

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

Lease Number: NMNM05791

Sundry Print Repor

Well Name: DAWSON A Well Location: T27N / R8W / SEC 4 /

NWSW / 36.600516 / -107.693562

JUAN / NM

Well Number: 1G Type of Well: CONVENTIONAL GAS

WELL

Allottee or Tribe Name:

County or Parish/State: SAN

**Unit or CA Name: Unit or CA Number:** 

**US Well Number: 3004531128 Operator: HILCORP ENERGY** 

COMPANY

#### **Notice of Intent**

**Sundry ID: 2831839** 

Type of Submission: Notice of Intent Type of Action: Plug and Abandonment

Date Sundry Submitted: 01/15/2025 **Time Sundry Submitted: 11:23** 

Date proposed operation will begin: 02/28/2025

Procedure Description: Hilcorp Energy Company requests permission to P&A the subject well per the attached procedure, current and proposed wellbore schematics. The Pre-Disturbance Site Visit was held on 01/14/2025 with Roger Herrera / BLM, Buck Wheeler (Enterprise) and Bryan Hall (HEC). 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** 

2025\_01\_07\_\_\_DAWSON\_A\_1G\_\_\_P\_A\_NOI\_20250115112224.pdf

Page 1 of 2

eceived by OCD: 2/11/2025 7:57:14 AM Well Name: DAWSON A

Well Location: T27N / R8W / SEC 4 /

NWSW / 36.600516 / -107.693562

County or Parish/State: SAN

JUAN / NM

Well Number: 1G

Type of Well: CONVENTIONAL GAS

WELL

**Allottee or Tribe Name:** 

Lease Number: NMNM05791

**Unit or CA Name:** 

**Unit or CA Number:** 

**US Well Number:** 3004531128

**Operator:** HILCORP ENERGY COMPANY

### **Conditions of Approval**

#### **Additional**

General\_Requirement\_PxA\_20250210132536.pdf

2831839\_NOI\_PnA\_Dawson\_A\_1G\_3004531128\_MHK\_02.10.2025\_20250210132525.pdf

Dawson\_A\_1G\_Geo\_Rpt\_20250210112539.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: TAMMY JONES Signed on: JAN 15, 2025 11:23 AM

Name: HILCORP ENERGY COMPANY

Title: Regulatory Compliance Specialist

Street Address: 382 ROAD 3100

City: AZTEC State: NM

Phone: (505) 324-5185

Email address: TAJONES@HILCORP.COM

#### **Field**

**Representative Name:** 

**Street Address:** 

City: State:

Phone:

**Email address:** 

#### **BLM Point of Contact**

Signature: Matthew Kade

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:** 02/10/2025

Zip:



## DAWSON A 1G P&A NOI

API#:

3004531128

#### JOB PROCEDURES

- 1. Contact NMOCD and BLM (where applicable) 24 hours prior to MIRU.
- 2. Hold pre-job safety meeting. Verify cathodic is off. Comply with all NMOCD, BLM, and HEC safety and environmental regulations.
- 3. MIRU service rig and associated equipment; POOH w/ rods & pump. NU and test BOP. POOH w/ tubing.
- 4. Set a 4-1/2" CIBP or CICR at +/- 6,994' to isolate the DK Perfs.
- 5. Load the well as needed. RU Wireline. Run CBL. Record Top of Cement. All subsequent plugs below are subject to change pending CBL results.
- 6. PU & TIH w/ work string to +/- 6,994'.
- 7. PLUG #1: 14sx of Class G Cement (15.8 PPG, 1.15 yield); DK Perfs @ 7,044' | DK Top @ 6,920' | GRN Top @ 6,919':

Pump a 14 sack balanced cement plug inside the 4-1/2" casing (est. TOC @ +/- 6,819' & est. BOC @ +/- 6,994'). Wait on Cement for 4 hours, tag TOC w/ work string. \*Note cement plug lengths & volumes account for excess.

- 8. POOH w/ work string to +/- 6,142'.
- 9. PLUG #2: 12sx of Class G Cement (15.8 PPG, 1.15 yield); GAL Top @ 6,092':

Pump a 12 sack balanced cement plug inside the 4-1/2" casing (est. TOC @ +/- 5,992' & est. BOC @ +/- 6,142'). Wait on Cement for 4 hours, tag TOC w/ work string. \*Note cement plug lengths & volumes account for excess.

- 10. POOH w/ work string to +/- 5,359'.
- 11. PLUG #3: 12sx of Class G Cement (15.8 PPG, 1.15 yield); MCS Top @ 5,309':

Pump a 12 sack balanced cement plug inside the 4-1/2" casing (est. TOC @ +/- 5,209' & est. BOC @ +/- 5,359'). Wait on Cement for 4 hours, tag TOC w/ work string. \*Note cement plug lengths & volumes account for excess.

- 12. POOH w/ work string .
- 13. Set a 4-1/2" CIBP or CICR at +/- 4,288' to isolate the MV Perfs.
- 14. TIH w/ work string to +/- 4,288'.
- 15. PLUG #4: 12sx of Class G Cement (15.8 PPG, 1.15 yield); MV Perfs @ 4,328' | MV Top @ 4,238':

Pump a 12 sack balanced cement plug inside the 4-1/2" casing (est. TOC @ +/- 4,138' & est. BOC @ +/- 4,288'). Wait on Cement for 4 hours, tag TOC w/ work string. \*Note cement plug lengths & volumes account for excess.

