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

Sundry Print Report

03/25/2022

Well Name: GRAHAM A WN FEDERAL

Well Location: T27N / R8W / SEC 9 / NESE / 36.586212 / -107.678345

County or Parish/State: SAN JUAN / NM

Well Number: 2

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMNM05791

Unit or CA Name:

Unit or CA Number:

US Well Number: 3004506638

Well Status: Gas Well Shut In

Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2654259

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 01/26/2022

Time Sundry Submitted: 01:01

Date proposed operation will begin: 02/01/2022

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 01/25/2022 with Bob Switzer/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

Graham_A_WN_Fed_2_P_A_NOI_Filed_20220126130046.pdf

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Conditions of Approval

Additional Reviews

General_Requirement_PxA_20220324120355.pdf

2654259_NOIA_2_3004506638_KR_03242022_20220324120343.pdf

27N08W09IKpc_Graham_A_WN_Federal_2_20220324103634.pdf

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: AMANDA WALKER

Signed on: JAN 26, 2022 01:01 PM

Name: HILCORP ENERGY COMPANY

Title: Operations/Regulatory Technician

Street Address: 1111 TRAVIS ST.

City: HOUSTON **State:** TX

Phone: (346) 237-2177

Email address: mwalker@hilcorp.com

Field Representative

Representative Name:

Street Address:

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

Phone:

Email address:

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647742

BLM POC Email Address: krennick@blm.gov

Disposition: Approved

Disposition Date: 03/24/2022

Signature: Kenneth Rennick

Plug and Abandonment - NOI

Graham A WN Fed 2

API # - 3004506638

Procedure:

Hold PJSM prior to beginning any and 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 string daily, prior to beginning operations. **Remember to notify NMOCD 24 hours prior to starting operations on location.**

NOTE: **This procedure is contingent upon P&A sundry approval by NMOCD**. All cement volumes use 100% excess outside pipe and 50' excess inside (unless otherwise stated). All cement will be Class G, mixed at 15.8 ppg w/ a 1.15 cf/sx yield. The stabilizing wellbore fluid will be an 8.3 ppg fluid, sufficient to balance all exposed formation pressures.

1. This project will use a steel tank to handle waste fluids circulated from the well and cement wash up.
2. Test anchors if not using a base beam. Comply with all NMOCD, BLM, and HEC safety regulations. MIRU and conduct safety meeting for all personnel on location.
3. Record casing, tubing, and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary. Ensure well is dead or on a vacuum.
4. RUPU and POOH with 2-3/8" tubing.
5. **Plug #1, 2067' – 2037' (PC Top: 2092')**
6. RIH with 5.5" CIBP and set at 2067' (30' above top perforation)
7. Cap CIBP with 30' of cement (0.714 bbl. cement)
8. RUWL and run CBL from 2037' to surface.
9. RIH with 2-3/8" tubing, circulate plug mud from 2037' to 1733'
10. **Plug #2, 1733' – 1633' (Fruitland Top: 1683')**
11. Circulate cement plug from 1733' to 1633' (2.38 bbl)
12. Circulate plug mud from 1633' to 1375'. Pooh with tubing and stand back.
13. RUWL and RIH to perforate. Perforate 2SPF 120 degree phasing 1375' and 1374'
14. POOH with WL. PU CICR on tubing and RIH to 1165'
15. Set retainer and function test.

16. **Plug #3, 1375’-1135’ (Kirtland Top: 1325’ Ojo Alamo Top:1215’)**
17. Squeeze 40.5 bbl below retainer (15.25 bbl for 8-5/8” x 5.5” annulus and 5.0 bbl for 210’ of 5.5” capacity X2 for excess)
18. Sting out of retainer and cap with 30’ of cement (0.714 bbl)
19. POOH with work string to 177’
20. **Plug #3, 177’ - Surface (Surface Shoe: 127’)**
21. Cement was squeezed down bradenhead during original completion. Do not plan to perforate, will modify based on CBL results if needed.
22. Circulate cement to surface and fill 5.5” ID (4.25 bbl).
23. ND BOP and cut off wellhead below surface casing flange per regulation. Top off w/cement if needed. Install P&A marker with cement to comply with regulations. RD, MOL and cut off anchors. Restore location.

