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

Sundry Print Report

09/06/2024

Well Name: HANCOCK FEDERAL

Well Location: T27N / R11W / SEC 24 / NENE / 36.565582 / -107.949081

County or Parish/State: SAN JUAN / NM

Well Number: 3

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMSF078094

Unit or CA Name: HANCOCK FEDERAL

Unit or CA Number: NMNM73709

US Well Number: 3004506425

Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2809070

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 08/28/2024

Time Sundry Submitted: 02:01

Date proposed operation will begin: 09/18/2024

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 08/07/2024 with Roger Herrera / BLM, Daniel Sloan (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

2024_08_23___HANCOCK_FEDERAL_3___P_A_NOI_20240828135855.pdf

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Conditions of Approval

Additional

General_Requirement_PxA_20240906121922.pdf

2809070_NOI_PnA_Hancock_Federal_3_3004506425_MHK_9.6.2024_20240906121909.pdf

Hancock_Federal_No_3_Geo_Rpt_20240905122335.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: AUG 28, 2024 02:01 PM

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:** **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: 09/06/2024

Signature: Matthew Kade

HILCORP ENERGY COMPANY
HANCOCK FEDERAL 3
P&A NOI

API #:	3004506425

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; NU and test BOP.
4. TOOH w/ tubing.
5. Set a **4-1/2" CICR** at **+/- 6,225'** to isolate the **GRN & DK Perfs**.
6. TIH with work string, sting into CICR, establish injection downhole through packer assemblies.
7. **PLUG #1: 23sx of Class G Cement (15.8 PPG, 1.15 yield); DK Perfs @ 6,407' | DK Top @ 6,395' | GRN Perfs @ 6,316' | GRN Top @ 6,282':**
   Pump 11sx of cement beneath the 4-1/2" CICR (est. **TOC @ +/- 6,225'** & est. **BOC @ +/- 6,366'**). Sting out of CICR, continue pumping a 12 sack balanced cement plug on top of the CICR. (est. **TOC @ +/- 6,075'** & est. **BOC @ +/- 6,225'**). Wait on Cement for 4 hours, tag TOC w/ work string. *Note cement plug lengths & volumes account for excess. ***NOTE* If unable to establish injection below CICR, forego pumping 11sx below CICR and proceed with pumping 12sx on top of CICR.**
8. Load the well as needed. Pressure test the casing above the plug to **560 psig**.
9. RU Wireline. Run CBL. Record Top of Cement. All subsequent plugs below are subject to change pending CBL results.
10. PU & TIH w/ work string to **+/- 5,440'**.
11. **PLUG #2: 12sx of Class G Cement (15.8 PPG, 1.15 yield); GAL Top @ 5,390':**
    Pump an 12 sack balanced cement plug inside the 4-1/2" casing (est. **TOC @ +/- 5,290'** & est. **BOC @ +/- 5,440'**).
12. TOOH w/ work string. TIH & perforate squeeze holes @ **+/- 4,590'**. RIH w/ **4-1/2" CICR** and set CICR @ **+/- 4,540'**. TIH w/ work string & sting into CICR. Establish injection.
13. **PLUG #3: 37sx of Class G Cement (15.8 PPG, 1.15 yield); MCS Top @ 4,540':**
    Pump 25sx of cement in the 4-1/2" casing X 6-3/4" open hole annulus (est. **TOC @ +/- 4,390'** & est. **BOC @ +/- 4,590'**). Pump an additional 4sx of cement beneath the 4-1/2" CICR (est. **TOC @ +/- 4,540'** & est. **BOC @ +/- 4,590'**). Sting out of retainer, pump an 8 sack balanced cement plug on top of the CICR. (est. **TOC @ +/- 4,440'** & est. **BOC @ +/- 4,540'**). WOC for 4 hrs, tag TOC w/ work string. *Note cement plug lengths and volumes account for excess.
