

Well Name: AXI APACHE O	Well Location: T25N / R4W / SEC 9 / NWNW / 36.418243 / -107.262969	County or Parish/State: RIO ARRIBA / NM
Well Number: 4	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name: JICARILLA APACHE
Lease Number: JIC122	Unit or CA Name:	Unit or CA Number:
US Well Number: 3003920970	Well Status: Gas Well Shut In	Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2671500

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 05/12/2022

Time Sundry Submitted: 11:30

Date proposed operation will begin: 05/26/2022

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 4/19/22 with Kurt Sandoval/BIA & Alfred Vigil/Jicarilla. The Re-Vegetation Plan that is attached was reviewed by Roger Herrera/BLM. A closed loop system will be used.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Axi_Apache_O_4_Final_Reclamation_Plan_20220512112823.pdf

Axi_Apach_O_4_P_A_Procedure_for_NOI_20220512112823.pdf

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Conditions of Approval

Additional

General_Requirement_PxA_20220616105315.pdf

2671500_NOIA_O_4_3003920970_KR_06162022_20220616105301.pdf

Axi_Apache_O_No_4_Geo_Rpt_20220615144004.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 12, 2022 11:30 AM

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: 06/16/2022

Signature: Kenneth Rennick



P&A Procedure

General Information			
Well Name	Axi Apache O 4	Date:	5/12/22
API:	30-039-20970	AFE #	
Field:	San Juan	County	San Juan
Status:	Well is ACOI		
Subject:	Permanently P&A wellbore		
By:	M. Wissing		

Well Data

Surface Casing: 8-5/8" 24# K-55 STC csg at 217'

Production Casing: 2-7/8" J-55 6.5# at 3,563'

Production tubing: 1.66" 2.33# at 3,410'

Current Perforations: 3388'-3446'

Current PBTD: 3,548' (cement plug)

KB: 11'

SICP = 0 psig/ BH: 0 psi (no historic BH pressures in last 8 tests)

Notes: No documented rig work on well. No slickline reports able to be found.

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

P&A Rig Procedure- Axi Apache O 4

1. RU Wireline and RIH with 1.66" GR to clear tbg to EOT at 3410'.
2. 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.
3. NU 5k BOP & test.
4. TOOH and LD 1.66" production tbg.
5. RU E-line and MU 2-7/8" GR. Clear 2-7/8" csg to 3,345'.
6. MU 2-7/8" CIBP and RIH. Set at 2,338'. Tag to verify set.
 - a. **PC top perf at 3,388'.**
7. RU E-line and MU CBL tools. Load wellbore with water. RIH and log well from CIBP to surface with pressure on csg.
 - a. Review results with NMOCD and BLM to finalize all future cement plugs.
8. Pressure test the casing to 500 psi to verify wellbore integrity and plug set.
9. **Plug #1 (PC top perf 3,388'; PC formation top at 3,384', FRC formation top at 3,163')**: RU cementers and pump a 236' balanced cmt plug inside the 2-7/8" csg from 3,102' – 3,338', using 1.4 bbls (7 sx) of 15.8+ ppg Class G cmt.
 - a. Adjust cmt plug top based on CBL results.
10. RU E-line and MU DP charges, RIH and perf 2-7/8" csg at 3,102'.
11. MU 2-7/8" CICR and RIH. Set CICR at 3,052'
 - a. Kirtland form. Top at 3,052'.
12. Establish injection rate.
13. **Plug #2 (Kirtland formation top at 3,052')**: RU cementers and pump a 100' inside/outside cmt plug with 2-7/8" csg from 3,002' – 3,102' + 50' excess cement inside 2-7/8" tbg, using 11.4 bbls (56 sx) of 15.8+ ppg Class G cmt.
14. RU E-line and MU DP charges, RIH and perf 2-7/8" csg at 2,643'.
15. MU 2-7/8" CICR and RIH. Set CICR at 2,593'
 - a. Ojo form. Top at 2,593'.
16. Establish injection rate.

