

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Sundry Print Report Page 1 of 27

Well Name: SAN JUAN 29-5 UNIT Well Location: T29N / R5W / SEC 9 /

NENE / 36.744507 / -107.356247

County or Parish/State: RIO

ARRIBA / NM

Well Number: 102 Type of Well: CONVENTIONAL GAS

Allottee or Tribe Name:

Lease Number: NMSF080179

Unit or CA Name: SAN JUAN 29-5

UNIT--PC

Unit or CA Number:

NMNM78415C

US Well Number: 3003922468 Well Status: Producing Gas Well **Operator: HILCORP ENERGY**

COMPANY

Notice of Intent

Sundry ID: 2770524

Type of Submission: Notice of Intent

Date Sundry Submitted: 01/18/2024

Type of Action: Plug and Abandonment

Time Sundry Submitted: 09:35

Date proposed operation will begin: 01/19/2024

Procedure Description: Hilcorp Energy Company requests permission to P&A the subject well per the attached procedures, current and proposed wellbore schematics. The Pre-Disturbance Site Visit was held on 1/17/2024 with Roger Herrera, BLM. The Re-Vegetation Plan is attached. A closed loop system will be used.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

2024_01_18___SAN_JUAN_29_5_UNIT_102___PA_Procedure_NOI_20240118093438.pdf

leceived by OCD: 11/18/2024 10:13:13 AM

Well Location: T29N / R5W / SEC 9 /

NENE / 36.744507 / -107.356247

County or Parish/State: RIO

ARRIBA / NM

Allottee or Tribe Name:

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Lease Number: NMSF080179

Unit or CA Name: SAN JUAN 29-5

UNIT--PC

Unit or CA Number: NMNM78415C

US Well Number: 3003922468

Well Status: Producing Gas Well

Operator: HILCORP ENERGY

COMPANY

Conditions of Approval

Specialist Review

2770524_NOI_PnA_San_Juan_29_5_Unit_102_20240118095740.pdf

General_Requirement_PxA_20240118094151.pdf

29N05W09_SJ_29_5_Unit_102_Geo_KR_1_20240118094134.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: PRISCILLA SHORTY Signed on: JAN 18, 2024 09:35 AM

Name: HILCORP ENERGY COMPANY

Title: Regulatory Technician

Street Address: 382 ROAD 3100

City: AZTEC State: NM

Phone: (505) 324-5188

Email address: PSHORTY@HILCORP.COM

Field

Representative Name:

Street Address:

City: State: Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: MATTHEW H KADE BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647736 BLM POC Email Address: MKADE@BLM.GOV

Disposition: Approved **Disposition Date:** 01/18/2024

Releasionaturaighathews/2024 4:32:17 PM

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Prepared by:	John LaMond
Preparation Date:	January 18, 2024

WELL INFORMATION							
Well Name:	SAN JUAN 29-5 UNIT 102	State:	NM				
API #:	3003922468	County:	RIO ARRIBA				
Area:	Area 12	Location:	1010' FNL & 930' FEL - Unit A - Section 9 - T 029N - R 005W				
Route:	1208	Latitude:	36.744511 N				
Spud Date:	July 29, 2002	Longitude:	-107.356201 W				
		Formations:	PC				