- 16. POOH w/ work string .
- 17. Set a 4-1/2" CICR at +/- 3,605' to isolate the CHC Perfs.
- 18. TIH w/ work string to +/- 3,605'. Sting into 4-1/2" CICR. Establish injection.
- 19. PLUG #5: 12sx of Class G Cement (15.8 PPG, 1.15 yield); CHC Top @ 3,605':

Pump 4sx of cement beneath the 4-1/2" CICR (est. TOC @ +/- 3,605' & est. BOC @ +/- 3,655'). Pump an 8 sack balanced cement plug on top of the CICR. (est. TOC @ +/- 3,505' & est. BOC @ +/- 3,605'). Wait on Cement for 4 hours, tag TOC w/ work string. \*Note cement plug lengths & volumes account for excess.

- 20. Load the well as needed. Pressure test the casing above the plug to 560 psig.
- 21. POOH w/ work string to +/- 3.147'.
- 22. PLUG #6: 12sx of Class G Cement (15.8 PPG, 1.15 yield); Int. Casing Shoe @ 3,097':

Pump a 12 sack balanced cement plug inside the 4-1/2" casing (est. TOC @ +/- 2,997' & est. BOC @ +/- 3,147').\*Note cement plug lengths and volumes account for excess.

- 23. POOH w/ work string to +/- 2,711'.
- 24. PLUG #7: 12sx of Class G Cement (15.8 PPG, 1.15 yield); PC Top @ 2,661':

Pump a 12 sack balanced cement plug inside the 4-1/2" casing (est. TOC @ +/- 2,561' & est. BOC @ +/- 2,711').\*Note cement plug lengths & volumes account for excess.

25. TOOH w/ work string. TIH & perforate squeeze holes @ +/- 2,272'. RIH w/ 4-1/2" CICR and set CICR @ +/- 2,222'. TIH w/ work string & sting into CICR. Establish injection & circulation.

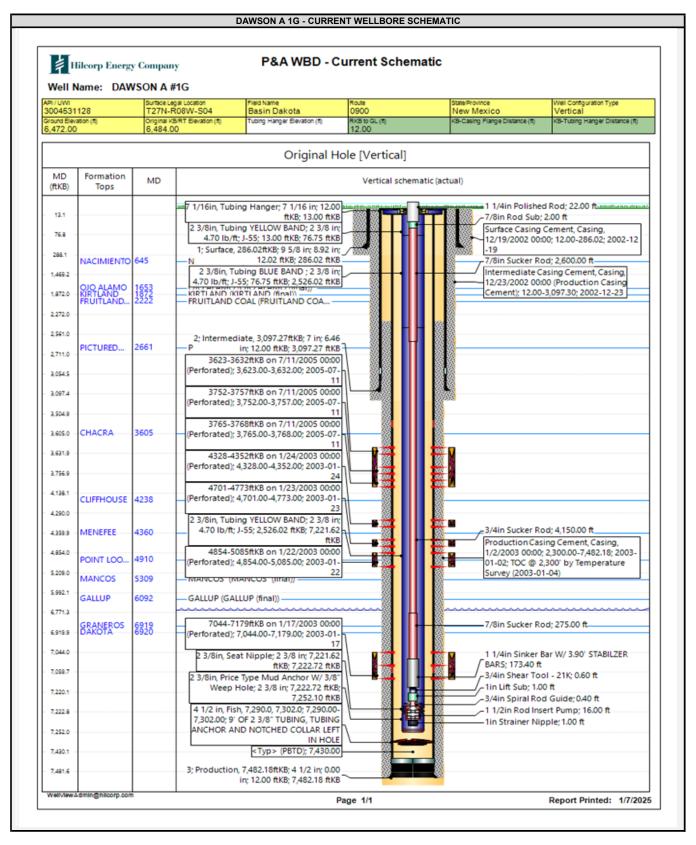
TOC w/ work string.

- 26. PLUG #8: 244sx of Class G Cement (15.8 PPG, 1.15 yield); FRD Top @ 2,222' | KRD Top @ 1,872' | OJO Top @ 1,653':
  - Pump 105sx of cement in the 7" casing X 8-3/4" open hole annulus (est. TOC @ +/- 1,469' & est. BOC @ +/- 2,272'). Continue pumping 82sx of cement in the 4-1/2" casing X 7" casing annulus (est. TOC @ +/- 1,469' & est. BOC @ +/- 2,272'). Pump an additional 4sx of cement beneath the 4-1/2" CICR (est. TOC @ +/- 2,222' & est. BOC @ +/- 2,272'). Sting out of retainer, pump a 53 sack balanced cement plug on top of the CICR. (est. TOC @ +/- 1,553' & est. BOC @ +/- 2,222'). WOC for 4 hrs, tag TOC w/ work string. \*Note cement plug lengths and volumes account for excess.
- 27. TOOH w/ work string. TIH and perforate squeeze holes @ +/- 695'. TIH with tubing/work string.
- 28. PLUG #9: 222sx of Class G Cement (15.8 PPG, 1.15 yield); NAC Top @ 645' | Surf. Casing Shoe @ 286':

  Pump 54sx of cement in the 7" casing X 8-3/4" open hole annulus (est. TOC @ +/- 286' & est. BOC @ +/- 695'). Continue pumping 42sx of cement in the 7" casing X 9-5/8" casing annulus (est. TOC @ +/- 0' & est. BOC @ +/- 286'). Continue pumping 71sx of cement in the 4-1/2" casing X 7" casing annulus (est. TOC @ +/- 695'). Pump a 55 sack balanced cement plug inside the 4-1/2" casing (est. TOC @ +/- 0' & est. BOC @ +/- 695'). WOC for 4 hrs, tag
- 29. ND BOP, cut off casing below casing flange. Top off cement in surface casing annulus and all other strings, if needed. Install a P&A marker with cement to comply with regulations. Rig down, move off location, cut off anchors, and restore location.

