

Well Name: FROST	Well Location: T27N / R10W / SEC 25 / NWNE / 36.550583 / -107.843536	County or Parish/State: SAN JUAN / NM
Well Number: 4	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM03198	Unit or CA Name:	Unit or CA Number:
US Well Number: 3004506291	Well Status: Gas Well Shut In	Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2671097

Type of Submission: Notice of Intent	Type of Action: Plug and Abandonment
Date Sundry Submitted: 05/10/2022	Time Sundry Submitted: 01:32
Date proposed operation will begin: 05/24/2022	

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 held on 4/7/22 with Roger Herrera/BLM. The Re-Vegetation Plan is attached. A closed loop system will be used.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

- Frost_4_P_A_Procedure_for_NOI_20220510133102.pdf
- Frost_4_Reclamation_Plan_20220510133102.pdf

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Conditions of Approval

Additional

General_Requirement_PxA_20220601142157.pdf
2671097_NOIA_4_3004506291_KR_06012022_20220601142138.pdf
27N10W25BKpc_Frost_4_20220601112041.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: KANDIS ROLAND
Signed on: MAY 10, 2022 01:31 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 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: 06/01/2022
Signature: Kenneth Rennick



P&A Procedure

General Information			
Well Name	Frost 4	Date:	5/10/22
API:	30-045-06291	AFE #	
Field:	San Juan	County	San Juan
Status:	Well is ACOI		
Subject:	Permanently P&A wellbore		
By:	M. Wissing		

Well Data

Surface Casing: 9-5/8" 25.4# welded csg at 106'

Intermediate Casing: 5-1/2" J-55 15.5# at 2,401'

Production Casing: 2-7/8" J-55 6.5# at 2,552'

Current Perforations: 2408'-2482'

Current PBTD: 2,546' (cement plug)

KB: 10'

SICP = 0 psig/ BH: 0 psi (no historic BH pressures in last 10 tests)

Notes: No rig work since the well was 2-7/8" cased and stimulated in the Pictured Cliffs in 3/1999.

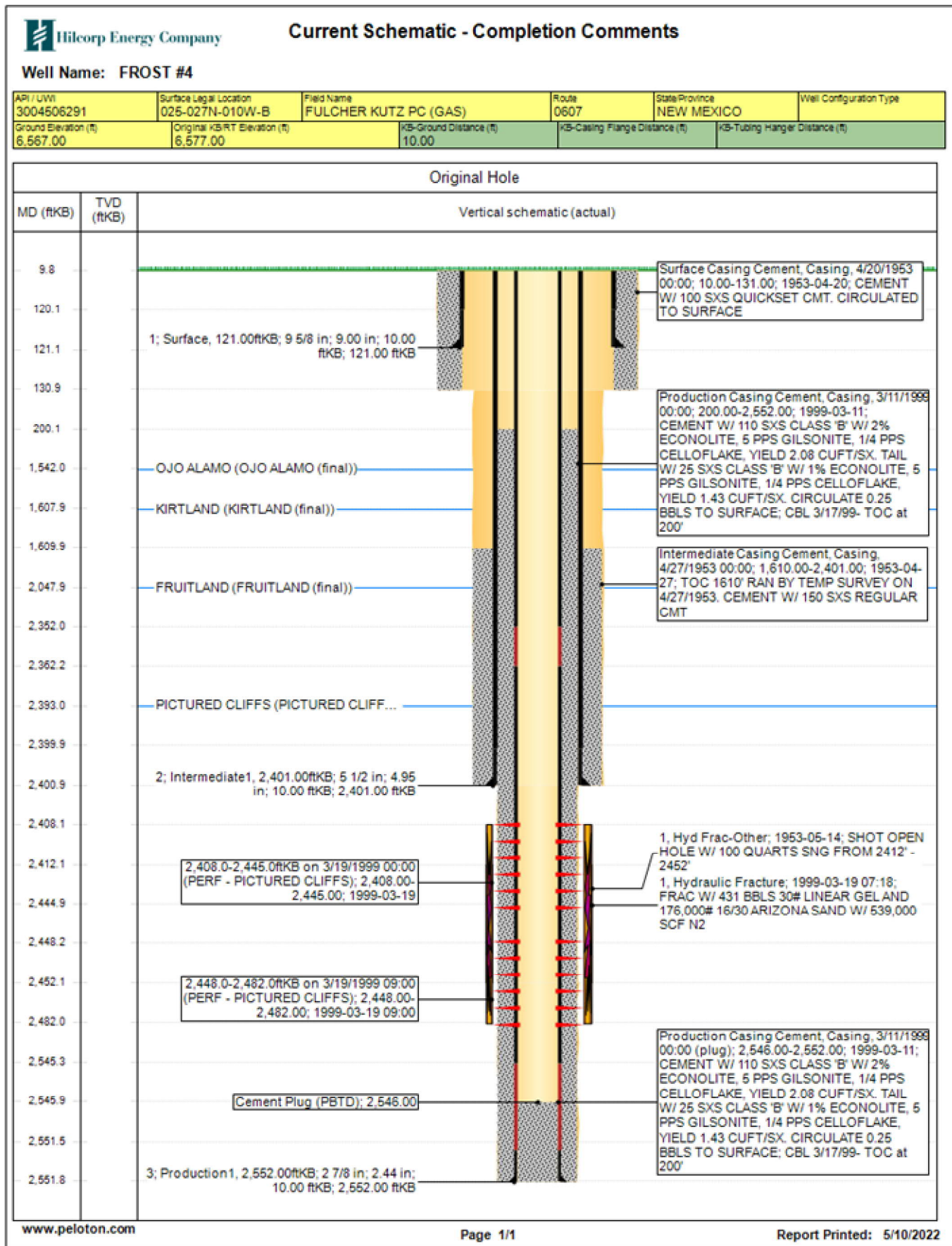
Hold PJSM prior to begin all operations. Properly document all operations via the JSA process. Ensure that all personnel onsite abide by HEC safety protocol, including PPE, housekeeping, and standard guidelines. Verify cathodic protection is off and wellhead instrumentation is properly disconnected from the wellhead. Comply with all NMOCD, BLM, and HEC safety and environmental regulations. Verify there is no H₂S present prior to beginning operations. If any H₂S 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 and BLM 24 hours prior to starting operations on location. This procedure is contingent upon P&A sundry approval by the NMOCD & BLM.