14. TOOH w/ work string. TIH & perforate squeeze holes @ **+/- 2,813'**. RIH w/ **4-1/2" CICR** and set CICR @ **+/- 2,763'**. TIH w/ work string & sting into CICR. Establish injection.
15. **PLUG #4: 38sx of Class G Cement (15.8 PPG, 1.15 yield); MV Top @ 2,763' | CHC Top @ 2,760':**
    Pump 25sx of cement in the 4-1/2" casing X 6-3/4" open hole annulus (est. **TOC @ +/- 2,610'** & est. **BOC @ +/- 2,813'**). Pump an additional 4sx of cement beneath the 4-1/2" CICR (est. TOC @ **+/- 2,763'** & est. **BOC @ +/- 2,813'**). Sting out of retainer, pump a 9 sack balanced cement plug on top of the CICR. (est. **TOC @ +/- 2,660'** & est. **BOC @ +/- 2,763'**). WOC for 4 hrs, tag TOC w/ work string. *Note cement plug lengths and volumes account for excess.
16. POOH w/ work string to **+/- 2,024'**.
17. **PLUG #5: 22sx of Class G Cement (15.8 PPG, 1.15 yield); DV Tool #1 @ 1,974' | PC Top @ 1,843':**
    Pump a 22 sack balanced cement plug inside the 4-1/2" casing (est. **TOC @ +/- 1,743'** & est. **BOC @ +/- 2,024'**). *Note cement plug lengths & volumes account for excess.
18. POOH w/ work string to **+/- 1,406'**.
19. **PLUG #6: 12sx of Class G Cement (15.8 PPG, 1.15 yield); FRD Top @ 1,356':**
    Pump an 12 sack balanced cement plug inside the 4-1/2" casing (est. **TOC @ +/- 1,256'** & est. **BOC @ +/- 1,406'**). *Note cement plug lengths & volumes account for excess.
20. TOOH w/ work string. TIH & perforate squeeze holes @ **+/- 971'**. RIH w/ **4-1/2" CICR** and set **CICR @ +/- 921'**. TIH w/ work string & sting into CICR. Establish injection.
21. **PLUG #7: 59sx of Class G Cement (15.8 PPG, 1.15 yield); KRD Top @ 921' | OJO Top @ 810':**
    Pump 38sx of cement in the 4-1/2" casing X 6-3/4" open hole annulus (est. **TOC @ +/- 660'** & est. **BOC @ +/- 971'**). Pump an additional 4sx of cement beneath the 4-1/2" CICR (est. **TOC @ +/- 921'** & est. **BOC @ +/- 971'**). Sting out of retainer, pump a 17 sack balanced cement plug on top of the CICR. (est. **TOC @ +/- 710'** & est. **BOC @ +/- 921'**). WOC for 4 hrs, tag TOC w/ work string. *Note cement plug lengths and volumes account for excess.
22. TOOH w/ work string. TIH and perforate squeeze holes @ **+/- 259'**. TIH with tubing/work string.
23. **PLUG #8: 111sx of Class G Cement (15.8 PPG, 1.15 yield); NAC Top @ 128' | Surf. Casing Shoe @ 209':**
    Pump 7sx of cement in the 4-1/2" casing X 6-3/4" open hole annulus (est. **TOC @ +/- 209'** & est. **BOC @ +/- 259'**). Continue pumping 83sx of cement in the 4-1/2" casing X 10-3/4" casing annulus (est. **TOC @ +/- 0'** & est. **BOC @ +/- 209'**). Pump an 21 sack balanced cement plug inside the 4-1/2" casing (est. **TOC @ +/- 0'** & est. **BOC @ +/- 259'**). WOC for 4 hrs, tag TOC w/ work string.
24. 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.

HILCORP ENERGY COMPANY
HANCOCK FEDERAL 3
P&A NOI

HANCOCK FEDERAL 3 - CURRENT WELLBORE SCHEMATIC

Hilcorp Energy Company

P&A WBD - Current Schematic

Well Name: HANCOCK FEDERAL #3

API / UWI	Surface Legal Location	Field Name	Route	State/Province	Well Configuration Type
3004506425	024-027N-011W-A	BASIN DAKOTA (PRORATED GAS)	0604	NEW MEXICO	VERTICAL
Ground Elevation (ft)	**Original KB/RT Elevation (ft)**	**Tubing Hanger Elevation (ft)**	**RKB to GL (ft)**	**KB-Casing Flange Distance (ft)**	**KB-Tubing Hanger Distance (ft)**
6,114.00	6,124.00		10.00		

Original Hole [VERTICAL]