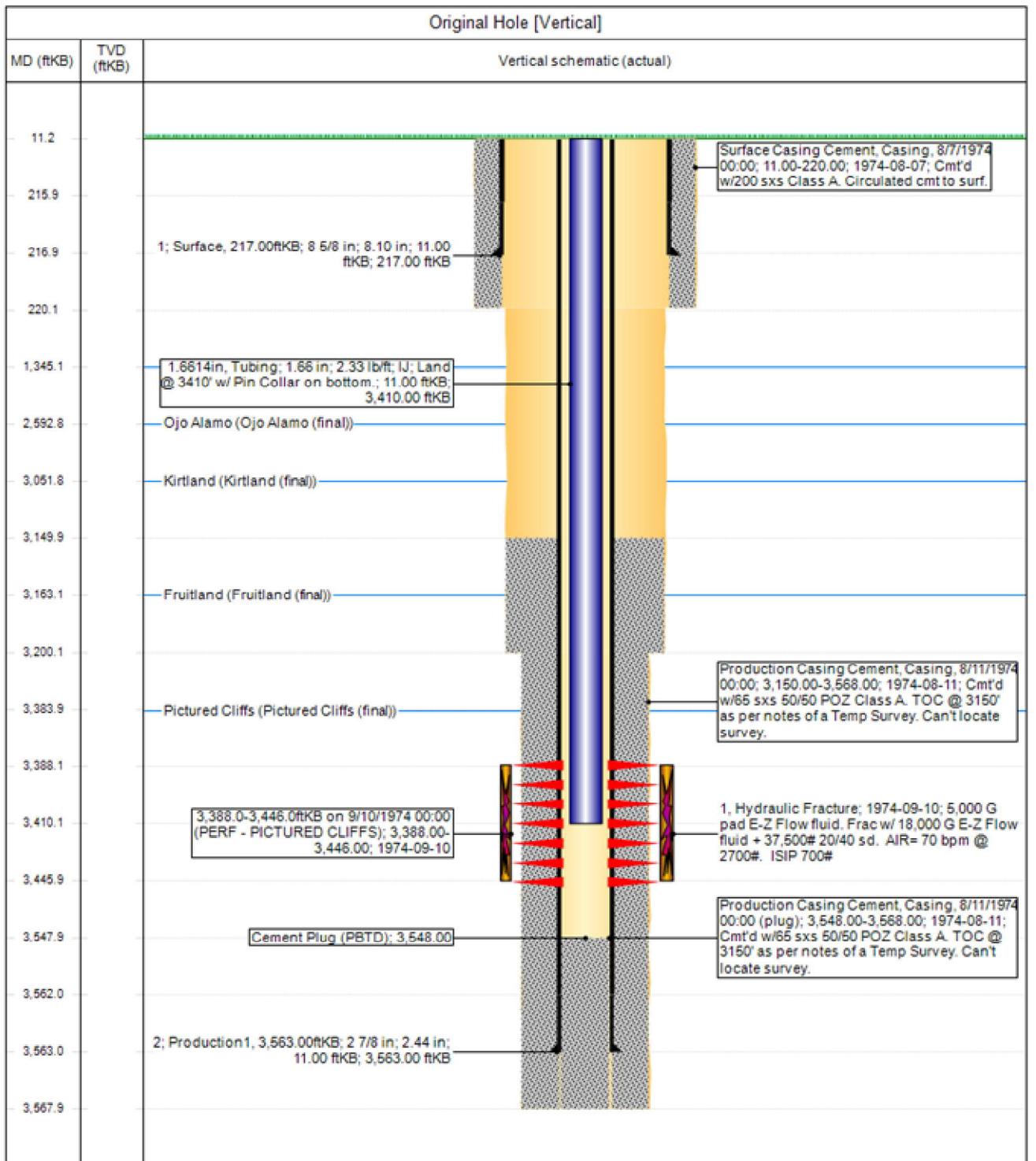
17. **Plug #3 (Ojo formation top at 2,593')**: RU cementers and pump a 100' inside/outside cmt plug with the 2-7/8" csg from 2,543' – 2,643' + 50' excess cement inside 2-7/8" tbg, using 11.4 bbls (56 sx) of 15.8+ ppg Class G cmt.
18. RU E-line and MU DP charges, RIH and perf 2-7/8" csg at 1,395'.
19. MU 2-7/8" CICR and RIH. Set CICR at 1,345'
 - a. Nacimiento form. Top at 1,345'.
20. Establish injection rate.
21. **Plug #4 (Nacimiento formation top at 1,345')**: RU cementers and pump a 100' inside/outside cmt plug with 2-7/8" csg from 1,295' – 1,395' + 50' excess cement inside 2-7/8" tbg, using 11.4 bbls (56 sx) of 15.8+ ppg Class G cmt.
22. RU E-line and MU DP perf gun. RIH and perforate 2-7/8" csg at 267'. Establish circulation with 8-5/8" x 2-7/8" casing annulus to surface.
 - a. Casing shoe at 217'
23. **Plug #5 (Surface casing at 217')**: RU cementers and circulate a 267' cmt plug from Surface – 267' inside the 2-7/8" & 2-7/8" x 8-5/8" csg annulus using 18 bbls (88 sx) of 15.8 ppg Class G cmt.
24. Verify all pressures on all strings are at 0 psi.
25. ND BOP. Cutoff wellhead at surface and weld on labeled P&A marker. Top off wellbore with cmt as needed.
26. RDMO P&A rig.