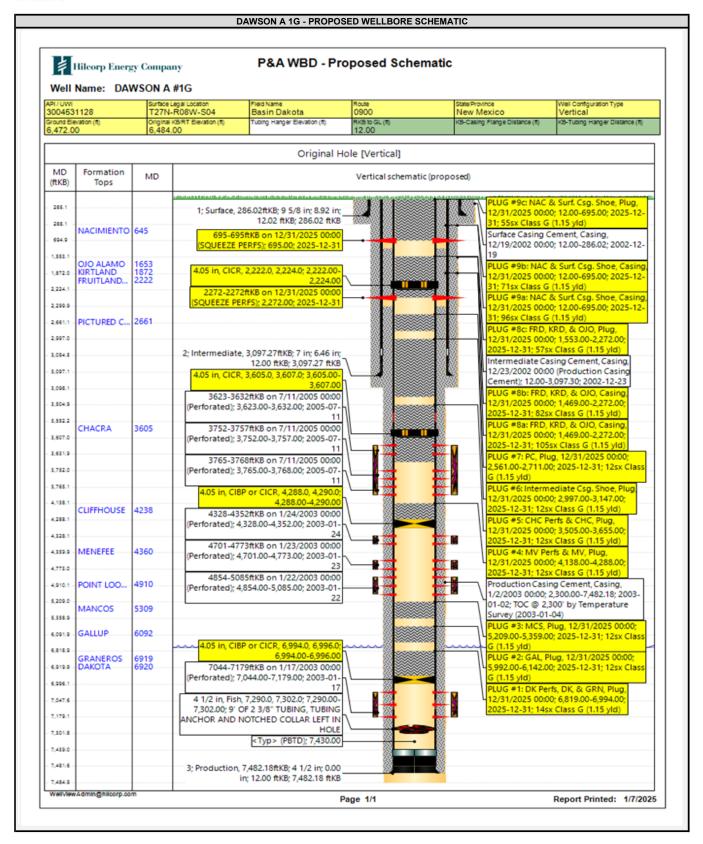


#### HILCORP ENERGY COMPANY DAWSON A 1G P&A NOI





#### HILCORP ENERGY COMPANY DAWSON A 1G P&A NOI



Hilcorp Energy
P&A Final Reclamation Plan
Dawson A 1G
API: 30-045-31128
T27N-R8W-Sec. 04-Unit L
LAT: 36.600549 LONG: -107.693006 NAD 27
1500' FSL & 475' FWL
San Juan County, NM

#### 1. PRE- RECLAMATION SITE INSPECTION

A pre-reclamation site inspection was completed with Roger Herrera (BLM), Buck Wheeler (Enterprise), and Bryan Hall Hilcorp Energy SJ South Construction Foreman on January 14, 2025.

#### 2. LOCATION RECLAMATION PROCEDURE

- 1. Removal of all equipment, separator, meter run, anchors, flowlines, fence, BGT and tank.
- 2. All trash and debris will be removed within a 50' buffer outside of the location disturbance during reclamation.
- 3. Bury gravel
- 4. Strip topsoil.
- 5. Push fill east to recreate natural terrain. Leaving valley in the middle of the two ridges.
- 6. Add silt traps as necessary.
- 7. Rip and seed pad.
- 8. Enterprise to remove pipeline 50' off location, at the road crossings, remove the dogleg and leg off at the Dawson A 1F. All other piping will be abandoned in place.

#### 3. ACCESS ROAD RECLAMATION PROCEDURE

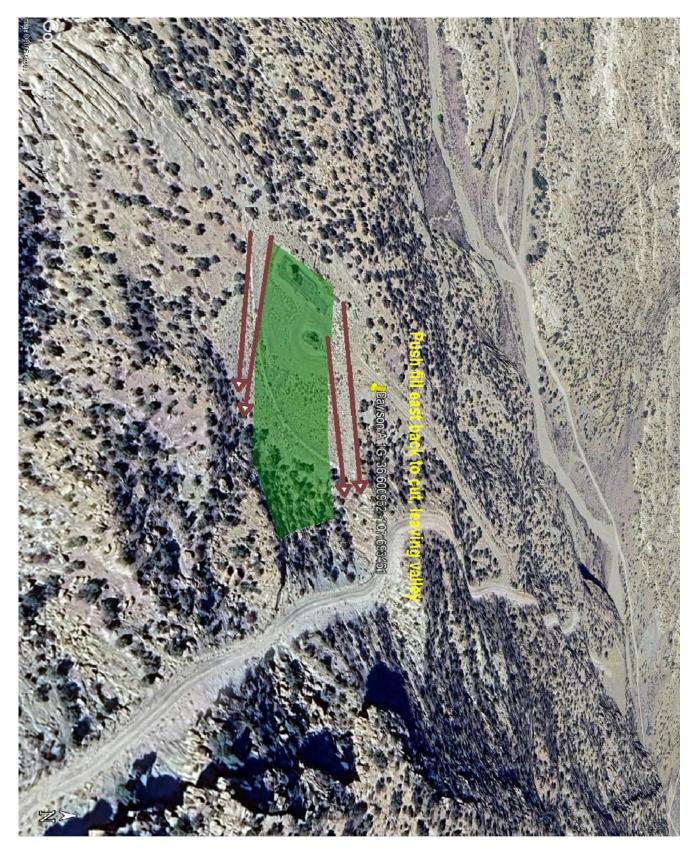
- 1. Reclaim road by pulling material back as much as possible, add water bars as necessary, build berm at main road.
- 2. Road from Dawson A 1 F will also be reclaimed, by pulling material back and adding water bars as necessary.
- 3. Remove all culverts.
- 4. Rip and seed road. Broad cast method will be used due to terrain.