MD (ftKB)	Formation Tops	MD
128.0	NACIMIENTO	128.0
810.0	OJO ALAMO	810.0
920.9	KIRTLAND	921.0
1,356.0	FRUITLAND	1,356.0
1,842.8	PICTURED...	1,843.0
2,759.8	CHACRA	2,760.0
2,763.1	CLIFF HOUSE	2,763.0
3,450.1	MENEFEE	3,450.0
4,169.9	POINT LOO...	4,170.0
4,540.0	MANCOS	4,540.0
5,390.1	GALLUP	5,390.0
6,282.2	GRANEROS	6,282.0
6,395.0	DAKOTA	6,395.0

Vertical schematic (actual)

NACIMIENTO (NACIMIENTO (final))

1; Surface, 209.00ftKB; 10 3/4 in; 10.19 in; 10.00 ftKB; 209.00 ftKB

Surface Casing Cement, Casing, 11/27/1961 00:00; 10.00-220.00; 1961-11-27; Cmt'd w/150 sx. Circulated to surface.

OJO ALAMO (OJO ALAMO (final))

KIRTLAND (KIRTLAND (final))

FRUITLAND (FRUITLAND (final))

PICTURED CLIFFS (PICTURED CLIFFS...

Production Casing Cement, Casing, 12/10/1961 00:00; 1,173.00-1,974.00; 1961-12-10; 2nd stage - Cmt'd w/125 sx 50/50 POZ mix. TOC @ 1173' per 75% efficiency calc.

CH...

1.9in, Tubing; 1.90 in; 2.90 lb/ft; J-55; 10.00 ftKB; 6,250.00 ftKB

4 in, Barrier - Fluid, 10.0, 6,250.0; 10.00-6,250.00; Spotted 115 bbls oil mixed w/Kempac.

POINT LOOKOUT (POINT LOOKOUT...

MANCOS (MANCOS (final))

GA...

1.9in, Seal Assembly; 1.90 in; 6,250.00 ftKB; 6,255.00 ftKB

4 in, Packer, 6,250.0, 6,255.0; 6,250.00-6,255.00

1.9in, Tubing; 1.90 in; 2.90 lb/ft; J-55; 6,255.00 ftKB; 6,260.00 ftKB

Production Casing Cement, Casing, 12/10/1961 00:00; 4,622.00-6,545.00; 1961-12-10; 1st stage - Cmt'd w/200 sx 50/50 POZ mix, followed w/100 sx Neat. TOC @ 4622' per 75% efficiency calc.

G...

4 in, Packer, 6,280.0, 6,285.0; 6,280.00-6,285.00; Kempac chemical sqz unsucessful due to packer leaking. Attempt to pull, could not remove. Left packer in hole without seal assembly.

6316-6356ftKB on 12/30/1961 00:00 (PERF - DAKOTA UPPER); 6,316.00-6,356.00; 1961-12-30

DAKOTA (DAKOTA (final))

6407-6422ftKB on 12/30/1961 00:00 (PERF - DAKOTA LOWER); 6,407.00-6,422.00; 1961-12-30

<Typ> (PBTD); 6,529.00

2; Production1, 6,545.00ftKB; 4 1/2 in; 4.05 in; 10.00 ftKB; Drilling rpt states DV tool @ 1974'. Subsequent rpt sent to State has DV Tool @ 1996'. Used Drilling rpt data.; 6,545.00 ftKB

Production Casing Cement, Casing, 12/10/1961 00:00 (plug); 6,529.00-6,545.00; 1961-12-10; 1st stage - Cmt'd w/200 sx 50/50 POZ mix, followed w/100 sx Neat. TOC @ 4622' per 75% efficiency calc.