PROJECT DESCRIPTION	
HILCORP ENERGY COMPANY REQUESTS APPROVAL TO PLUG AND ABANDON THE SAN JUAN 29-5 UNIT 102	

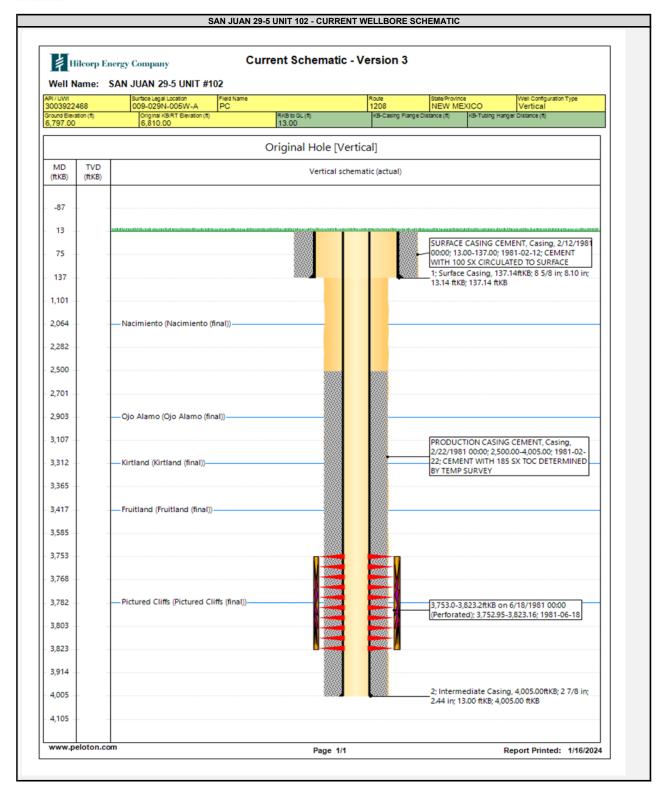


JOB PROCEDURES

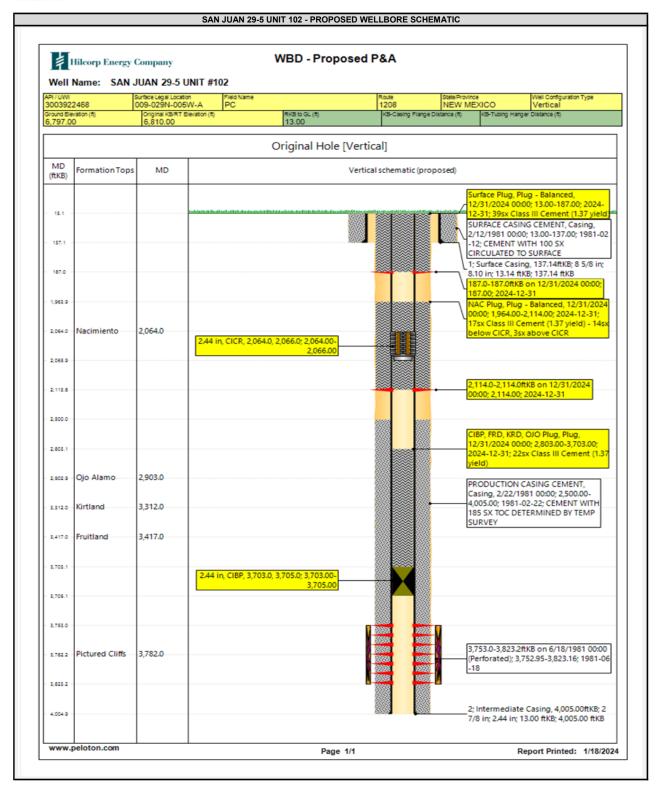
- *Note: The San Juan 29-5 Unit 102 currently has a Hole in Casing (estimated to be between 1,005' and 1,600', but unconfirmed). NMOCD and BLM were notified
 of the potential leak on 1/2/2024 and immediate action requested to remedy. Hilcorp intends to P&A the San Juan 29-5 Unit 102.
- 2. Contact NMOCD and BLM (where applicable) 24 hours prior to MIRU.
- 3. Hold pre-job safety meeting. Verify cathodic is off. Comply with all NMOCD, BLM, and HEC safety and environmental regulations.
- 4. MIRU service rig and associated equipment; NU and test BOP.
- 5. Set a 2-7/8" plug at +/- 3.703' to isolate the Pictured Cliffs.
- 6. Load the well as needed. Perform Mechanical Integrity Test (MIT) by pressure testing the 2-7/8" casing above the CIBP set @ 3,703' to 560 psig for 30 minutes on a 2 hour chart with a 1,000 lb spring. This will confirm Hole in Casing.
- 7. RU Wireline. Run CBL. Record Top of Cement. All subsequent plugs below subject to change pending CBL results.
- 8. PU & TIH w/ tubing/work string to +/- 3,703'.
- 9. Plug #1: PICTURED CLIFFS, FRUITLAND, KIRTLAND, & OJO ALAMO FORMATION TOPS (22 Sacks of Class III Cement Total):
 Pump a +/- 900' balanced cement plug (22 sacks of Class III (14.8 PPG, 1.37 yield) cement with an estimated TOC @ +/- 2,803' and an estimated BOC @ +/- 3,703'). Wait on Cement for 4 hours, tag TOC w/ work string.
- 10. TOOH w/ tubing/work string. TIH and perforate squeeze holes @ +/- 2,114*. Establish injection rate into squeeze holes. RIH w/ 2-7/8" CICR and set CICR @ +/- 2,064*
- 11. Plug #2: NACIMIENTO FORMATION TOP (17 Sacks of Class III Cement Total):

 Pump a squeeze leaving +/- 200' of cement between the 2-7/8" casing open hole annulus (12 sacks of Class III (14.8 PPG, 1.37 yield) cement with an estimated TOC @ +/- 1,914' and an estimated BOC @ +/- 2,114'). Continue pumping additional +/- 50' cement plug beneath the 2-7/8" CICR (2 sacks of Class III (14.8 PPG, 1.37 yield) cement with an estimated TOC @ +/- 2,064' and an estimated BOC @ +/- 2,114'). Sting out of retaininer, pump +/- 100' balanced cement plug (3 sacks of Class III (14.8 PPG, 1.37 yield) cement with an estimated TOC @ +/- 1,964' and an estimated BOC @ +/- 2064'). Wait on Cement for 4 hours, tag TOC w/ work string.
- 12. TOOH w/ tubing/work string. TIH and perforate squeeze holes @ +/- 187'. Establish injection rate into squeeze holes.
- 13. Plug #3: SURFACE PLUG (39 Sacks of Class III Cement Total):
 Pump a squeeze leaving +/- 187' of cement between the 2-7/8" open hole annulus as well as the 2-7/8" x 8-5/8" casing hole annulus (35 sacks of Class III (14.8 PPG, 1.37 yield) cement with an estimated TOC @ +/- 0' and an estimated BOC @ +/- 187'). Continue pumping additional +/- 187' balanced cement plug in the 2-7/8" casing to surface (4 sacks of Class III (14.8 PPG, 1.37 yield) cement with an estimated TOC @ +/- 0' and an estimated BOC @ +/- 187').
- 14. ND BOP, cut off casing below casing flange. Top off cement in surface casing annulus, if needed. Install a P&A marker with cement to comply with regulations. Rig down, move off location, cut off anchors, and restore location.