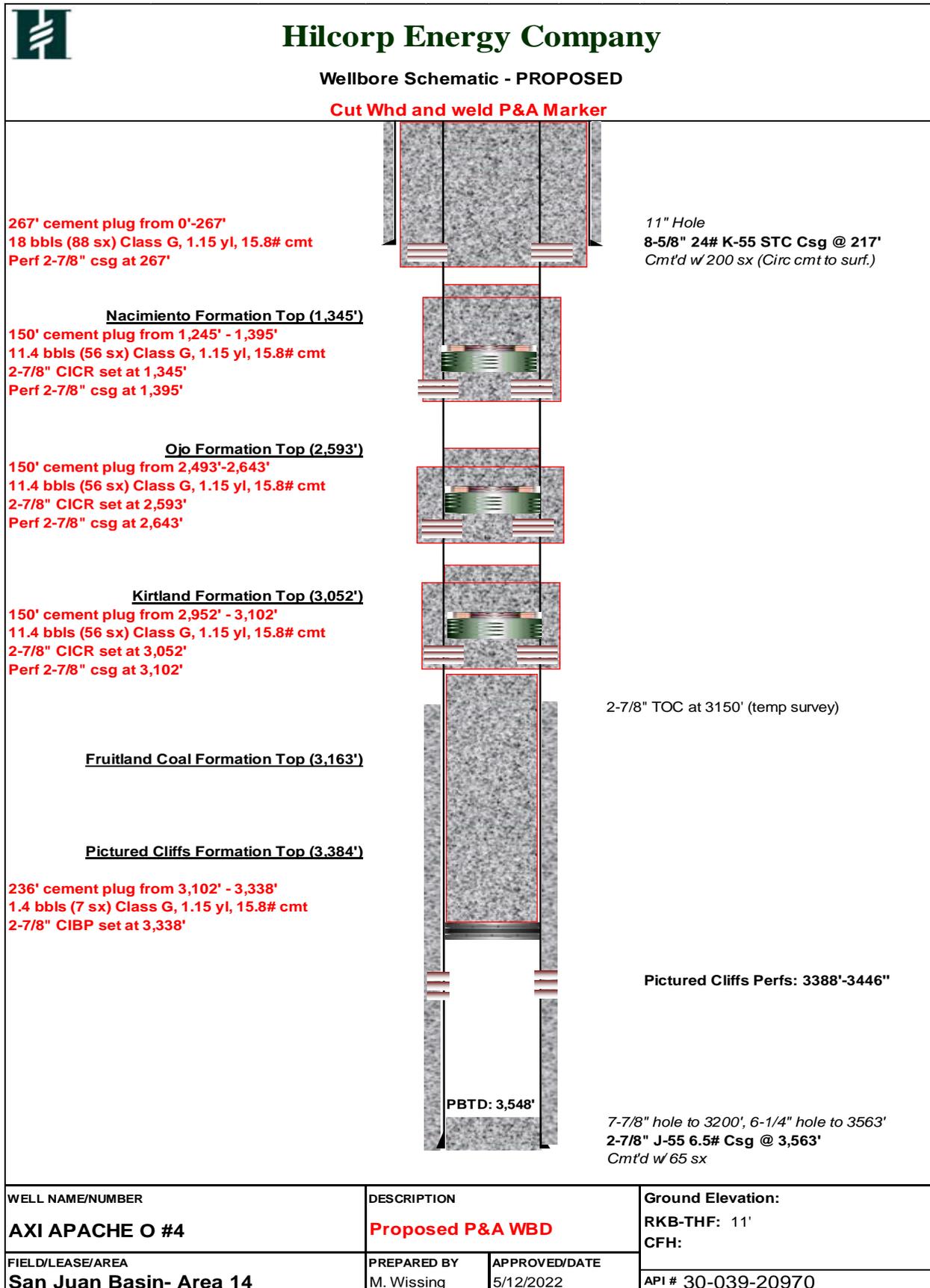
Current Schematic - Completion Comments

Well Name: AXI APACHE O #4

API / UWI 3003920970	Surface Legal Location 009-025N-004W-D	Field Name PC	Route 1406	State/Province NEW MEXICO	Well Configuration Type Vertical
Ground Elevation (ft) 6,958.00	Original KB/RT Elevation (ft) 6,969.00	KB-Ground Distance (ft) 11.00	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)	