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Report Printed: 8/23/2024

HILCORP ENERGY COMPANY
HANCOCK FEDERAL 3
P&A NOI

HANCOCK FEDERAL 3 - PROPOSED WELLBORE SCHEMATIC

Hilcorp Energy Company

P&A WBD - Proposed Schematic

Well Name: HANCOCK FEDERAL #3

API / UWI	Surface Legal Location	Field Name	Route	State/Province	Well Configuration Type
3004506425	024-027N-011W-A	BASIN DAKOTA (PRORATED GAS)	0604	NEW MEXICO	VERTICAL
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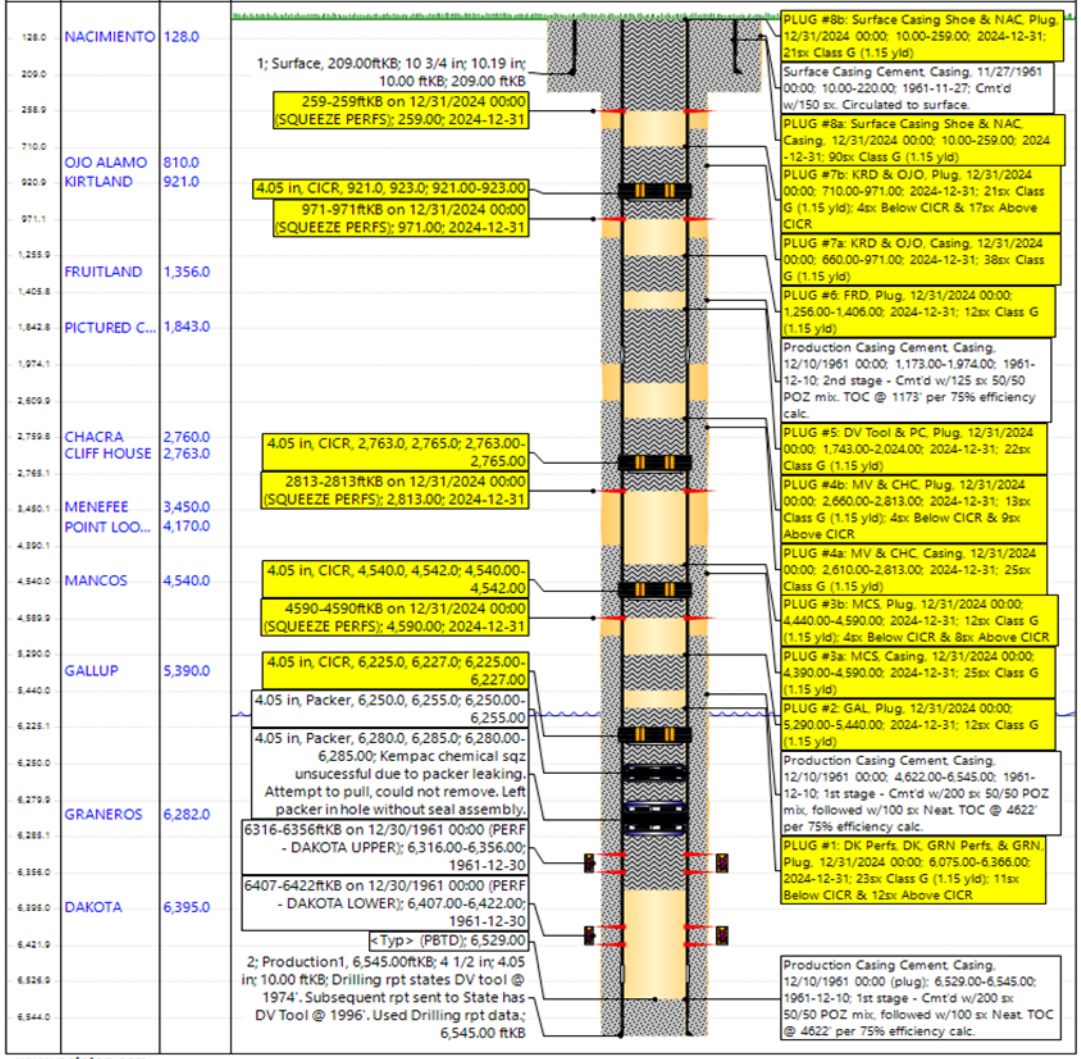
6,114.00	6,124.00		10.00		

Original Hole [VERTICAL]