Mail Name SAN JUAN 29.5 UNIT #100 Property Age State Property (Age State Prope		rgy Company	LINIT #402	Pertin	ent Data	Sheet				
Mell Header	API/UWI	Surface Legal Locat	ion Field N	ame		Route 1208	State/Provin	ce EXICO		on Type
Well Header		Original KB/RT	Elevation (ft)		L (ft)	KB-Casing FI	lange Distance (ft)	KB-Tubing Han	ger Distance (ft)	
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Media Notes Amodation Depth (RVS)	Original Spud Date									
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Intermediate Casing	Casing Joints			8.10	24.00	I-55				
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		3,753.0 3,	023.2							
1 !	Hydraulic Fracture			Comment						

Hilcorp Energy
P&A Final Reclamation Plan
SJ 29-5 # 102

API: 3003922468

T29N-005W-Sec. 09-Unit A

LAT: 36.744511 LONG: -107.356201 -NAD 27

Footage: 890' FSL & 1700' FEL Rio Arriba County, NM

1. PRE- RECLAMATION SITE INSPECTION

A pre-reclamation site inspection was completed with Roger Herrera from the BLM and Patrick Hudman, Hilcorp Energy SJ East Construction Foreman on Jan 17, 2024.

2. LOCATION RECLAMATION PROCEDURE

- 1. Reclamation work will begin in spring.
- 2. Removal of all equipment, anchors, flowlines, cathodic, and pipelines.
- 3. All trash and debris will be removed within a 50' buffer outside of the location disturbance during reclamation.
- 4. Remove flowline to meter run.
- 5. Rip and disk the hard driven on surface.
- 6. Harvest meter run and line. Cut and cap.

3. ACCESS ROAD RECLAMATION PROCEDURE

- 1. The well access road will be contoured by pulling in the sides of road and build silt traps as needed.
- 2. Block at the main lease road with a berm and ditch.
- 3. Seed road.

4. **SEEDING PROCEDURE**

- 1. A Pinon/Juniper seed mix will be used for all reclaimed and disturbed areas of the well pad and lease road.
- 2. Drill seed will be done where applicable, and all other disturbed areas will be broadcast seeded and harrowed. Broadcast seeding will be applied at a double the rate of seed.
- 3. Timing of the seeding will be when the ground is not frozen or saturated.

5. WEED MANAGEMENT

1. No noxious weeds were identified during this onsite.

Priscilla Shorty

From: Amanda Atencio

Sent: Tuesday, January 16, 2024 12:30 PM

To: John LaMond

Subject: FW: [EXTERNAL] San Juan 29-5 Unit 102 (3003922468): Notification of Casing Leak

From: Kuehling, Monica, EMNRD < monica.kuehling@emnrd.nm.gov>

Sent: Friday, January 5, 2024 10:19 AM

To: Rennick, Kenneth G <krennick@blm.gov>; Amanda Atencio <Amanda.Atencio@hilcorp.com> **Cc:** Farmington Regulatory Techs <FarmingtonRegulatoryTechs@hilcorp.com>; Shane Smith

<Shane.Smith@hilcorp.com>; Freddie Garcia <fgarcia@hilcorp.com>; Calen Wilkins <cwilkins@hilcorp.com>; Rustin

Mikeska <rmikeska@hilcorp.com>; Lee Murphy <lmurphy@hilcorp.com>; JP Knox <jknox@hilcorp.com>

Subject: RE: [EXTERNAL] San Juan 29-5 Unit 102 (3003922468): Notification of Casing Leak

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

Immediate action still applies.

Please let me know when the NOI has been submitted

Thank you

Monica Kuehling Compliance Officer Supervisor Deputy Oil and Gas Inspector New Mexico Oil Conservation Division North District

Office Phone: 505-334-6178 ext. 123

Cell Phone: 505-320-0243

Email - monica.kuehling@emnrd.nm.gov

From: Rennick, Kenneth G < krennick@blm.gov>
Sent: Wednesday, January 3, 2024 4:45 PM

To: Amanda Atencio < Amanda.Atencio@hilcorp.com; Kuehling, Monica, EMNRD < monica.kuehling@emnrd.nm.gov>

Cc: Farmington Regulatory Techs <FarmingtonRegulatoryTechs@hilcorp.com>; Shane Smith

<Shane.Smith@hilcorp.com>; Freddie Garcia <fgarcia@hilcorp.com>; Calen Wilkins <cwilkins@hilcorp.com>; Rustin

Mikeska <<u>rmikeska@hilcorp.com</u>>; Lee Murphy <<u>lmurphy@hilcorp.com</u>>; JP Knox <<u>jknox@hilcorp.com</u>>

Subject: Re: [EXTERNAL] San Juan 29-5 Unit 102 (3003922468): Notification of Casing Leak

Thank you for the update, Amanda!

Kenneth (Kenny) Rennick

Petroleum Engineer

Bureau of Land Management Farmington Field Office 6251 College Blvd Farmington, NM 87402

Email: krennick@blm.gov
Mobile & Text: 505.497.0019

From: Amanda Atencio < <u>Amanda. Atencio@hilcorp.com</u>>

Sent: Wednesday, January 3, 2024 4:21 PM

To: Kuehling, Monica, EMNRD <monica.kuehling@emnrd.nm.gov>; Rennick, Kenneth G <krennick@blm.gov>

Cc: Farmington Regulatory Techs < FarmingtonRegulatoryTechs@hilcorp.com >; Shane Smith

<<u>Shane.Smith@hilcorp.com</u>>; Freddie Garcia <<u>fgarcia@hilcorp.com</u>>; Calen Wilkins <<u>cwilkins@hilcorp.com</u>>; Rustin

Mikeska <rmikeska@hilcorp.com>; Lee Murphy@hilcorp.com>; JP Knox <jknox@hilcorp.com>

Subject: RE: [EXTERNAL] San Juan 29-5 Unit 102 (3003922468): Notification of Casing Leak

Hilcorp has decided to P&A this well. A procedure/NOI is being worked by our P&A team.