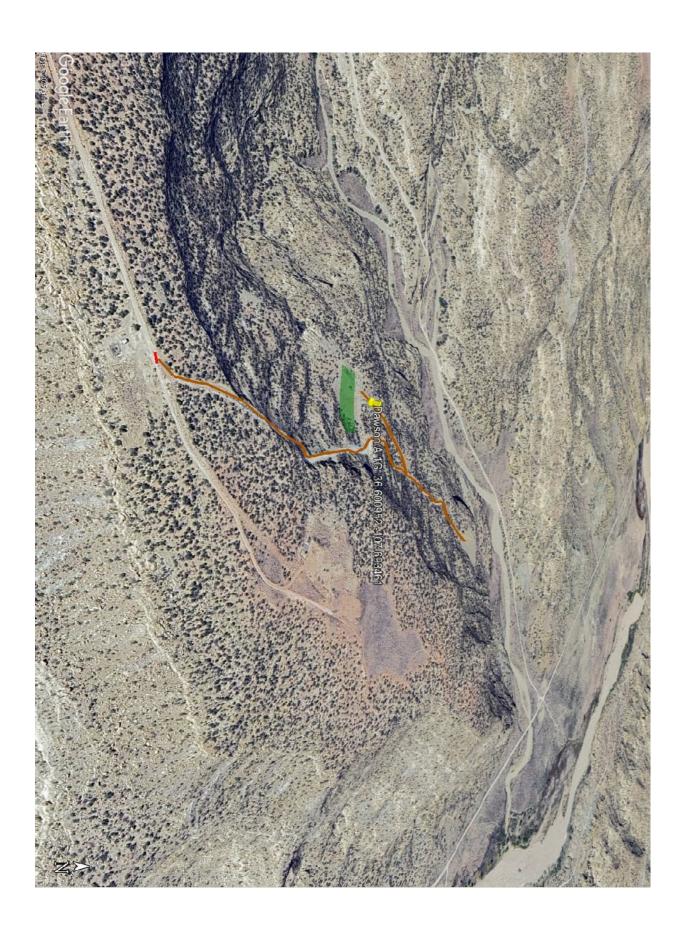
#### 4. SEEDING PROCEDURE

- 1. BLM Special 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.





# 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

- 5.1 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 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) 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 - FFO - Geologic Report**

Date Completed 2/10/2025

Well: Dawson A 1G

Surf. Loc. 1500 FSL 475 FWL Lease: NMNM05791 Sec. 4 T27N R8W

Operator Hilcorp Energy Co. County San Juan State New Mexico

TD 7485 PBTD 7485 Formation: DK, MV, Chc, Elevation: GL 6472 Elevation: Est. KB 6484

Geologic Formations San Jose Fm.	Est. tops Surface	Subsea Elev.	Remarks
Nacimiento Fm.	1164	5320	Surface /fresh water sands
Ojo Alamo Ss	1759	4725	Aquifer (fresh water)
Kirtland Fm.	1879	4605	,
Fruitland Fm.	2289	4195	Coal/gas/possible water
Pictured Cliffs	2679	3805	Possible water
Lewis Shale (main)	2799	3685	
Huerfanito Bentonite	3174	3310	Reference bed
Chacra (lower)	3579	2905	Possible gas, water
Lewis Sh stringer	4094	2390	Possible gas, water
Cliff House	4319	2165	Possible gas, water
Menefee Fm.	4374	2110	Coal/ss/water/possible gas
Point Lookout Fm.	4914	1570	Possible gas, water
Mancos Shale	5254	1230	Petroleum source rock
Gallup	6094	390	Petroleum source rock
Juana Lopez	6314	170	
Mancos Stringer	6424	60	
Greenhorn	6764	-280	
Graneros	6854	-370	
Dakota	6924	-440	O&G
Morrison	7079	-595	Possible gas, water

#### Remarks:

- Vertical wellbore all fm. tops are TVD.
- -Modify the Plug 1 TOC to 6754' to account for the BLM geologist's pick for the Graneros.
- -Modify the Plug 2 BOC to 6144.
- -Modify the Plug 3 BOC to 5304' and the TOC to 5154' to account for the BLM geologist's pick for the Mancos.
- -Plug 4 is acceptable.
- -Move the Plug 5 TOC to 3479' to account for the BLM geologist's pick for the Chacra.
- -Plug 6 is acceptable.
- -Modify the Plug 7 BOC to 2729' and the TOC to 2579' to account for the BLM geologist's pick for the Pictured Cliffs.
- -Move the Plug 8 CICR to 2289' and move the BOC to 2339' to account for the BLM Geologists pick for the Fruitland. The TOC is acceptable.
- -Add a plug from 1214' to 1064' to account for the BLM geologist's pick for the Nacimiento.
- -Plug 9 is acceptable as described.