Well Name: GRAHAM A WN FED 002

API / UWI	Surface Legal Location	Field Name	License No.	State Province	Well Configuration Type
3004506638	009-027N-008W-I	PC		NEW MEXICO	

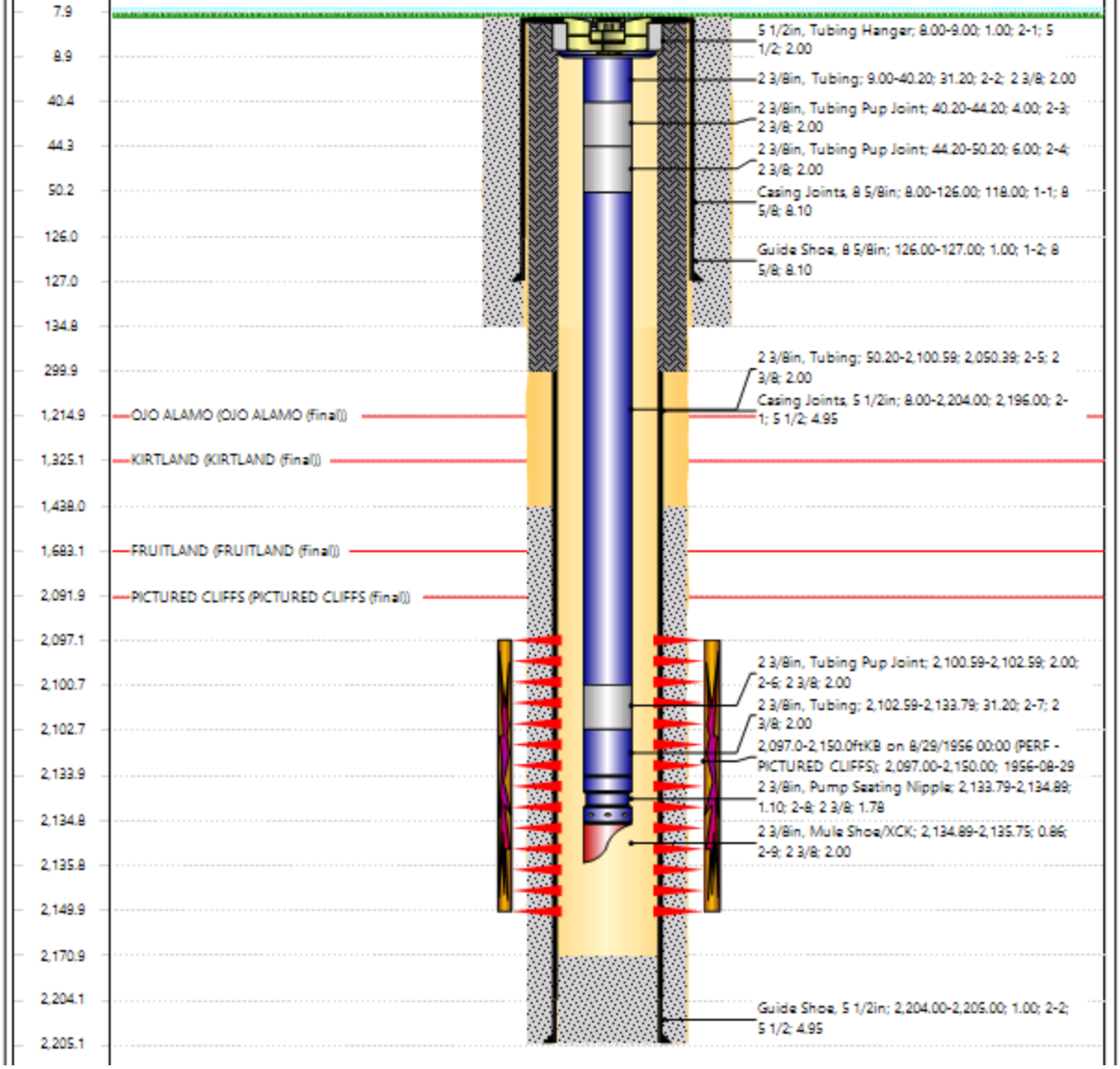
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
5,921.00	8.00	8/21/1956 00:00			