Thanks, Amanda

From: Kuehling, Monica, EMNRD < monica.kuehling@emnrd.nm.gov>

Sent: Tuesday, January 2, 2024 4:49 PM

To: Rennick, Kenneth G < <u>krennick@blm.gov</u>>; Amanda Atencio < <u>Amanda.Atencio@hilcorp.com</u>> **Cc:** Farmington Regulatory Techs < <u>FarmingtonRegulatoryTechs@hilcorp.com</u>>; Shane Smith

<Shane.Smith@hilcorp.com>; Freddie Garcia <fgarcia@hilcorp.com>; Calen Wilkins <cwilkins@hilcorp.com>

Subject: RE: [EXTERNAL] San Juan 29-5 Unit 102 (3003922468): Notification of Casing Leak

CAUTION: External sender. DO NOT open links or attachments from UNKNOWN senders.

A casing leak does not have a 90 day window. Immediate action is required.

Thank you

Monica Kuehling Compliance Officer Supervisor Deputy Oil and Gas Inspector New Mexico Oil Conservation Division North District

Office Phone: 505-334-6178 ext. 123

Cell Phone: 505-320-0243

Email - monica.kuehling@emnrd.nm.gov

From: Rennick, Kenneth G < kenneth G kennethgov>

Sent: Tuesday, January 2, 2024 2:21 PM

To: Amanda Atencio < <u>Amanda.Atencio@hilcorp.com</u>>; Kuehling, Monica, EMNRD < <u>monica.kuehling@emnrd.nm.gov</u>>

Cc: Farmington Regulatory Techs < <u>FarmingtonRegulatoryTechs@hilcorp.com</u>>; Shane Smith

<<u>Shane.Smith@hilcorp.com</u>>; Freddie Garcia <<u>fgarcia@hilcorp.com</u>>; Calen Wilkins <<u>cwilkins@hilcorp.com</u>>

Subject: Re: [EXTERNAL] San Juan 29-5 Unit 102 (3003922468): Notification of Casing Leak

Thank you for the information Amanda. The BLM has no questions at this time.

Kenny Rennick

Kenneth (Kenny) Rennick

Petroleum Engineer

Bureau of Land Management Farmington Field Office 6251 College Blvd Farmington, NM 87402

Email: krennick@blm.gov
Mobile & Text: 505.497.0019

From: Amanda Atencio < Amanda. Atencio @hilcorp.com>

Sent: Tuesday, January 2, 2024 9:46 AM

To: Kuehling, Monica, EMNRD < monica.kuehling@emnrd.nm.gov; Rennick, Kenneth G < krennick@blm.gov>

Cc: Farmington Regulatory Techs <FarmingtonRegulatoryTechs@hilcorp.com>; Shane Smith

<Shane.Smith@hilcorp.com>; Freddie Garcia <fgarcia@hilcorp.com>; Calen Wilkins <cwilkins@hilcorp.com>

Subject: [EXTERNAL] San Juan 29-5 Unit 102 (3003922468): Notification of Casing Leak

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Monica & Kenny,

Please be advised that on 12/28/2023 - while running slickline diagnostics on the San Juan 29-5 Unit 102 – we discovered a casing leak somewhere between 1,050'-1,600'. The schematic is attached for reference.

We are currently evaluating remediation options (casing repair vs. P&A). Once a plan of action is determined – we will submit a NOI for approval. Please let us know if you have any questions in the meantime.

Thank you and Happy New Year!

Amanda Atencio

Operations Engineer – SJE Hilcorp Energy Company Office: (346) 237-2160

Cell: (719) 393-2721

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Received by OCD: 1/18/2024 10:13:53 AM

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UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FARMINGTON DISTRICT OFFICE

6251 COLLEGE BLVD. FARMINGTON, NEW MEXICO 87402

AFMSS 2 Sundry ID 2770524

Attachment to Notice of Intention to Plug and Abandon

Operator: Hilcorp Energy Company

Well: San Juan 29-5 Unit 102 (API # 30-039-22468)

CONDITIONS OF APPROVAL

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
- 2. Farmington Office is to be notified at least 24 hours before the plugging operations commence at (505) 564-7750.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Send a copy of CBL to BLM FFO Engineers, Kenneth Rennick at krennick@blm.gov and Matthew Kade at mkade@blm.gov

Office Hours: 7:45 a.m. to 4:30 p.m.

M. Kade 1/18/2024

GENERAL REQUIREMENTS FOR PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES FARMINGTON FIELD OFFICE

- 1.0 The approved plugging plans may contain variances from the following <u>minimum general</u> requirements.
 - 1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.
 - 1.2 Requirements may be added to address specific well conditions.
- 2.0 Materials used must be accurately measured. (densometer/scales)
- 3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.
 - 3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.
- 4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.
 - 4.1 The cement shall be as specified in the approved plugging plan.
 - 4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.
 - 4.3 Surface plugs may be no less than 50' in length.
 - 4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.
 - 4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.
 - 4.6 A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously ran or cement did not circulate to surface during the original casing cementing job or subsequent cementing jobs.

