Hobbs, New Mexico 88240

Bureau of Land Management Henryetta Price 620 E Greene Street Carlsbad, New Mexico 88220

SUBJECT: FINAL CLOSURE PLAN FOR THE INCIDENT AT THE GC Federal #031 (1RP-4629), LEA COUNTY, NEW MEXICO

Ms. Yu:

On behalf of COG Operating, LLC, HRL Compliance Solutions, Inc (HRL) is pleased to submit the attached final closure report summarizing the finding and closure actions located on the GC Federal #031 release. The purpose of the report is to obtain approval from the New Mexico Oil Conservation Divison (NMOCD) for the remediation and closure of the release that occurred on March 1, 2017. Table 1 below summarizes information regarding the release.

1.0 Background

The release at the GC Federal #031 was caused due to equipment failure from a hole that occurred on a fitting (nipple) connected to the pumping tee as outlined in the NMOCD C-141 report (Appendix A). All released material remained on location within the perimeter of the well pad, isolated around the wellhead. A vacuum truck was used to remove all freestanding liquid. Samples were collected from the impacted area to delineate the vertical and horizontal extent of impacts.

2.0 Site Ranking and Land Jurisdiction

The release site is located approximately 3.3 miles south-southwest of Maljamar, with an elevation of approximately 4595 feet above sea level. After evaluation of the site using the Chevron Texaco Groundwater Trend Map (2005), depth to groundwater was estimated at 175 feet below ground surface (bgs).

Recommended Remediation Action Levels (RRALs) are determined by the site ranking according to the NMOCD *Guidelines for Remediation of Leaks, Spills, and Releases* (1993). The site ranking for this location was 0 as documented in the approved work plan.

Concho |GC Fed 31 | 6/28/2018 VATIVE SOLUTIONS DELIVERED

Page 1 of 22



Name	GC Federal #031
Company	COG Operating, LLC
RP Number	1RP-4629
API Number	30-025-39266
Location	32.81433889, -103.7909611
Estimated Date of Release	3/1/2017
Date Reported to NMOCD	3/3/2017
Land Owner	Federal
Reported to	OCD/BLM
Source of Release	Hole in a pumping tee
Released Material	Oil and Produced Water
Released Volume	5 bbls oil, 5 bbls produced water
Recovered Volume	4.5 bbls oil, 4.5 bbls produced water
Net Release Volume	0.5 bbls oil, 0.5 bbls water
Nearest Waterway	9.1 miles to White Lake
Depth to Groundwater	175 feet bgs
Nearest Domestic Water Source	> 1 mile
NMOCD Ranking	0
Response Date	3/2/2018

Table 1: Release Information and Site Ranking

3.0 Assessment

On June 19, 2018, after receiving clearance, HRL field personnel supervised the excavation of the area in accordance to the approved work plan. Confirmation sampling for T2 bottom, T2 West wall, T2 East wall, T2 North wall, T2 South wall, and sample point West bottom have been included for your consideration. During excavation, field sampling was taken which required further excavation than originally stated in the approved work plan. The areas of T2 bottom, T2 East wall and T2 West wall required further excavation to remediate the impacted areas. The area around T2 was excavated to approximately 3.5' while the original area was expanded slightly to the east and west. All contaminated soil was removed and disposed at an approved NMOCD disposal facility.

4.0 Conclusion

The excavated areas have been back filled to its original state with appropriate material from a licensed caliche pit. No further remedial activities are recommended.

5.0 Revegetation Plan

The facility is still in production and requires no vegetation plan. All excavation occurred on the production pad.



6.0 Scope and Limitations

The scope of HRL's services consist of performing site characterization and remediation, verification of release stabilization, regulatory liaison, and preparation of this work plan. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact Jennifer Knowlton at 505-238-3588.