#### Reference Well:

Hilcorp Energy Co Filan 4 1530' FNL, 1050' FEL 27N-8W-5H GL= 5955', KB= 5965' Surface - Lewis Shale

Hilcorp Energy Co Dawson A No 1 790' FSL, 1450' FWL 27N-8W-4N GL= 6723', KB= 6740' Huerfanito Bentonite -Morrison

Prepared by: Walter Gage



### United States Department of the Interior

BUREAU OF LAND MANAGEMENT Farmington District Office 6251 College Boulevard, Suite A Farmington, New Mexico 87402 http://www.blm.gov/nm



#### **CONDITIONS OF APPROVAL**

February 10, 2025

#### **Notice of Intent - Plug and Abandonment**

**Operator:** Hilcorp Energy Company

Lease: NMNM05791

**Well(s):** Dawson A 1G, API # 30-045-31128

**Location:** NWSW Sec 4 T27N R8W (San Juan County, NM)

Sundry Notice ID#: 2831839

The Notice of Intent to Plug and Abandon is accepted with the following Conditions of Approval (COA):

1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."

#### 2. The following modifications to your plugging program are made:

- a. Adjust Plug 1 (Dakota/Graneros) TOC to 6754' to account for the BLM geologist's pick for the Graneros formation top (6854'). If plug is tagged, the tag must be at 6804' or higher.
- b. Adjust Plug 3 (Mancos) to account for the BLM geologist's pick for the Mancos formation top @ 5254'. Plug 3 should cover at a minimum 5304' up to 5154', estimated 12 sx Class G.
- c. Adjust Plug 5 (Chacra) TOC to 3479' to account for the BLM geologist's pick for the Lower Chacra formation top (3579'). If plug is tagged, the tag must be at 3529' or higher.
- d. Adjust Plug 7 (Picture Cliff) to account for the BLM geologist's pick for the Picture Cliffs formation top @ 2679'. Plug 7 should cover at a minimum 2729' up to 2579', estimated 12 sx Class G. If plug is tagged, the tag must be at 2629' or higher.
- e. Adjust Plug 8 (Fruitland/Kirtland/Ojo) to account for the BLM geologist's picks for the Fruitland (2289'), Kirtland (1879'), and Ojo Alamo (1759') formation tops. Plug 8 should cover at a minimum 2339' up to 1659' in all casing strings. If plug is tagged, the tag must be at 1709' or higher.
- f. Add plug to account for the BLM geologist's picks for the Nacimiento formation top @ 1164'. Plug should cover at a minimum 1214' up to 1064' in all casing strings. If plug is tagged, the tag must be at 1114' or higher.
- g. May adjust Plug 9 (Surf. Casing Shoe) BOC to 336' to account for additional plug to cover BLM

Nacimiento formation top pick. Plug 9 should at a minimum 336' up to surface in all casing strings.

- 3. <u>Notification</u>: Farmington Field Office is to be notified at least 24 hours before the plugging operations commence at (505) 564-7750.
- 4. **Deadline of Completion of Operations:** Complete the plugging operation before February 10, 2026. If unable to meet the deadline, notify the Bureau of Land Management's Farmington Field Office prior to the deadline via Sundry Notice (Form 3160-5) Notice of Intent detailing the reason for the delay and the date the well is to be plugged.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements. Any estimated minimum sacks provided in procedure modification include necessary excesses.

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

Matthew Kade (<u>mkade@blm.gov</u>/505-564-7736) / Kenny Rennick (<u>krennick@blm.gov</u>/505-564-7742)

# 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:
  - o 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 2. 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)