2

- 5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.
 - 5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.
 - 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
 - 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.
 - 5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.
- 6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.
 - 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
 - 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.
- 7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H_2S .
- 8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), through the Automated Fluid Minerals Support System (AFMSS) with the Field Manager, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM 87402. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show <u>date</u> well was plugged.
- 9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d) and 43 CFR 3172.12(a)(10). Unless otherwise approved.
- 10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

BLM FLUID MINERALS P&A Geologic Report

Date Completed: 01/17/2024

Well No. San Juan 29-5 Unit 102 (API 30-039	Location	NENE		
Lease No. NMSF 0080179	Sec. 9	T29N		R5W
Operator Hilcorp Energy Company	County	San Jua	n State	New Mexico
Total Depth 4010' (TD) 3995' (F) Formation	Pictured C	liffs	
Elevation (GL) 6797'				

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					Surface/freshwater sands
Nacimiento Fm	2064				Possible freshwater sands
Ojo Alamo Ss			2903		Aquifer (possible freshwater)
Kirtland Shale			3312		
Fruitland Fm			3417		Coal/Gas/Possible water
Pictured Cliffs Ss			3782		Gas
Lewis Shale					
Chacra					Gas
Cliff House Ss					Water/Possible gas
Menefee Fm					Coal/Ss/Water/Possible O&G
Point Lookout Ss					Probable water/Possible O&G
Mancos Shale					
Gallup					O&G/Water
Greenhorn					
Graneros Shale					
Dakota Ss					O&G/Water

Remarks:

- Available raster log justifies the formation top locations provided by the operator for Ojo Alamo and below. The Nacimiento formation location is not definite on the log. Reviewing the reference well, the Nacimiento formation location provided by the operator for the 102 well is appropriate. The thickness of the Nacimiento, formation top to the formation top of the Ojo Alamo, is reasonable for this area.

Reference Well: US Well No. 30-039-22467 San Juan 29 5 Unit 103 ConocoPhillips Company Sec 4, T 29 N, R 5 W

Prepared by: Kenneth Rennick

State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division Standard Plugging Conditions



This document provides OCD's general plugging conditions of approval. It should be noted that the list below may not cover special plugging programs in unique and unusual cases, and OCD expressly reserves the right to impose additional requirements to the extent dictated by project conditions. The OCD also reserves the right to approve deviations from the below conditions if field conditions warrant a change. A C-103F NOI to P&A must be approved prior to plugging operations. Failure to comply with the conditions attached to a plugging approval may result in a violation of 19.15.5.11 NMAC, which may result in enforcement actions, including but not limited to penalties and a requirement that the well be re-plugged as necessary.

- 1. Notify OCD office at least 24 hours before beginning work and seek prior approval to implementing any changes to the C-103 NOI to PA.
 - North Contact, Monica Kuehling, 505-320-0243, monica.kuehling@emnrd.nm.gov
 - South Contact, Gilbert Cordero, 575-626-0830, gilbert.cordero@emnrd.nm.gov
- A Cement Bond Log is required to ensure strata isolation of producing formations, protection of
 water and correlative rights. A CBL must be run or be on file that can be used to properly
 evaluate the cement behind the casing.

Note: Logs must be submitted to OCD via OCD permitting. A copy of the log may be emailed to OCD inspector for faster review times, but emailing does not relieve the operators obligation to submit through OCD permitting.

- 3. Once Plugging operations have commenced, the rig must not rig down until the well is fully plugged without OCD approval. If gap in plugging operations exceeds 30 days, the Operator must file a subsequent sundry of work performed and revised NOI for approval on work remaining. At no time shall the rig be removed from location if it will result in waste or contamination of fresh water.
- 4. Insure all bradenheads have been exposed, identified and valves are operational prior to rig up.
- 5. Fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.
 - North, water or mud laden fluids
 - South, mud laden fluids
- 6. Closed loop system is to be used for entire plugging operation. Upon completion, contents of steel pits are to be hauled to an OCD permitted disposal facility.
- 7. Class of cement shall be used in accordance with the below table for depth allowed.

Class	TVD Lower Limit (feet)
Class A/B	6,000
Class I/II	6,000
Class C or III	6,000
Class G and H	8,000
Class D	10,000

Class E	14,000
Class F	16,000

- 8. After cutting the well head any "top off cement jobs" must remain static for 30 minutes. Any gas bubbles or flow during this 30 minutes shall be reported to the OCD for approval of next steps.
- 9. Trucking companies being used to haul oilfield waste fluids (Commercial or Private) to a disposal facility shall have an approved OCD C-133 permit.
 - A copy of this permit shall be available in each truck used to haul waste products.
 - It is the responsibility of the Operator and Contractor to verify that this permit is in place prior to performing work.
 - Drivers shall be able to produce a copy upon request of an OCD Compliance Officer.
- 10. Filing a [C-103] Sub. Plugging (C-103P) will serve as notification that the well has been plugged.
- 11. A [C-103] Sub. Release After P&A (C-103Q) shall be filed no later than a year after plugging and a site inspection by OCD Compliance officer to determine if the location is satisfactorily cleaned, all equipment, electric poles and trash has been removed to meet OCD standards before bonding can be released.
- 12. Produced water or brine-based fluids may not be used during any part of plugging operations without prior OCD approval.

13. Cementing;

- All cement plugs will be neat cement and a minimum of 100' in length. 50' of calculated cement excess required for inside casing plugs and 100% calculated cement excess required on outside casing plugs.
- If cement does not exist between or behind the casing strings at recommended formation depths, the casing perforations will be shot at 50' below the formation top and the cement retainer shall be set no more than 50' from the perforations.
- WOC (Wait on Cement) time will be:
 - 4 hours for accelerated (calcium chloride) cement.
 - o 6 hours on regular cement.
- Operator must tag all cement plugs unless it meets the below condition.
 - The operator has a passing pressure test for the casing annulus and the plug is only an inside plug.
- If perforations are made operator must tag all plugs using the work string to tag unless given approval to tag with wireline by the correct contact from COA #1 of this document.
 - This includes plugs pumped underneath a cement retainer to ensure retainer seats properly after cement is pumped.
- Cement can only be bull-headed with specific prior approval.
- Squeeze pressures are not to exceed the exposed formations frac gradient or the burst pressure of the casing.
- 14. A cement plug is required to be set from 50' below to 50' above (straddling) formation tops, casing shoes, casing stubs, any attempted casing cut offs, anywhere the casing is perforated, DV tools.
 - Perforation/Formation top plug. (When there is less than 100ft between the top perforation to the formation top.) These plugs are required to be started no greater than

50ft from the top perforation. However, the plug should be set below the formation top or as close to the formation top as possible for the maximum isolation between the formations. The plug is required to be a 100ft cement plug plus excess.