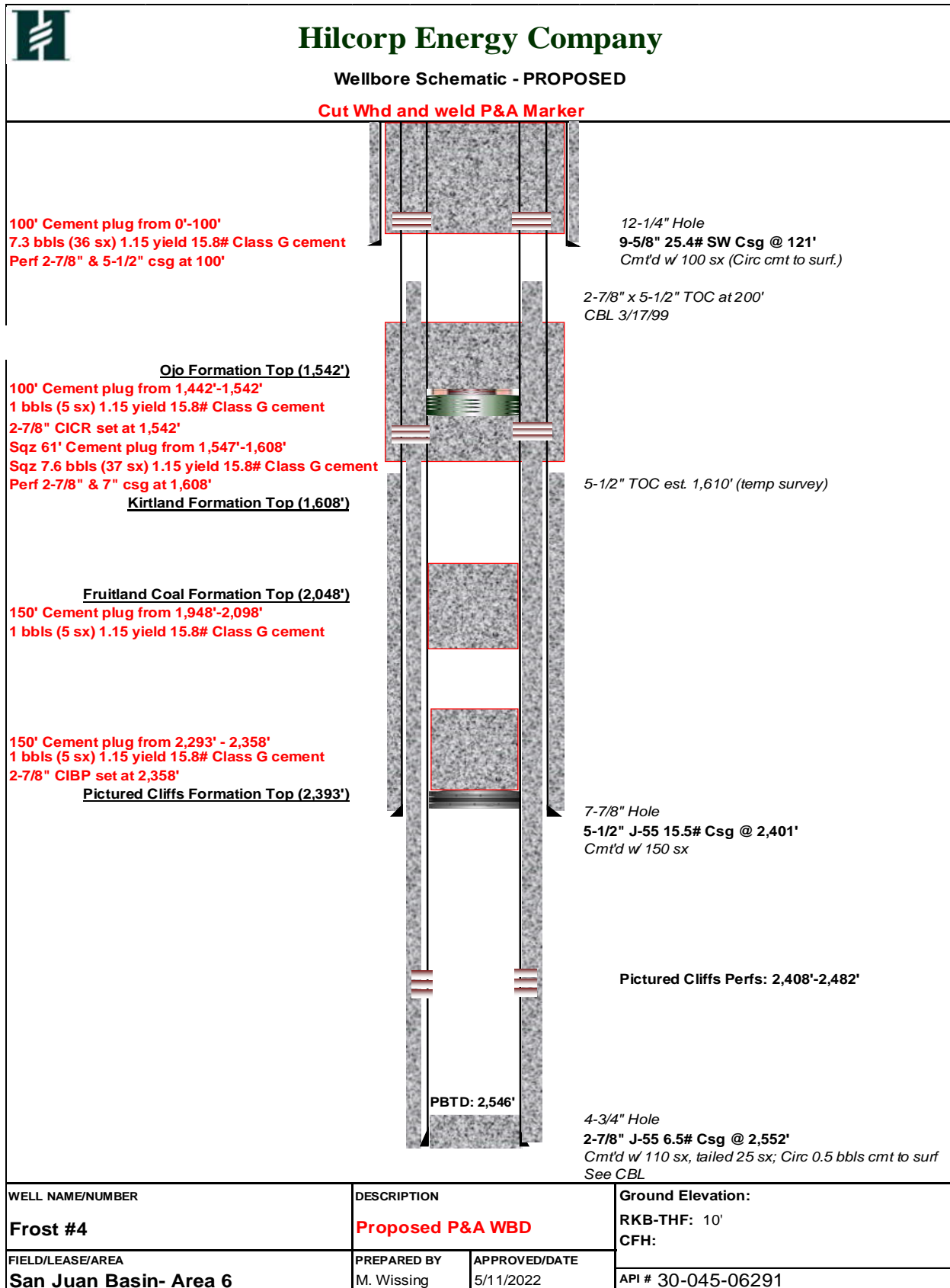
P&A Rig Procedure

1. MIRU P&A rig and equipment.
 - a. *Record daily pressures on all strings.*
 - b. *Document all agency onsite witnesses and any approved procedure changes with all agencies.*
2. NU 5k BOP & test.
3. RU E-line and MU 2-7/8" GR. Clear 2-7/8" csg to 2,370'.
4. MU 2-7/8" CIBP and RIH. Set at 2,358. Tag to verify set.
 - a. Set with 1-1/4" pipe or E-line.
 - b. **PC top perf at 2,408'.**
5. RIH with 1-1/4" work string to 2,350'. Fill wellbore with fluid and circulate wellbore clean.
6. Pressure test the casing to 500 psi to verify wellbore integrity and plug set.
7. **Plug #1 (PC top perf 2,408'; PC formation top at 2,393')**: RU cementers and pump a 150' balanced cmt plug inside the 2-7/8" csg from 2,293' – 2,358', using 1 bbls (5 sx) of 15.8+ ppg Class G cmt.
8. **Plug #2 (Fruitland Coal formation top at 2,048')**: RU cementers and pump a 150' balanced cmt plug inside the 2-7/8" csg from 1,948' – 2,098', using 1 bbls (5 sx) of 15.8+ ppg Class G cmt.
9. TOOH with tbg.
10. RU E-line and MU DP perf gun. RIH and perforate 2-7/8" csg and 5-1/2" csg at 1,608'.
 - a. **Kirtland formation top at 1,608'.**
 - b. *5-1/2' TOC at 1,610'*
 - c. *2-7/8" x 5-1/2" TOC at +/- 200'*
11. MU 2-7/8" CICR and RIH. Set CICR at 1,542'
12. Sting into CICR and establish injection rate into perforations.
13. **Plug #3 (Ojo formation top at 1,542' & Kirtland top at 1,608')**: RU cementers and pump a 161' inside/outside cmt plug inside the 2-7/8" csg and outside of 5-1/2" csg from 1,442' – 1,608',
 - a. Below CICR, 7.6 bbls (37 sx) of 15.8+ ppg Class G cmt.
 - b. Above CICR, 1 bbl (5 sx) of 15.8+ ppg Class G cmt.
14. TOOH with tbg.