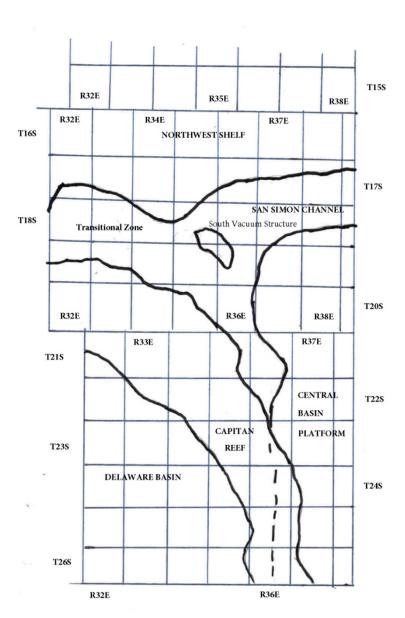


Figure D1 Map

## Figure D2 Formation Table

Mortoverst Shelf   Captan Reef Area   Transition Zone   San Simon Channel   South Vacuum Structure   Delaware Basin   Carnit Vash (Detrat   Basement material and fractured pre-Cambrian   Siluro-Devonian   Anoka   Connel   Siluro-Devonian   Anoka   Connel   Siluro-Devonian   Anoka   Connel   Siluro-Devonian   Molosamp   Mo		100'	Plug to isolate upper ar	nd lower fresh water	zones (typically 250' to	350')	
Grant Wash Lebrital Dasement misterial and fractured pre-Cambrian Dasement rock)   Siluro-Cevonian Dasement rock and fractured pre-Cambrian Dasement rock)   Siluro-Devorsian Dasement rock and fractured pre-Cambrian Dasement rock)   Siluro-Devorsian Dasement Rocka Dasement Pre-Cambrian Dasement Rocka D	Northwest Shelf		<del>,</del>		<del>, ,,, ,</del>		Central Basin Platform
Fusselman   Morrow   Strawn   Wolfcamp   Situro-Devonian   Arcka   Connell	basement material and fractured pre-Cambrian	Siluro-Devonian	Morrow	Siluro-Devonian	Ellenburger	Siluro-Devonian	basement material, fractured pre-Cambrian basement rock and fracture
Moodford   Aloka   Cisco   Abo Reef   Moodford   Stravm   Waddel	Montoya	Mississippian	Atoka	Morrow	Mckee	Morrow	Ellenburger
Situro-Devorian   Strawn   Pennsylvanian   Bone Spring   Mississippian   Pennsylvanian   Misses   Pennsylvanian   Wolfcamp   Delaware   Barnet Shale   Lover Wolfcamp   Minotoya   Mississippian   Abo Reef, if present   Delaware   Queen   Actoa   Wolfcamp   Minotoya   Mississippian   Abo Reef, if present   Delaware   Queen   Actoa   Wolfcamp   Mississippian   Abo Reef, if present   Delaware   Queen   Actoa   Wolfcamp   Mississippian   Abo Reef, if present   Delaware   Queen   Actoa   Wolfcamp   Fusselman   Mississippian   Abo Reef, if present   Grayburg-San Andres   Yates   Strawn   Third Bone Spring Sand (Top of Wolfcone)   Silvaian   Top of Wolfcone)   Top of Wolfcone   Top of Wolfcone   Top of Wolfcone   Pennsylvanian   Bone Spring   Queen   Rustler   Pennsylvanian   Bone Spring   Strawn   Delaware   Seven Rivers   Bineby   Brushy Canyon   Pennsylvanian   Bone Spring   Strawn   Strawn   Bineby   Brushy Canyon   Pennsylvanian   Bone Spring   Strawn   Pennsylvanian   Pennsylvania	Fusselman	Morrow	Strawn	Wolfcamp	Siluro-Devonian	Atoka	Connell
Chester   Pennsylvanian   Wolfcamp   Bone Spring   San Andres   Morrow   Upper Wolfcamp   Montoya	Woodford	Atoka	Cisco	Abo Reef	Woodford	Strawn	Waddell
Austin Molfoamp Bone Spring San Andres Morrow Upper Volloamp Montoya Mabo, Effect, if present Delaware Queen Atoka Wolloamp Fusselman Morrow Abo, if present San Andres San Andres Strawn Third Bone Spring Sand (Top of Wollbone) Silvarian (Top of Wollbone) Silvarian (Top of Wollbone) Silvarian (Top of Wollbone) Silvarian Delaware San Andres Base of Salt Caryon First Bone Spring Sand (Top of Wollbone) Devonian Octoor-Caryon Delaware Seven Rivers Blinebry Brushy Caryon Pennsylvanian Base Captan Reef Yates Base of Salt San Andres Pusselvanian Seven Rivers Bushy Caryon Pennsylvanian Pyates Base of Salt San Andres Rustler Abo Molfoamp Yates Base of Salt San Andres Rustler Abo Reef, if present Base of Salt San Andres Base of Salt San Andres Base of Salt Dirkard Abo Reef (Top on the Pit South to Tourship 17 South) Paddock (Tourship 15 South to Tourship 17 South) Binebry (Tourship 15 South to Tourship 17 South) Country 17 South) South to Tourship 17 South) South to Tourship 17 South) South to Tourship 17 South) Seven Rivers Country 17 South) Seven Rivers (Tourship 15 South to Tourship 17 South) Seven Rivers (Tourship 15 South to Tourship 17 South) Seven Rivers (Tourship 15 South to Tourship 17 South) Seven Rivers (Tourship 15 South to Tourship 17 South) Seven Rivers (Tourship 15 South to Tourship 17 South) Seven Rivers (Tourship 15 South to Tourship 17 South) Seven Rivers (Tourship 15 South to Tourship 17 South) Seven Rivers (Tourship 15 South to Tourship 17 South) Base of Salt Rustler South to Tourship 17 South) Base of Salt Rustler South to Tourship 17 South) Base of Salt Rustler South to Tourship 17 South) Base of Salt Rustler South to Tourship 17 South) Base of Salt Rustler South to Tourship 17 South) Base of Salt Rustler South to Tourship 17 South) Base of Salt Rustler South to Tourship 17 South) Base of Salt Rustler South to Tourship 17 South) Base of Salt Rustler South to Tourship 17 South) Base of Salt Rustler South Tourship 17 South) Base of	Siluro-Devonian	Strawn	Pennsylvanian	Bone Spring	Mississippian	Pennsylvanian	Mckee