- Perforation Plug when a formation top is not included. These plugs are required to be started within 50ft of the top perforation. The plug is required to be a 100ft cement plug plus excess.
- Cement caps on top of bridge plugs or cement retainers for perforation plugs, that are
 not straddling a formation top, may be set using a bailer with a minimum of 35' of
 cement in lieu of the 100' plug. The bridge plug or retainer must be set within 50ft of the
 perforations.
- Perforations are required below the surface casing shoe if cement does not exist behind
 the casing, a 30-minute minimum wait time will be required immediately after
 perforating to determine if gas and/or water flows are present. If flow is present, the
 well will be shut-in for a minimum of one hour and the pressure recorded. If gas is
 detected contact the OCD office for directions.
- 15. No more than 3000 feet is allowed between cement plugs in cased hole and no more than 2000 feet is allowed in open hole.
- 16. Formation Tops to be isolated with cement plugs, but not limited to are:
 - Northwest See Figure A
 - South (Artesia) See Figure B
 - Potash See Figure C
 - o In the R-111-P (Or as subsequently revised) Area a solid cement plug must be set across the salt section. Fluid used to mix the cement shall be saturated with the salts that are common to the section penetrated and in suitable proportions, not more than 3% calcium chloride (by weight of cement) will be considered the desired mixture whenever possible, woe 4 hours and tag, this plug will be 50' below the bottom and 50' above the top of the Formation.
 - South (Hobbs) See Figure D1 and D2
 - Areas not provided above will need to be reviewed with the OCD on a case by case basis.

17. Markers

• Dry hole marker requirements 19.15.25.10.

The operator shall mark the exact location of plugged and abandoned wells with a steel marker not less than four inches in diameter set in cement and extending at least four feet above mean ground level. The marker must include the below information:

- 1. Operator name
- 2. Lease name and well number
- 3. API number
- 4. Unit letter
- 5. Section, Township and Range
- AGRICULTURE (Below grade markers)

In Agricultural areas a request can be made for a below ground marker. For a below ground marker the operator must file their request on a C-103 notice of intent, and it must include the following;

- A) Aerial photo showing the agricultural area
- B) Request from the landowner for the below ground marker.

C) Subsequent plugging report for a well using a below ground marker must have an updated C-102 signed by a certified surveyor for SHL.

Note: A below ground marker is required with all pertinent information mentioned above on a plate, set 3' below ground level, a picture of the plate will be supplied to OCD for record, the exact location of the marker (longitude and latitude by GPS) will be provided to OCD. OCD requires a current survey to verify the location of the below ground marker, however OCD will accept a GPS coordinate that were taken with a GPS that has an accuracy of within 15 feet.

18. If work has not commenced within 1 year of the approval of this procedure, the approval is automatically expired. After 1 year a new [C-103] NOI Plugging (C-103F) must be submitted and approved prior to work.

Figure A

North Formations to be isolated with cement plugs are:

- San Jose
- Nacimiento
- Ojo Alamo
- Kirtland
- Fruitland
- Picture Cliffs
- Chacra (if below the Chacra Line)
- Mesa Verde Group
- Mancos
- Gallup
- Basin Dakota (plugged at the top of the Graneros)
- Deeper formations will be reviewed on a case-by-case basis

Figure B

South (Artesia) Formations to be isolated with cement plugs are:

- Fusselman
- Montoya
- Devonian
- Morrow
- Strawn
- Atoka
- Permo-Penn
- Wolfcamp
- Bone Springs
- Delaware, in certain areas where the Delaware is subdivided into;
 - 1. Bell Canyon
 - 2. Cherry Canyon
 - 3. Brushy Canyon
- Any salt sections
- Abo
- Yeso
- Glorieta
- San Andres
- Greyburg
- Queen
- Yates

Figure C

Potash Area R-111-P

T 18S - R 30E

Sec 10 Unit P. Sec 11 Unit M,N. Sec 13 Unit L,M,N. Sec 14 Unit C -P. Sec 15 Unit A G,H,I,J,K,N,O,P. Sec 22 Unit All

except for M. Sec 23, Sec 24 Unit C,D,E,L, Sec 26 Unit A-G, Sec 27 Unit A,B,C

T 19S - R 29E

Sec 11 Unit P. Sec 12 Unit H-P. Sec 13. Sec 14 Unit A,B,F-P. Sec 15 Unit P. Sec 22 Unit A,B,C,F,G,H,I,J K,N,O,P. Sec 23.

Sec 24. Sec 25 Unit D. Sec 26 Unit A-F. Sec 27 Unit A,B,C,F,G,H.

T 19S - R 30E

Sec 2 Unit K,L,M,N. Sec 3 Unit I,L,M,N,O,P. Sec 4 Unit C,D,E,F,G,I-P. Sec 5 Unit A,B,C,E-P. Sec 6 Unit I,O,P.