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
Expense Workover	TUBING REPAIR	INSTALL PLUNGER	3/18/2019	3/19/2019

TD: 2,205.0

Original Hole



Well Name: GRAHAM A WN FED 002

Proposed

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3004506638	009-027N-008W-I	PC		NEW MEXICO	

Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
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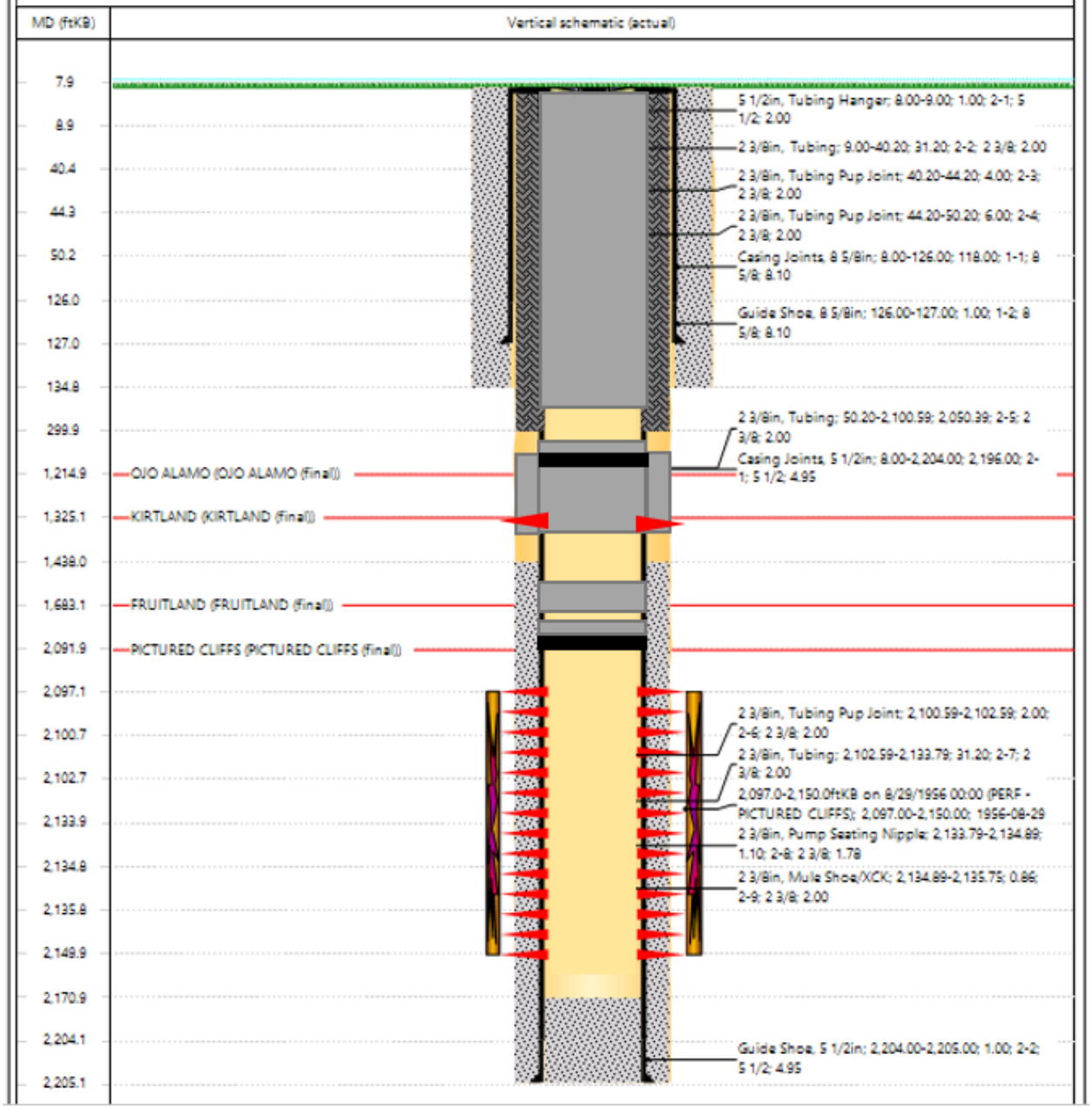