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Hilcorp Energy

Hancock Federal 3

36.56558, -107.94908

API-30-045-06425

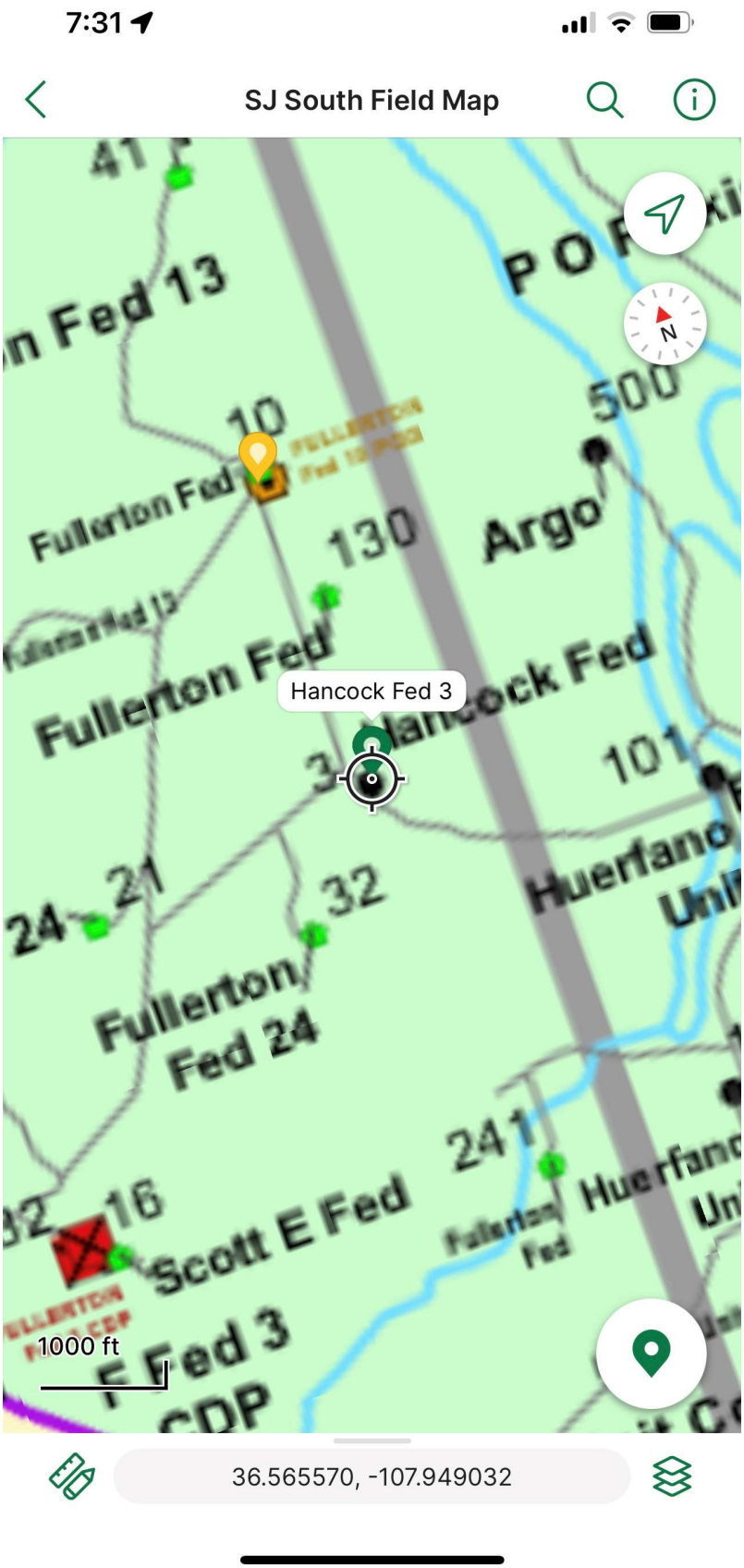
T27N-11W SEC 24

Final Reclamation Plan

Onsite Completed on 8/7/2024 with Roger Herrera, Daniel Sloan (Enterprise) and Bryan Hall

1. Pick up and remove all trash, metal, cable, and any foreign debris within 100’ of location.
2. Remove anchors.
3. Strip equipment off facility.
4. Remove piping and cables.
5. Enterprise to remove meter run and piping back to dog leg.
6. Strip and stockpile top soil.
7. Re-purpose available gravel/rock on main road.
8. Push fill NE to recreate natural ridge.
9. Rip bare soil, leaving rough terrain.
10. Re-seed all disturbed areas. Drill where applicable at rate per acre defined by seed mix (2 acres), and broadcast seed and harrow, at double the rate, all other disturbed areas. Sage Brush-Grass seed mix will be used.