Submitted by: HRL Compliance Solutions, Inc

Jennife Knowltm

Jennifer Knowlton Regional Manager - Permian

Attachments:

Figure 1: Site and Sample Location Map

Table 3: Summary of Sample Results

Appendix A: Form C141 Initial Appendix B: Laboratory Analytical Reports Received by OCD: 4/11/2023 11:32:43 AM

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Appendix B: Laboratory Analytical Reports



Name	GC Federal #031
Company	COG Operating, LLC
RP Number	1RP-4629
API Number	30-025-39266
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Submitted by: HRL Compliance Solutions, Inc

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Appendix A: Form C141 Initial Appendix B: Laboratory Analytical Reports Received by OCD: 4/11/2023 11:32:43 AM

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Figure 1:

Site and Sample Location Map



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TABLE 3										
Summa	Summary of Delineation Sampling Analytical Results									
SAMPLE LOCATION	SAMPLE DEPTH (bgs)	SAMPLE DATE	CHLORIDE (mg/Kg)							
NMOCD - Guideli	600									
T2 - West Wall 1	1.5'	6/19/2018	1,500.0							
T2 - West Wall 2	1.5'	6/21/2018	256.0							
T2 - North Wall	1.5'	6/19/2018	64.0							
T2 - South Wall	1.5'	6/19/2018	16							
T2 - East Wall 1	1.5'	6/21/2018	864							
T2 - East Wall 2	1.5'	6/21/2018	112							
T2 – Bottom 1	2.5'	6/19/2018	1,120.0							
T2 - Bottom 2	3'	6/21/2018	592.0							
West Bottom	0.5'	6/19/2018	80.0							

Received by OCD: 4/11/2023 11:32:43 AM

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Appendix A: Form C141 Final

State of New Mexico Energy Minerals and Natural Resources

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

Form C-141 Revised April 3, 2017

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

Santa Fe, NM 87505

Release Notification and Corrective Action

OPERATOR	Initial Report	Final Report
Contact: Robert McNeill		
Telephone No: 432-230-0077		
Facility Type: Wellhead		
	Contact: Robert McNeill Telephone No: 432-230-0077	Contact: Robert McNeill Telephone No: 432-230-0077

Surface Owner: Federal	Mineral Owner: Federal	API No.30-025-39266

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
Ν	20	17S	32E	525	South	1960	West	Lea

Latitude 32.8142929 Longitude -103.7908478 NAD83

NATURE OF RELEASE

Source of Release: Wellhead 5 bbls oil and 5 bbl PW 4.5 bbls Oil and 4.5 bbls PW Source of Release: Wellhead Date and Hour of Occurrence March 1, 2017 Unknown Date and Hour of Discovery: March 1, 2017 11:00AM Was Immediate Notice Given? If YES, To Whom? If YES, To Whom? By Whom? Date and Hour If YES, Volume Impacting the Watercourse. Was a Watercourse Reached? Yes No If a Watercourse was Impacted, Describe Fully.* If YES, Volume Impacting the Watercourse. Describe Cause of Problem and Remedial Action Taken.* This release occurred due to a hole in a nipple on the pumping tee. The damaged nipple was replaced with a new nipple. Describe Area Affected and Cleanup Action Taken.* This release remained on location around the wellhead. A vacuum truck was dispatched to remove all freestanding fluids. Concho delineated the area and a work plan was submitted and approved. HRL removed the contaminated soil, slightly beyond the original work plan, and took confirmation samples. The area was backfilled and recontoured. No revegetation was necessary as the excavation was only on the production pad.
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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and
regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger
public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability
should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health
or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other
federal, state, or local laws and/or regulations.
Relecca Haskell
routen machen
Signature: Approved by Environmental Specialist: Hall
Printed Name: Rebecca Haskell
Title: Senior Environmental Coordinator Approval Date: 5/8/2023 Expiration Date: N/A
Title: Senior Environmental Coordinator Approval Date: 5/8/2023 Expiration Date: N/A
E mail Address: rhaskall@sonaho.som
E-mail Address: rhaskell@concho.com Conditions of Approval: Attached

* Attach Additional Sheets If Necessary

Released to Imaging: 5/8/2023 1:37:58 PM

Received by OCD: 4/11/2023 11:32:43 AM

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Appendix B: Laboratory Analytical Reports



June 20, 2018

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: GC FEDERAL #31

Enclosed are the results of analyses for samples received by the laboratory on 06/19/18 15:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-17-10. 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/ga/lab_accred_certif.html.