15. RU E-line and MU DP perf gun. RIH and perforate 2-7/8" & 5-1/2" csg at 100'. Establish circulation with 9-5/8" x 5-1/2" and 2-7/8" x 5-1/2" casing annulus to surface.
 - a. **Surface csg shoe at 106'.**
 - b. *No free 2-7/8" pipe below 2-7/8" collar at 108' based on CBL 3/16/99*
16. **Plug #4 (Surface casing at 106')**: RU cementers and circulate a 100' cmt plug from Surface – 100' inside the 2-7/8", 2-7/8" x 5-1/2" csg, & 9-5/8" x 5-1/2" csg annulus using 7.3 bbls (36 sx) of 15.8 ppg Class G cmt.
17. Verify all pressures on all strings are at 0 psi.
18. ND BOP. Cutoff wellhead at surface and weld on labeled P&A marker. Top off wellbore with cmt as needed.
19. RDMO P&A rig.



PROPOSED P&A WELLBORE SCHEMATIC



Hilcorp Energy
P&A Final Reclamation Plan
Frost 4
API: 30-045-06291
T27N-R10W-Sec. 25-Unit B
LAT: 36.55058 LONG: -107.84354 NAD 27
Footage: 990' FNL & 1650' FEL
San Juan County, NM

1. PRE- RECLAMATION SITE INSPECTION

A pre-reclamation site inspection was completed with Roger Herrera from the BLM and Eufracio Trujillo, Hilcorp Energy SJ South Construction Foreman on April 7, 2022.

2. LOCATION RECLAMATION PROCEDURE

1. Reclamation work will begin in summer.
2. Removal of all equipment, anchors, flowlines, cathodic, and pipelines.
3. All trash and debris will be removed within a 50' buffer outside of the location disturbance during reclamation.
4. Check on BGT permit. Close out BGT if need be on location when results are clear.
5. Remove line drip and test. Dispose when results permit.
6. Rip compacted soil and walk down disturbed portion of well pad.
7. Location will be reclaimed when collocated location is P&A.
8. Remove all gravel from berms, pads, and meter run and use on lease road where needed.
9. Enterprise meter run will be removed out of their ROW. Barricade riser and blind if needed.
10. Enterprise to cut and cap pipeline.

3. ACCESS ROAD RECLAMATION PROCEDURE

1. The well access road will be blocked at the entrance with a berm and ditch.
2. Reclaim road by ripping, recontouring road out of location to main lease road.
3. Seed road after ripping.

4. SEEDING PROCEDURE

1. A sagebrush 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 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 H₂S.

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.

(October 2012 Revision)

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

AFMSS 2 Sundry ID 2671097

Attachment to notice of Intention to Abandon

Well: Frost 4

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. The following modifications to your plugging program are to be made:
 - a) Bring the bottom of the Surface plug down to 156'.
3. 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 06/01/2022

BLM FLUID MINERALS P&A Geologic Report

Date Completed: 06/01/2022

Well No. Frost #4 (API# 30-045-06291)		Location	990	FNL	&	1650	FEL
Lease No. NMNM03198		Sec. 25	T27N			R10W	
Operator Hilcorp Energy Company		County	San Juan		State	New Mexico	
Total Depth 2552'	PBTD 2546'	Formation Pictured Cliffs					
Elevation (GL) 6567'		Elevation (KB) 6577'					

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					
Nacimiento Fm	Surface	1542			Surface/possible freshwater sands
Ojo Alamo Ss	1542	1608			Aquifer (possible freshwater)
Kirtland Shale	1608	2048			Possible gas
Fruitland Fm	2048	2393			Coal/Gas/Water
Pictured Cliffs Ss	2393	PBTD			Gas
Lewis Shale					
Chacra					
Cliff House Ss					
Menefee Fm					
Point Lookout Ss					
Mancos Shale					
Gallup					
Greenhorn					
Graneros Shale					
Dakota Ss					
Morrison Formation					

Remarks:

P & A

Reference Well:

1) **Formation Tops**

Same

- Bring the bottom of the Surface plug down to 156'.

- The plugs proposed in the P&A procedure, with recommended changes, will adequately protect any freshwater sands in this well bore.
- Pictured Cliffs perms 2408' – 2482'.

Prepared by: *Chris Wenman*

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 112909

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 112909
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	6/3/2022
kpickford	Adhere to BLM approved COAs and plugs. See GEO report.	6/3/2022