Earth
Push Fill NE to recreate ridge
Hancock Federal 3 36.566083, -107.949654
36.56558


7:31
SJ South Field Map
Hancock Fed 3
Fullerton Fed
Argo
Scott E Fed
1000 ft
36.565570, -107.949032

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_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 9/5/2024

Well No.	Hancock Federal No 3			Surf. Loc.	790	FNL	990 FEL
Lease No.	NMSF078094				Sec	24	T27N R11W
Agrmt:	NMNM73709			County	San Juan		State New Mexico
Operator:	Hilcorp Energy Co.						
TVD	6545	PBTD	6527	Formation	Blanco Mesa Verde/Basin Dakota		
Elevation	GL	6114		Elevation	Est. KB	6126	(Estimated)

Geologic Formations	Est. tops	Subsea Elev.	Remarks
Nacimiento Fm.	Surface		Surface /fresh water sands
Ojo Alamo Ss	596	5530	Fresh water aquifer
Kirtland Fm.	936	5190	
Fruitland Fm.	1347	4779	Coal/gas/possible water
Pictured Cliffs	1858	4268	Possible gas/water
Lewis Shale (Main)	2051	4075	Source rock
Huerfanito Bentonite	2341	3785	Reference bed
Chacra (upper)	2371	3755	Possible gas/water
Chacra (lower)	2421	3705	Possible gas/water
Lewis Shale Stringer	2861	3265	Source rock
Cliff House Ss	2781	3345	Possible gas/water
Menefee Fm.	2881	3245	Coal/water/possible gas
Point Lookout Fm.	4201	1925	Possible gas/water
Mancos Shale	4561	1565	Source rock
El Vado Ss	4771	1355	Possible gas/water
Tocito Ss Lentils	5111	1015	Possible gas/water
Gallup	5416	710	Oil & gas
Juana Lopez	5781	345	
Mancos Stringer	6011	115	
Brdge Crk/Grnhrn	6241	-115	
Graneros Shale	6296	-170	
Dakota Ss	6414	-288	Possible gas/water

Remarks:

-Vertical wellbore, all formation depths are TVD from KB at the wellhead.
-Modify the TOC for Plug 2 to 5316’ and the BOC to 5466’ to account for the BLM geologist’s pick for the Gallup.
-Place the CICR for Plug 3 at 4561' with the squeeze holes at 4611' and the TOC at 4411’ to account for the BLM geologist's Mancos top.
-Place the CICR for Plug 4 at 2781' with the squeeze holes at 2831' and the TOC at 2271’ to account for the BLM geologist's Cliff House and Chacra tops. Placing these plugs separately is also acceptable with a Plug 4 TOC of 2631’ and the Chacra plug placed to account for the BLM geologist's Chacra top of 2421’.
-Place the CICR for Plug 7 at 936' with the squeeze holes at 986' and the TOC at 496’ to account for the BLM geologist's Kirtland and Ojo Alamo tops.

Reference Well:

Hilcorp Energy Co.
Fullerton Federal No. 10
1775' FSL, 990' FEL,
13I- 27N-11W
GL= 6085', KB= 6095'

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

September 6, 2024

Notice of Intent - Plug and Abandonment

Operator: Dugan Production Corporation
Lease: NMSF078094
Unit: NMNM73709
Well(s): Hancock Federal 3, API # 30-045-06425
Location: NENE Sec 24 T27N R11W (San Juan County, NM)
Sundry Notice ID#: 2809070

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 #2 (Step 11) to cover BLM Gallup formation top pick @ 5416'. Estimated minimum 12 Sx Cement (5466' – 5316'). If pressure test fails, this plug must be plugged at 5316' or shallower.

   b. Adjust Plug #3 (Steps 12/13) to cover BLM Mancos formation top pick @ 4561'. Perforate squeeze holes @ 4611' and set CICR @ 4561'. Bring TOC inside and outside to 4461'.

   c. Adjust Plug #4 (Steps 14/15) to cover BLM Mesaverde and Chacra formation top picks @ 2781' and 2371' respectively. Perforate squeeze holes @ 2831' and set CICR @ 2781'. Bring TOC inside and outside to 2271'. Plugs may be placed separately with Mesaverde TOC of 2681' inside and outside and Chacra TOC of 2271' inside and outside.

   d. Adjust Plug #7 (Steps 20/21) to cover BLM Kirtland and Ojo Alamo formation top picks @ 936' and 596' respectively. Perforate squeeze holes @ 986' and set CICR @ 936'. Bring TOC inside and outside to 496'.

3. **NOTIFICATION:** Farmington 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 August 28, 2025. If unable to meet 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. Estimated minimum sacks provided here include the necessary excesses.