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



Analytical Results For:

		Cog oper Dakota N P. O. Box Artesia N	IEEL 1630		
		Fax To:	NONE		
Received:	06/19/2018			Sampling Date:	06/19/2018
Reported:	06/20/2018			Sampling Type:	Soil
Project Name:	GC FEDERAL #31			Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN			Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN				

Sample ID: T2 - WEST WALL (H801664-01)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1500	16.0	06/20/2018	ND	416	104	400	0.00	

Sample ID: T2 - NORTH WALL (H801664-02)

Chloride, SM4500Cl-B	mg,	′kg	Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	06/20/2018	ND	416	104	400	0.00	

Sample ID: T2 - SOUTH WALL (H801664-03)

Chloride, SM4500Cl-B	mg	/kg	Analyze	Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	06/20/2018	ND	416	104	400	0.00	

Sample ID: T2 - BOTTOM (H801664-04)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1120	16.0	06/20/2018	ND	416	104	400	0.00	

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 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



Analytical Results For:

COG OPERATING DAKOTA NEEL P. O. BOX 1630 ARTESIA NM, 88210 Fax To: NONE

Received:	06/19/2018	Sampling Date:	06/19/2018
Reported:	06/20/2018	Sampling Type:	Soil
Project Name:	GC FEDERAL #31	Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN		

Sample ID: WEST BOTTOM (H801664-05)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	06/20/2018	ND	416	104	400	0.00	

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 whother is 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



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

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Celeg D. Keine

Celey D. Keene, Lab Director/Quality Manager

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Page 5 of 5

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

Company Name: HPC		BILL TO		ANALYSIS REQUEST
Project Manager: Ferniter Know to	2	P.O. #:		
		Company: COG		
City: State:	Zip:	shot- N	kel	
Phone #: 575-725-0787 Fax #:	L L	Address:	7	
Project #: Project Owner:	1.050	City:	oĉ.	
Project Name: SC Federal #31	0	State: Zip:	130	
Project Location:		Phone #:	2	
Sampler Name:	F	Fax #:		
FOR LAB USE ONLY	MATRIX	PRESERV. SAMPLING		
Lab I.D. Sample I.D.		BASE:	hbrides	
4801/08H	# CC GRC WAS SOIL OIL SLUI		TIME	
1 12 - Vestwall	8	6/29/10	8	
2 TZ - North Wall	>		6	
3 TZ- South Well	8		×	
4 72 - 5the	X		×	
S West Bottom	×		×	
PI FASE NOTE: In the limit is and client's exclusive remedy for any claim arising whether based in contract or toot shall be finited to the amount hald by the client for the	Processing whether based in contract o	r fort, shall be limited to the amount paid 1	v the client for the	
anayses. All claims including trose on regigence and any oner cause whatsvere shall be caused unless made in wining and received by Claimial winin su days aref complement on the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without litritation, business interruptions, tasso fur so of profits incurred by Cleint, its subsidiaries, affiales or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.	neemed waived unless made in writing and r without limitation, business interruptions, lo ardinal, regardless of whether such claim is	eceived by Cardinal within 30 days after or ss of use, or loss of profits incurred by clie based upon any of the above stated reas.	ompletion of the applicable int, its subsidiaries, ons or otherwise.	
Relinquished By: Time:	Received By:	Miller	ult: Yes	No Add'I Phone #: No Add'I Fax #:
Relinquished By: Date:	Received By:	Manne	Email to	learrasco l'intemp. com
Sampler - UPS - Bus - Other:	30.8° Sample Condition	Initials)	Aus	shiper Datatelle
1 AUVINANO (JUI INC INC INC			