Hilcorp Energy
P&A Final Reclamation Plan
Graham A WN Federal 2
API: 30-045-06638
T27N-R8W-Sec. 9-Unit I
LAT: 36.586208 LONG: -107.67835 NAD 27
Footage: 1844' FSL & 256' FEL
San Juan County, NM

1. PRE- RECLAMATION SITE INSPECTION

   A pre-reclamation site inspection was completed with Bob Switzer from the BLM, Mike Raney from Enterprise, and Eufracio Trujillo, Hilcorp Energy SJ South Construction Foreman on January 25, 2022.

2. LOCATION RECLAMATION PROCEDURE

   1. Reclamation work will begin in spring/summer.
   2. Removal of all equipment, anchors, line drip, and flowlines.
   3. All trash and debris will be removed within a 50' buffer outside of the location disturbance during reclamation.
   4. BGT will be sampled and closed once test results are clear.
   5. Line drip will be pulled and tested.
   6. No recontouring of location will be needed. Location will just be seeded.
   7. Remove all gravel from berms, pads, and meter run and use for back fill of BGT.
   8. Enterprise will remove pipeline from meter run to dog leg.

3. ACCESS ROAD RECLAMATION PROCEDURE

   1. Reclaim road from location to dog leg on lease road by ripping and seeding.
   2. Road will be blocked at dog leg on lease road with berm and diversion ditch.
   3. Culvert will be removed from lease road before location.

4. SEEDING PROCEDURE

   1. A Sagebrush seed mix will be used for all reclaimed and disturbed areas of the well pad and sides of 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 H_2S.

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.

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

AFMSS 2 Sundry ID 2654259

Attachment to notice of Intention to Abandon

Well: Graham A WN Federal 2

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) Adjust cement volume for Plug #1 (Pictured Cliffs) so that 50' of cement is placed on top of the CIBP.
   b) Bring the bottom of Plug #3 (Kirtland and Ojo Alamo) down to 1430' to cover BLM pick for the Kirtland top (1380').

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 3/24/2022

BLM FLUID MINERALS
P&A Geologic Report

Date Completed: 03/24/2022

Well No. Graham A WN Federal #2 (API# 30-045-06638)		Location	1844 FSL	&	256 FEL	
Lease No. NMNM-05791		Sec. 09	T27N		R08W	
Operator Hilcorp Energy Company		County	San Juan	State	New Mexico	
Total Depth 2205’	PBTD 2171’	Formation	Pictured Cliffs			
Elevation (GL) 5913’		Elevation (KB)	5921’			

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					
Nacimiento Fm			Surface	1215	Surface/freshwater sands
Ojo Alamo Ss			1215	1380	Aquifer (possible freshwater)
Kirtland Shale			1380	1683	
Fruitland Fm			1683	2092	Coal/Gas/Possible water
Pictured Cliffs Ss			2092	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

- BLM pick for the Kirtland formation top varies from Operator.
- Adjust cement volume for Plug #1 (Pictured Cliffs) so that 50’ of cement is placed on top of the CIBP.
- Bring the bottom of Plug #3 (Kirtland and Ojo Alamo) down to 1430’ to cover BLM pick for the Kirtland top (1380’).
- The plugs proposed in the P&A procedure, with changes recommended above, will adequately protect any freshwater sands in this well bore.
- Pictured Cliffs perfs 2097’ – 2150’.

Reference Well:
1) **Formation Tops**
Same

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 93101

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 93101
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	CBL required	3/28/2022
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	3/28/2022
kpickford	Adhere to BLM approved COAs and plugs. See GEO report.	3/28/2022