Sec 7 – Sec

10. Sec 11 Unit D, G—P. Sec 12 Unit A,B,E-P. Sec 13 Unit A-O. Sec 14-Sec 18. Sec 19 Unit A-L, P. Sec 20 – Sec 23. Sec

24 Unit C,D,E,F,L,M,N. Sec 25 Unit D. Sec 26 Unit A-G, I-P. Sec 27, Sec 28, Sec 29 Unit A,B,C,D,F,G,H,I,J,O,P. Sec 32

Unit A,B,G,H,I,J,N,O,P. Sec 33. Sec 34. Sec 35. Sec 36 Unit D,E,F,I-P.

T 19S - R 31E

Sec 7 Unit C,D,E,F,L. Sec 18 Unit C,D,E,F,G,K,L. Sec 31 Unit M. Sec 34 Unit P. Sec 35 Unit M,N,O. Sec 36 Unit O.P.

T 20S - R 29E

Sec 1 Unit H,I,P. Sec 13 Unit E,L,M,N. Sec 14 Unit B-P. Sec 15 Unit A,H,I,J,N,O,P. Sec 22 Unit A,B,C,F,G,H,I,J,O,P. Sec

23. Sec 24 Unit C,D,E,F,G,J-P. Sec 25 Unit A-O. Sec 26. Sec 27 Unit A,B,G,H,I,J,O,P. Sec 34 Unit A,B,G,H. Sec 35 Unit

A-H. Sec 36 Unit B-G.

T 20S - R 30E

Sec 1 – Sec 4. Sec 5 Unit A,B,C,E-P. Sec 6 Unit E,G-P. Sec 7 Unit A-H,I,J,O,P. Sec 8 – 17. Sec 18 Unit A,B,G,H,I,J,O,P.

Sec 19 Unit A,B,G,H,I,J,O,P. Sec 20 – 29. Sec 30 Unit A-L,N,O,P. Sec 31 Unit A,B,G,H,I,P. Sec 32 – Sec 36.

T 20S - R 31E

Sec 1 Unit A,B,C,E-P. Sec 2. Sec 3 Unit A,B,G,H,I,J,O,P. Sec 6 Unit D,E,F,J-P. Sec 7. Sec 8 Unit E-P. Sec 9 Unit E,F,J-P.

Sec 10 Unit A,B,G-P. Sec 11 – Sec 36.

T 21S - R 29E

Sec 1 – Sec 3. Sec 4 Unit L1 – L16,I,J,K,O,P. Sec 5 Unit L1. Sec 10 Unit A,B,H,P. Sec 11 – Sec 14. Sec 15 Unit A,H,I. Sec

23 Unit A,B. Sec 24 Unit A,B,C,D,F,G,H,I,J,O,P. Sec 25 Unit A,O,P. Sec 35 Unit G,H,I,J,K,N,O,P. Sec 36 A,B,C,F – P.

T 21S - R 30E

Sec 1 - Sec 36

T 21S - R 31E

Sec 1 – Sec 36

T 22S - R 28E

Sec 36 Unit A,H,I,P.

T 22S - R 29E

Sec 1. Sec 3 Unit I,J,N,O,P. Sec 9 Unit G – P. Sec 10 – Sec 16. Sec 19 Unit H,I,J. Sec 20 – Sec 28. Sec 29 Unit

A,B,C,D,G,H,I,J,O,P. Sec 30 Unit A. Section 31 Unit C – P. Sec 32 – Sec 36

T 22S - R 30E

Sec 1 – Sec 36

T 22S - R 31E

Sec 1 – Sec 11. Sec 12 Unit B,C,D,E,F,L. Sec 13 Unit E,F,K,L,M,N. Sec 14 – Sec 23. Sec 24 Unit C,D,E,F,K,L,M,N. Sec 25

Unit A,B,C,D. Sec 26 Unit A,BC,D,G,H. Sec 27 – Sec 34.

T 23S - R 28E

Sec 1 Unit A

T 23S - R 29E

Sec 1 – Sec 5. Sec 6 Unit A – I, N,O,P. Sec 7 Unit A,B,C,G,H,I,P. Sec 8 Unit A – L, N,O,P. Sec 9 – Sec 16. Sec 17 Unit

A,B,G,H,I,P. Sec 21 – Sec 23. Sec 24 Unit A – N. Sec 25 Unit D,E,L. Sec 26. Sec 27. Sec 28 Unit A – J, N,O,P. Sec 33

Unit A,B,C. Sec 34 Unit A,B,C,D,F,G,H. Sec 35. Sec 36 Unit B,C,D,E,F,G,K,L.

T 23S - R 30E

Sec 1 – Sec 18. Sec 19 Unit A – I,N,O,P. Sec 20, Sec 21. Sec 22 Unit A – N, P. Sec 23, Sec 24, Sec 25. Sec 26 Unit

A,B,F-P. Sec 27 Unit C,D,E,I,N,O,P. Sec 28 Unit A – H, K,L,M,N. Sec 29 Unit A – J, O,P. Sec 30 Unit A,B. Sec 32 A,B. Sec

33 Unit C,D,H,I,O,P. Sec 34, Sec 35, Sec 36.

T 23S - R 31E

Sec 2 Unit D,E,J,O. Sec 3 – Sec 7. Sec 8 Unit A – G, K – N. Sec 9 Unit A,B,C,D. Sec 10 Unit D,P. Sec 11 Unit G,H,I,J,M,N,O,P. Sec 12 Unit E,L,K,M,N. Sec 13 Unit C,D,E,F,G,J,K,L,M,N,O. Sec 14. Sec 15 Unit A,B,E – P. Sec 16 Unit

I, K – P. Sec 17 Unit B,C,D,E, I – P. Sec 18 – Sec 23. Sec 24 Unit B – G, K,L,M,N. Sec 25 Unit B – G, J,K,L. Sec 26 – Sec

34. Sec 35 Unit C,D,E.

T 24S - R 29E

Sec 2 Unit A, B, C, D. Sec 3 Unit A

T 24S - R 30E

Sec 1 Unit A – H, J – N. Sec 2, Sec 3. Sec 4 Unit A,B,F – K, M,N,O,P. Sec 9 Unit A – L. Sec 10 Unit A – L, O,P. Sec 11.