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)  Atoka Queen, if present Grayburg-San Andres Base of Salt Canyon of First Bone Spring Sand (Top of Wolfbone)  Lover Pennsylvanian Bone Spring Queen Rustler Pennsylvanian Bone Spring Strawn  Cisco-Canyon Delaware Seven Rivers Blinebry Bushy Canyon Pennsylvanian  Pennsylvanian Base Capitan Reef Yates Bone Spring Delaware (Base of Salt) Wolfcamp  Pennsylvanian Bone Spring Delaware Seven Rivers Blinebry Bushy Canyon Pennsylvanian  Pennsylvanian Bone Spring Delaware (Base of Salt) Wolfcamp  Pennsylvanian Base Capitan Reef Yates Base of Salt San Andres Rustler Abo  Abo Reef, if present  Yaso (Tourship 17 South)  Tourship 17 South) Tourship 17 South)  Dirinkard or Lover Yeso (Tourship 15 South to Tourship 17 South)  Dirinkard or Lover Yeso (Tourship 15 South to Tourship 17 South)  Dirinkard South to Tourship 17 South)  Bilinebry (Tourship 15 South to Tourship 17 South)  Glorieta San Andres  San Andres  Queen Grayburg San Andres  Grayburg San Andres  Grayburg Seven Rivers  Grayburg Seven Rivers  Seven Rivers (Tourship 15 South to Tourship 17 South)  Seven Rivers (Tourship 15 South to Tourship 17 South)  Seven Rivers (Tourship 15 South to Tourship 17 South)  Seven Rivers (Tourship 15 South to Tourship 17 South)  Seven Rivers (Tourship 15 South to Tourship 17 South)  Seven Rivers (Tourship 15 South to Tourship 17 South)  Seven Rivers (Tourship 15 South to Tourship 17 South)  Base of Salt Funds  Fusiter Pennsylvanian Bone Spring Devonian Cony Sand Tourship 17 South)  Base of Salt Funds Pennsylvanian Bone Spring Sund (Tourship 17 South)  Fusiter Pennsylvanian Bone Spring Sund (Tourship 17 South)  Fusiter Pennsylvanian Bone Spring Sund (Tourship 17 South)  Fusiter Pennsylvanian Bone Spr	Chester	Pennsylvanian	Wolfcamp	Delaware	Barnett Shale	Lower Wolfcamp	Simpson Group
Morrow Abo, if present San Andres Yates Strawn Thrid Bone Spring Sand (Top of Wolfbone)  Atoka Queen, if present Grayburg-San Andres Base of Salt Canyon Fist Bone Spring Sand (Top of Lower Bone Spring)  Lower Pennsylvanian Bone Spring Queen Rustler Pennsylvanian Bone Spring Strawn  Cisco-Canyon Delaware Seven Rivers Binebry Brushy Canyon Pennsylvanian  Bone Spring Strawn  Pennsylvanian Bone Spring Strawn  Pennsylvanian  Bone Spring Straw	Austin	Wolfcamp	Bone Spring	San Andres	Morrow	Upper Wolfcamp	Montoya
Morrow Abo, It present San Andres Yates Stawn (Top of Wolfbone) Situlan (Top of Wolfbone) Abo, It present (San Andres) Base of Salt Caryon First Bone Spring Sand (Top of Lover Bone Spring) Devonian of Lover Bone Spring (Strawn Cisco-Caryon Delaware Seven Rivers Binebry Bitusby Caryon Pennsylvanian Base Capitan Reef Yates Bone Spring Delaware (Base of Salt) Wolfcamp Pennsylvanian Base Capitan Reef Yates Bone Spring Delaware (Base of Salt) Wolfcamp Wates Abo Reef, It present Passe of Salt San Andres Rustler Abo Reef, It present Base of Salt Base o	Mississippian	Abo Reef, if present	Delaware	Queen	Atoka	Wolfcamp	Fusselman
Aloka Uueen, ir present Grayburg-San Andres Base of Salt Canyon of Lower Bone Spring Devorian  Lover Pennsylvanian Bone Spring Queen Puster Pennsylvanian Bone Spring Brushy Carpyon Pennsylvanian  Pennsylvanian Base Capitran Reef Yates Bone Spring Delaware (Base of Salt) Wollcoamp  Bough Seven Rivers Base of Salt San Andres Rustler Queen Abo Neef Delaware (Base of Salt)  Abo Top Capitran Reef Abo Top Capitran Reef Abo Reef Delaware (Base of Salt)  Abo Reef If present Base of Salt Base of Salt Rustler Queen Base of Salt Delaware (Base of Salt)  Abo Reef If present Base of Salt Rustler Rustler Rustler Base of Salt Rustler Base of Salt Base of Salt Rustler	Morrow	Abo, if present	San Andres	Yates	Strawn	(Top of Wolfbone)	Silurian
Cisco-Canyon Delaware Seven Rivers Binebry Brushy Canyon Pennsylvanian Pennsylvanian Base Capitan Reef Yates Bone Spring Delaware (Base of Salt) Molfoamp Bough Seven Rivers Base of Salt San Andres Wolfoamp Yates Rustler Queen Abo Reef Abo Top Capitan Reef Abo Reef, if present Base of Salt Rustler Base of Salt Rustler  Yeso (Township 15 South to Township 17 South) Dinkard or Lower Yeso (Township 15 South to Township 17 South) Dinkard or Lower Yeso (Township 15 South to Township 17 South) Bilinebry (Township 15 South to Township 17 South) Paddock (Township 15 South to Township 17 South) Bilinebry (Township 15 South to Township 17 South) Glorieta San Andres Queen (Township 15 South to Township 17 South) Glorieta San Andres Queen (Township 15 South to Township 17 South) Seven Rivers (Township 15 South to Township 17 South) Seven Rivers (Township 15 South to Township 17 South) Seven Rivers (Township 15 South to Township 17 South) Seven Rivers (Township 15 South to Township 17 South) Base of Salt Base of Salt Rustler  Blinebry Delaware (Base of Salt) Abo Outen (Delaware (Base of Salt)) Abo Outen (Base of Salt) Abo Delaware (Base of Salt)	Atoka	Queen, if present	Grayburg-San Andres	Base of Salt	Canyon		Devonian