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+ Cardinal cannot accent verbal channee Dleace fav written channee to ISTS1 202_2226



June 22, 2018

DAKOTA NEEL

COG OPERATING

P. O. BOX 1630

ARTESIA, NM 88210

RE: GC FEDERAL #31

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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



Analytical Results For:

		COG OPER DAKOTA N P. O. BOX ARTESIA N	IEEL 1630		
		Fax To:	NONE		
Received:	06/21/2018			Sampling Date:	06/21/2018
Reported:	06/22/2018			Sampling Type:	Soil
Project Name:	GC FEDERAL #31			Sampling Condition:	** (See Notes)
Project Number:	NONE GIVEN			Sample Received By:	Tamara Oldaker
Project Location:	NOT GIVEN				

Sample ID: GC FED #31 T2 EAST WALL (H801695-01)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	864	16.0	06/21/2018	ND	432	108	400	3.77	

Sample ID: GC FED #31 T2 WEST WALL (H801695-02)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	06/21/2018	ND	432	108	400	3.77	

Sample ID: GC FED #31 T2 BOTTOM @3' (H801695-03)

Chloride, SM4500Cl-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	06/21/2018	ND	432	108	400	3.77	

Sample ID: GC FED #31 T2 EAST WALL 2 (H801695-04)

Chloride, SM4500Cl-B	mg	/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	06/21/2018	ND	432	108	400	3.77	

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*=Accredited Analyte

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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

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

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 21 of 22

Page 4 of 4

101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

-		
company value. Her Loncing		BILL TO ANALYSIS REQUEST
Project Manager: Jennifer Knowl thy	P.O.	
Address:	Com	company: Conchid
City: State:	Zip: Attn:	
Phone #: 505-238-358 Fax #:		Address:
Project #: Project Owner:	vner: City:	
Project Name: Gril Feel 3	State:	te: Zip:
Project Location:	Pho	Phone #:
Sampler Name: Luce Carrasco	Fax #:	# -{{SZ
FOR LAB USE ONLY	MATRIX	ESERV. SAMPLING
Lab I.D. Sample I.D.	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER :	ACID/BASE: ICE / COOL DTHER : DA IN Chiorides
/ GCFed #31 T2 Eastwall	~	0 81 219
2 GC Fed #31 Ta West wall	- 5	1000
21	S .	18
PLEASE NOTE: Liability and Damages. Cardinats liability and client oxclusive mondy for any claim arising whether based in contract or fort, shall be limited to the amount paid by the client for the 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 20 days after completion of the applicable service. In no event shall Cardinal be liable for incidential 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 services hereunder by Cardinal, regardinal, regardiness or whether such claim is based upon any of the above stated reasons or otherwise.	y for any claim arising whether based in contract or tort, s lall be deemed walved unless made in writing and receive cluding without limitation, business interruptions, loss of us er by Cardinal, regardless of whether such claim is based	vy claim atisfin whether based in contract or tork, shall be limited to the amount paid by the client for the leerned waived unless made in writing and received by Cardinal within 30 days after completion of the applicable without limitation, business interruptions, loss of user, or loss of porfis incurred by client, its subsidiaries, ardinal, repardless of whether such claim is based upon any of the above stated reasons or otherwise.
Relinquished By: Date: Sq Times 118 Relinquished By: Date: Date:		Phone Result: Yes No Add'I Phone #: Fax Result: REMARKS: REMARKS:
Time:		It clean with 4000 run 200
	Sample Condition Cool Intact	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other: Joshentid 33. Se	1 0	te #15t

Received by OCD: 4/11/2023 11:32:43 AM

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:
Spur Energy Partners LLC	328947
9655 Katy Freeway	Action Number:
Houston, TX 77024	206294
	Action Type:
	[IM-SD] Incident File Support Doc (ENV) (IM-BNF)

CONDITIONS

Created By		Condition Date
bhall	None	5/8/2023

Action 206294