

U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

<b>Well Name:</b> WF FEDERAL 5	<b>Well Location:</b> T29N / R14W / SEC 5 / SWNW / 36.758894 / -108.326307	<b>County or Parish/State:</b> SAN JUAN / NM
<b>Well Number:</b> 1R	<b>Type of Well:</b> OTHER	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMSF079968	<b>Unit or CA Name:</b> WF FEDERAL 5	<b>Unit or CA Number:</b> NMNM103036
<b>US Well Number:</b> 3004531353	<b>Well Status:</b> Gas Well Shut In	<b>Operator:</b> HILCORP ENERGY COMPANY

**Notice of Intent**

**Sundry ID:** 2649569

**Type of Submission:** Notice of Intent

**Type of Action:** Plug and Abandonment

**Date Sundry Submitted:** 12/17/2021

**Time Sundry Submitted:** 04:19

**Date proposed operation will begin:** 01/10/2022

**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 not required as location is FEE Surface. A closed loop system will be used.

**Surface Disturbance**

**Is any additional surface disturbance proposed?:** No

**NOI Attachments**

**Procedure Description**

WF\_Federal\_5\_1R\_PA\_Procedure\_for\_NOI\_20211217161828.pdf

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**Operator:** HILCORP ENERGY COMPANY

### Conditions of Approval

#### Additional Reviews

- 2649569\_NOIA\_1R\_3004531353\_KR\_01062021\_20220106172027.pdf
- General\_Requirement\_PxA\_20220106172013.pdf
- 29N14W05EKpc\_WF\_Federal\_5\_1R\_20220106122427.pdf

### Operator Certification

*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 submission of Form 3160-5 or a Sundry Notice.*

**Operator Electronic Signature:** KANDIS ROLAND

**Signed on:** DEC 17, 2021 04:18 PM

**Name:** HILCORP ENERGY COMPANY

**Title:** Operation Regulatory Tech

**Street Address:** 382 Road 3100

**City:** Farmington **State:** NM

**Phone:** (505) 599-3400

**Email address:** kroland@hilcorp.com

### Field Representative

**Representative Name:**

**Street Address:**

**City:** **State:** **Zip:**

**Phone:**

**Email address:**

### BLM Point of Contact

**BLM POC Name:** KENNETH G RENNICK

**BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5055647742

**BLM POC Email Address:** krennick@blm.gov

**Disposition:** Approved

**Disposition Date:** 01/06/2022

**Signature:** Kenneth Rennick

**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
FARMINGTON DISTRICT OFFICE  
6251 COLLEGE BLVD.  
FARMINGTON, NEW MEXICO 87402**

Attachment to notice of  
Intention to Abandon

Re: Permanent Abandonment  
Well: WF Federal 5 1R

**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.

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

K. Rennick 1/6/2022

**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 minimum general 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.**

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<sub>2</sub>S.

8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, 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 date 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). 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:** 01/06/2022

Well No. WF Federal 5 #1R (API# 30-045-31353)	Location	1555	FNL	&	710	FWL
Lease No. NMSF-079968	Sec. 05	T29N			R14W	
Operator Hilcorp Energy Company	County	San Juan		State	New Mexico	
Total Depth 890'	PBTD 850'	Formation Pictured Cliffs (TD), Fruitland (producing)				
Elevation (GL) 5370'		Elevation (KB) 5375'				

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					Surface/freshwater sands
Nacimiento Fm					Possible freshwater sands
Ojo Alamo Ss					Aquifer (possible freshwater)
Kirtland Shale	Surface	451			
Fruitland Fm	451	773			Coal/Gas/Possible water
Pictured Cliffs Ss	773	PBTD			Gas
Lewis Shale					
Chacara					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:

P &amp; A

- BLM estimate for the Fruitland formation top varies from Operator's submission.

- No CBL on file.

- The plugs proposed in the P&A procedure will adequately protect any freshwater sands in this well bore.
- Fruitland perfs 506' – 560'.

Reference Well:

1) **Formation Tops**  
Same

**Prepared by:** Chris Wenman



## P&A Procedure

General Information			
<b>Well Name</b>	WF Federal 5 #1R	<b>Date:</b>	12/13/2021
<b>API:</b>	30-045-31353	<b>AFE #</b>	
<b>Field:</b>	San Juan	<b>County</b>	San Juan
<b>Status:</b>	Well is ACOI		
<b>Subject:</b>	Permanently P&A wellbore		
<b>By:</b>	M. Wissing		

### Well Data

Surface Casing: 7" 20# J-55 at 128'

Production Casing: 4-1/2" J-55 10.5# at 720'

Production Tubing: 2-3/8" J-55 4.7# at 829'

Current Perforations: 506' – 560'

Current PBTD: 850' (cement plug)