Sec 12 Unit D,E,L. Sec 14 Unit B – G. Sec 15 Unit A,B,G,H.

T 24S – R 31E Sec 3 Unit B – G, J – O. Sec 4. Sec 5 Unit A – L, P. Sec 6 Unit A – L. Sec 9 Unit A – J, O,P. Sec 10 Unit B – G, K – N. Sec 35 Unit E – P. Sec 36 Unit E,K,L,M,N.

T 25S – R 31E Sec 1 Unit C,D,E,F. Sec 2 Unit A – H.

Figure D1 and D2

South (Hobbs) Formations to be isolated with cement plugs are:

The plugging requirements in the Hobbs Area are based on the well location within specific areas of the Area (See Figure D1). The Formations in the Hobbs Area to be isolated with cement plugs are (see Figure D2)

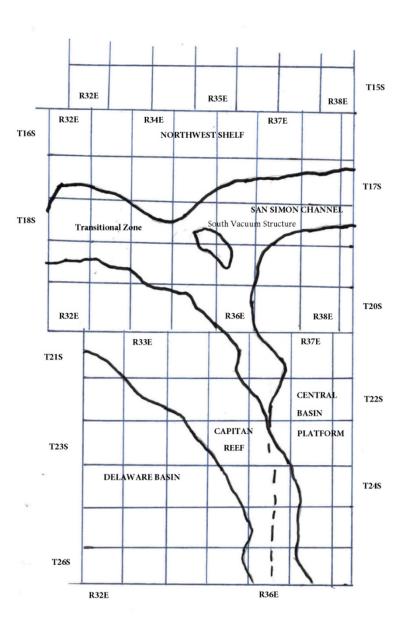


Figure D1 Map

Figure D2 Formation Table

	100'	Plug to isolate upper a	nd lower fresh water	zones (typically 250' to	350')	
Northwest Shelf	Captan Reef Area	Transition Zone	San Simon Channel	South Vacuum Structure	Delaware Basin	Central Basin Platform
Granit Wash (Detrital						Granit Wash (Detrital
basement material and						basement material,
fractured pre-Cambrian	Siluro-Devonian	Morrow	Siluro-Devonian	Ellenburger	Siluro-Devonian	fractured pre-Cambrian
basement rock)						basement rock and fracture
basement rock)						Mafic Volcanic intrusives).
Montoya	Mississippian	Atoka	Morrow	Mckee	Morrow	Ellenburger
Fusselman	Morrow	Strawn	Wolfcamp	Siluro-Devonian	Atoka	Connell
Woodford	Atoka	Cisco	Abo Reef	Woodford	Strawn	Waddell
Siluro-Devonian	Strawn	Pennsylvanian	Bone Spring	Mississippian	Pennsylvanian	Mckee
Chester	Pennsylvanian	Wolfcamp	Delaware	Barnett Shale	Lower Wolfcamp	Simpson Group
Austin	Wolfcamp	Bone Spring	San Andres	Morrow	Upper Wolfcamp	Montoya
Mississippian	Abo Reef, if present	Delaware	Queen	Atoka	Wolfcamp	Fusselman
Morrow	Abo, if present	San Andres	Yates	Strawn	Third Bone Spring Sand (Top of Wolfbone)	Silurian
Atoka	Queen, if present	Grayburg-San Andres	Base of Salt	Canyon	First Bone Spring Sand (Top of Lower Bone Spring)	Devonian
Lower Pennsylvanian	Bone Spring	Queen	Rustler	Pennsylvanian	Bone Spring	Strawn
Cisco-Canyon	Delaware	Seven Rivers		Blinebry	Brushy Canyon	Pennsylvanian
Pennsylvanian	Base Capitan Reef	Yates		Bone Spring	Delaware (Base of Salt)	Wolfcamp
Bough	Seven Rivers	Base of Salt		San Andres	Rustler	Abo
Wolfcamp	Yates	Rustler		Queen		Abo Reef
Abo	Top Capitan Reef			Base of Salt		Drinkard
Abo Reef, if present	Base of Salt			Rustler		Tubb
Yeso (Township 15 South to	Rustler					Blinebry
Township 17 South)	nustiei					Billiebly
Drinkard or Lower Yeso						
(Township 15 South to						Paddock
Township 17 South)						
Tubb (Township 15 South to						Glorieta
Township 17 South)						Cioneta
Blinebry (Township 15 South						San Andres
to Township 17 South)						SarrAndres
Paddock (Township 15						Grayburg
South to Township 17 South)						
Glorieta						Grayburg-San Andres
San Andres						Queen
Queen (Township 15 South						Seven Rivers
to Township 17 South)				1		
Seven Rivers (Township 15						Yates
South to Township 17 South) Yates (Township 15 South to						
Township 17 South to						Base of Salt
Base of Salt						Rustler
Bustler Bustler						1 Interation

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

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 304944

CONDITIONS

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	304944
	Action Type:
	[C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	Notify NMOCD 24 hours prior to moving on - Monitor pressures on strings daily - if pressure on the bradenhead cannot go past the kirtland. When running surface plug make sure good cement to surface before stopping COAS attached	1/18/2024