Pennsylvanian Base Capitan Reef Yates Base of Salt Wolfcamp Bough Seven Rivers Base of Salt San Andres Rustler Abo Wolfcamp Yates Rustler Queen Abo Top Capitan Reef Base of Salt Pustler Rustler Rust	Lower Pennsylvanian	Bone Spring	Queen	Rustler	Pennsylvanian	Bone Spring	Strawn
Bough Seven Rivers Base of Salt Queen Abo Reef Wolfcamp Yates Rustler Queen Dirinkard Abo Top Capitan Reef Base of Salt Dirinkard Abo Reef, if present Base of Salt Pustler Base of Salt Dirinkard Abo Reef, if present Base of Salt Pustler Tubb  Paddock Township 17 South to Township 15 South to Township 1	Cisco-Canyon	Delaware	Seven Rivers		Blinebry	Brushy Canyon	Pennsylvanian
Wolfcamp   Yates   Rustler   Queen   Abo Reef	Pennsylvanian	Base Capitan Reef	Yates		Bone Spring	Delaware (Base of Salt)	Wolfcamp
Abo Reef, if present Abo Reef, if present Base of Salt	Bough	Seven Rivers	Base of Salt		San Andres	Rustler	Abo
Abo Reef, if present Passe of Salt Pustler Tubb  Yeso (Township 15 South to Township 17 South)  Paddock (Township 15 South to Township 15 South to Township 17 South)  Paddock (Township 15 South to Township 15 South to Township 17 South)  Paddock (Township 15 South to Township 15 South to Township 17 South)  South to Township 15 South to Townsh	Wolfcamp	Yates	Rustler		Queen		Abo Reef
Yeso (Township 17 South to Township 17 South to T	Abo	Top Capitan Reef			Base of Salt		Drinkard
Township 17 South) Dirikard or Lower Yeso (Township 15 South to Township 17 South) Tubb (Township 15 South to Township 17 South) Tubb (Township 15 South to Township 17 South) Township 17 South	Abo Reef, if present	Base of Salt			Rustler		ТиЬЬ
Countship 17 South   Countsh	· '	Rustler					Blinebry
Township 17 South Blinebry (Township 15 South to Township 17 South) Paddock (Township 15 South or Township 17 South) Glorieta Grayburg-San Andres Grayburg-San Andres Grayburg-San Andres Gueen (Township 15 South to Township 15 South to Township 17 South) Geven Rivers (Township 15 South to Township 17 South) Geven Rivers (Township 17 South) Grayburg-San Andres G	(Township 15 South to						Paddock
to Township 17 South) Paddock (Township 15 South to Township 17 South) Glorieta San Andres San Andres Queen (Township 15 South to Township 17 South) Seven Rivers (Township 15 South to Township 17 South) Yates (Township 17 South) Sase of Salt  Base of Salt							Glorieta
South to Township 17 South Glorieta Glorieta San Andres Gueen (Township 15 South to Township 17 South) Seven Rivers (Township 15 South Township 17 South) Yates (Township 15 South Township 17 South) Base of Salt  Base of Salt	to Township 17 South)						San Andres
San Andres Queen (Township 15 South to Township 17 South) Seven Rivers (Township 15 South to Township 17 South) Seven Rivers (Township 15 South to Township 17 South) Yates (Township 15 South to Township 17 South) Base of Salt  Base of Salt  Rustler							
Queen (Township 15 South to Township 17 South)  Seven Rivers (Township 15 South to Township 17 South)  Yates (Township 17 South)  Yates (Township 17 South)  Base of Salt  Base of Salt  Rustler	Glorieta	<u> </u>					Grayburg-San Andres
to Township 17 South)  Seven Rivers (Township 15 South to Township 17 South)  Yates (Township 15 South to Township 15 South to Township 17 South)  Base of Salt  Base of Salt  Rustler	San Andres	·					Queen
South to Township 17 South)         Yates (Township 15 South to Township 15 South to Township 17 South)         Base of Salt           Base of Salt         Bustler							Seven Rivers
Township 17 South)         Base of Salt           Base of Salt         Rustler							Yates
Base of Salt Rustler	Yates (Township 15 South to						Base of Salt
	<u> </u>						Rustler
	Rustler						

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 430473

#### **CONDITIONS**

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	430473
	Action Type:
	[C-103] NOI Plug & Abandon (C-103F)

#### CONDITIONS

Created By	Condition	Condition Date
mkuehling	NMOCD call on formation tops - Morrison 7266 - Dakota 7031 - graneros 6920 gallup 6094 mancos 5309 Cliff house 4319 chacra 3603 intermediate shoe 3097 PC 2663 Fruitland 2289 Kirtland 1879 Ojo 1754 Nacimiento 645 - Add plug to cover Morrison and fish -	2/13/2025
mkuehling	Notify NMOCD 24 hours prior to moving on - monitor string pressures daily report on subsequent - submit all logs prior to subsequent	2/13/2025
mkuehling	Adjust all plugs to accommodate BLM and NMOCD	2/17/2025