SICP = 10 psig

**Notes:** Possible hole in tubing; tubing went into vacuum when water was pumped from surface.

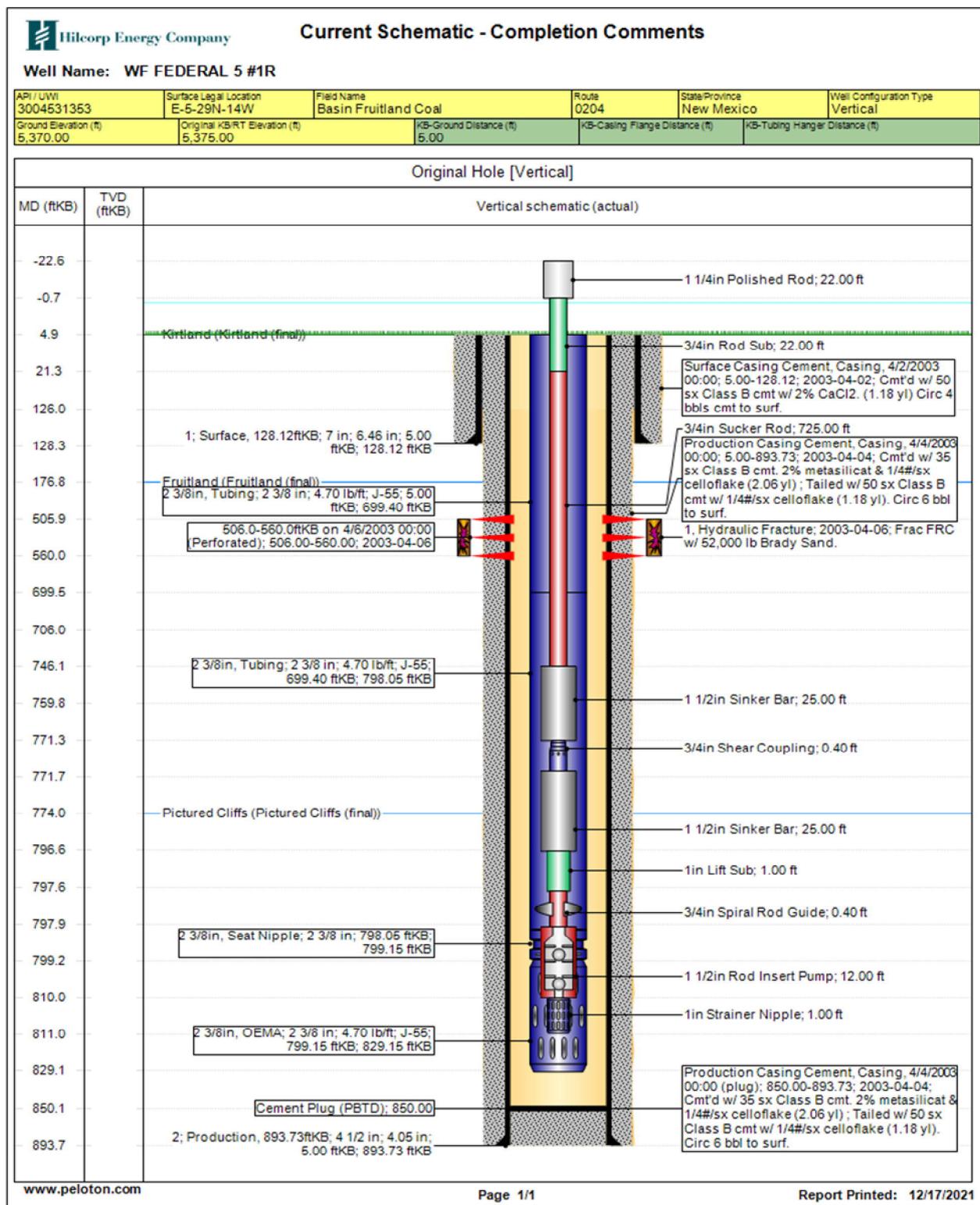
Hold PJSM prior to begin all operations. Properly document all operations via the JSA process. Ensure that all personnel onsite abide by HEC safety protocol, including PPE, housekeeping, and standard guidelines. Verify cathodic protection is off and wellhead instrumentation is properly disconnected from the wellhead. Comply with all NMOCD, BLM, and HEC safety and environmental regulations. Verify there is no H<sub>2</sub>S present prior to beginning operations. If any H<sub>2</sub>S is present, take the necessary actions to ensure that the location is safe prior to beginning operations. Observe and record pressures across all strings daily, prior to beginning operations.

Remember to notify NMOCD & BLM 24 hours prior to starting operations on location. This procedure is contingent upon P&A sundry approval by both the NMOCD and BLM.