Office Hours: 7:45 a.m. to 4:30 p.m. / M. Kade (mkade@blm.gov / 505-564-7736)

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

2. 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.
        - 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
        - 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. Sec2. 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

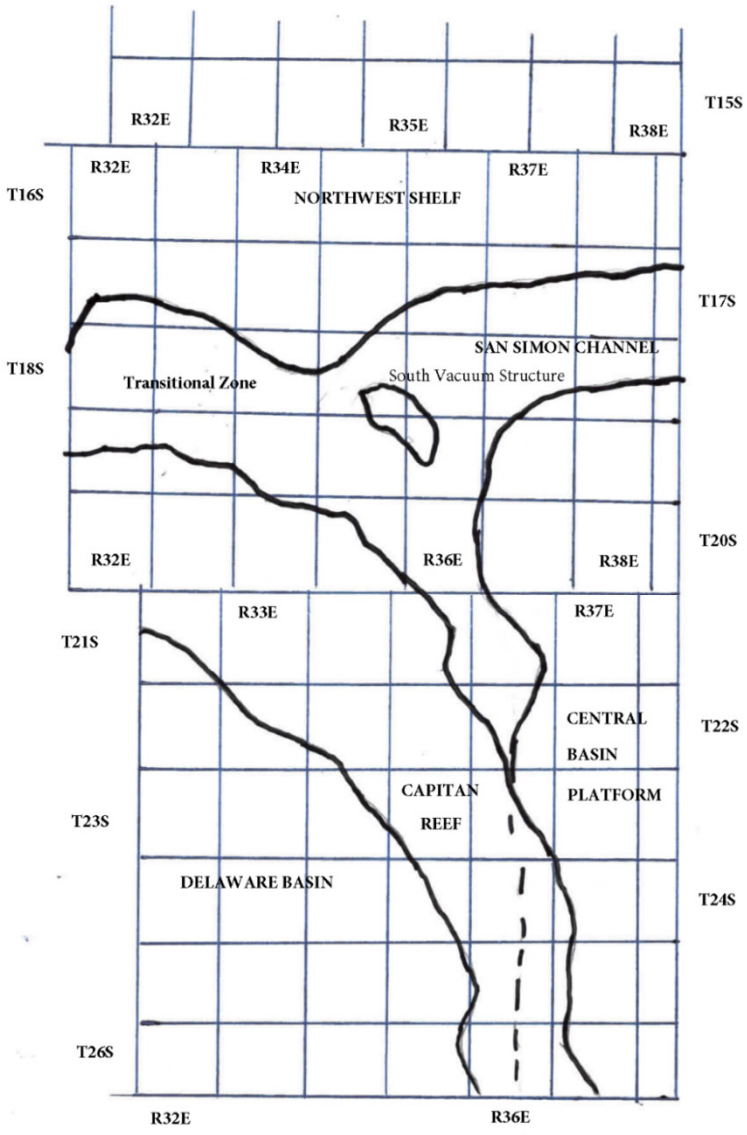


Figure D2 Formation Table

100' Plug to isolate upper and 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 basement material and fractured pre-Cambrian basement rock)	Siluro-Devonian	Morrow	Siluro-Devonian	Ellenburger	Siluro-Devonian	Granit Wash (Detrital basement material, fractured pre-Cambrian basement rock and fracture 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 Township 17 South)	Rustler					Blinebry
Drinkard or Lower Yeso (Township 15 South to Township 17 South)						Paddock
Tubb (Township 15 South to Township 17 South)						Glorieta
Blinebry (Township 15 South to Township 17 South)						San Andres
Paddock (Township 15 South to Township 17 South)						Grayburg
Glorieta						Grayburg-San Andres
San Andres						Queen
Queen (Township 15 South to Township 17 South)						Seven Rivers
Seven Rivers (Township 15 South to Township 17 South)						Yates
Yates (Township 15 South to Township 17 South)						Base of Salt
Base of Salt						Rustler
Rustler						

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

CONDITIONS

Action 381352

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 381352
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
mkuehling	NMOCD agrees with BLM picks on formation tops and also agrees with their coas - In addition NMOCD requires Hilcorp to remove packer at 6280 - Add plug at Dakota perforations and Graneros top - Notify NMOCD 24 hours prior to moving on - monitor string pressures daily report on subsequent - submit all logs prior to subsequent	9/24/2024