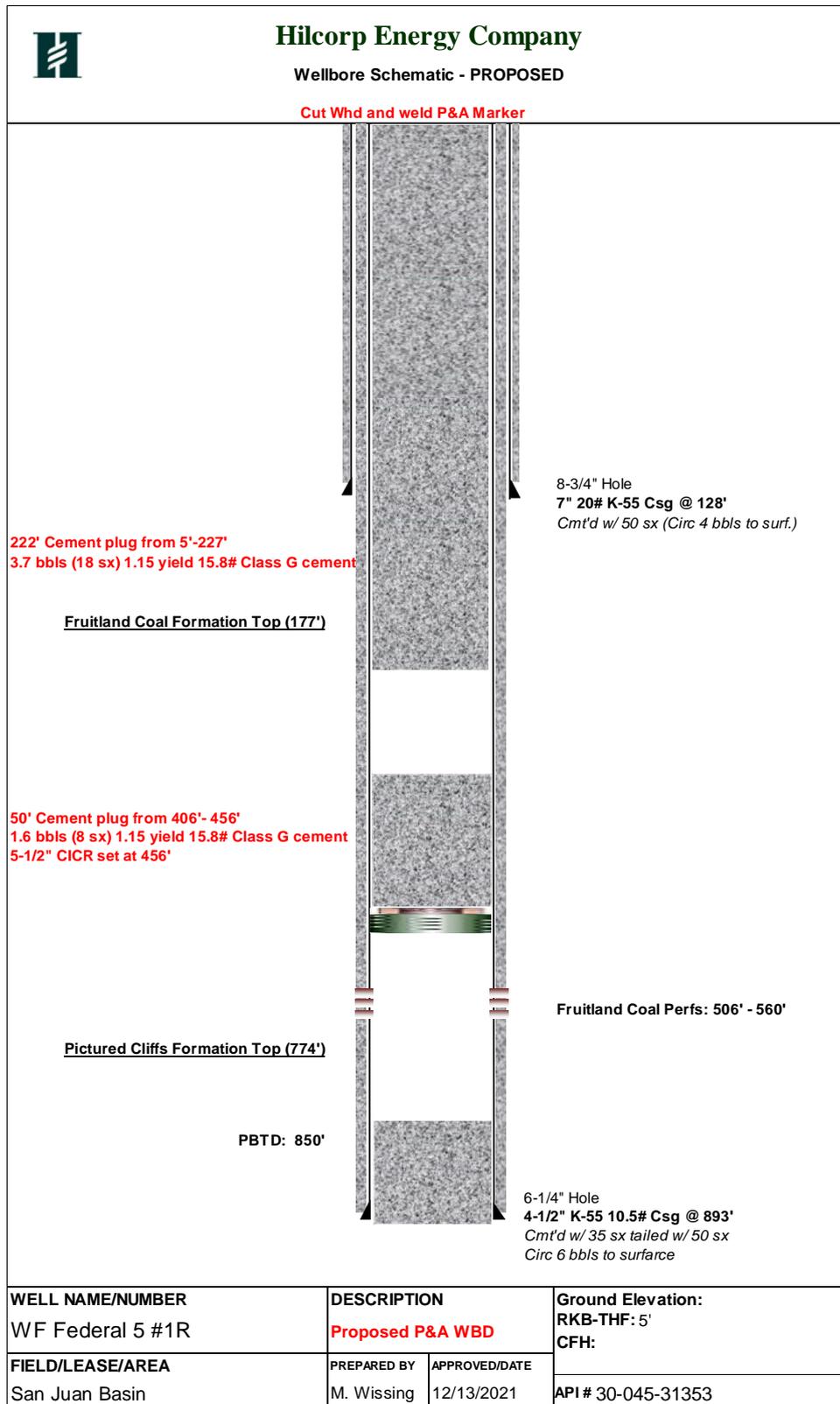
## P&A Rig Procedure

1. MIRU P&A rig and equipment. Record pressures on all strings.
2. Unseat rod pump and POOH with rod string & rod pump. NU BOP & test. TOOH with production tbg.
3. RIH with 4.5" casing scraper to +/- 470'.
4. MU 4.5" CICR and RIH. Set CICR at 456'
  - a. **Top Fruitland Coal perf at 506'**
5. Load wellbore with KCl water and circulate wellbore clean. Pressure test the casing to 500 psi to verify wellbore integrity and CICR is set.
6. **Cement Plug #1 (Fruitland Coal):** RU cementers and pump a 50' balanced cmt plug inside the 4-1/2" csg from 406' – 456', using 1.8 bbls (8 sx) of 15.8+ ppg Class G cmt.
7. TOOH with tbg to 227'.
  - a. **Top Fruitland Coal formation top at 177'**
8. **Cement Plug #2 (Surface & Fruitland Coal Top):** RU cementers and pump a 222' balanced cmt plug from Surface – 227' inside the 4-1/2" using 3.7 bbls (18 sx) of 15.8 ppg Class G cmt.
9. WOC 4 hrs. Verify all pressures on all strings are 0 psi.
10. ND BOP. Tag cmt and top off wellbore as needed. Cutoff wellhead at surface and weld P&A marker.
11. RDMO P&A rig.

## CURRENT WELLBORE SCHEMATIC



## PROPOSED P&A WELLBORE SCHEMATIC



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

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

CONDITIONS  
 Action 71017

**CONDITIONS**

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 71017
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

**CONDITIONS**

Created By	Condition	Condition Date
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	1/13/2022
kpickford	Adhere to BLM approved COAs and plugs. See GEO report.	1/13/2022