PROPOSED P&A WELLBORE SCHEMATIC



Hilcorp Energy

Axi Apache O 4

36.418121, -107.26245

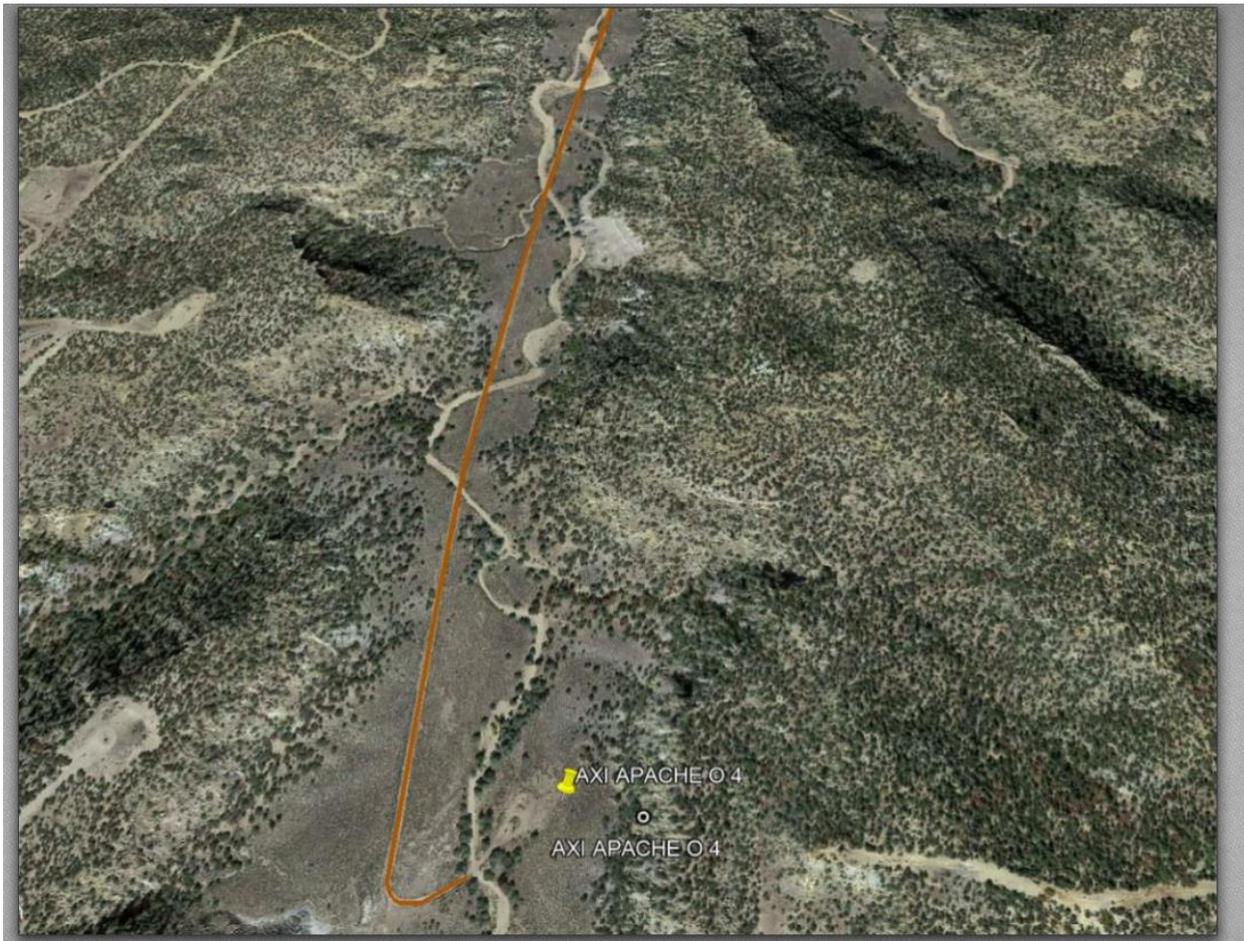
API-30-039-20970

Jicarilla Lease #97

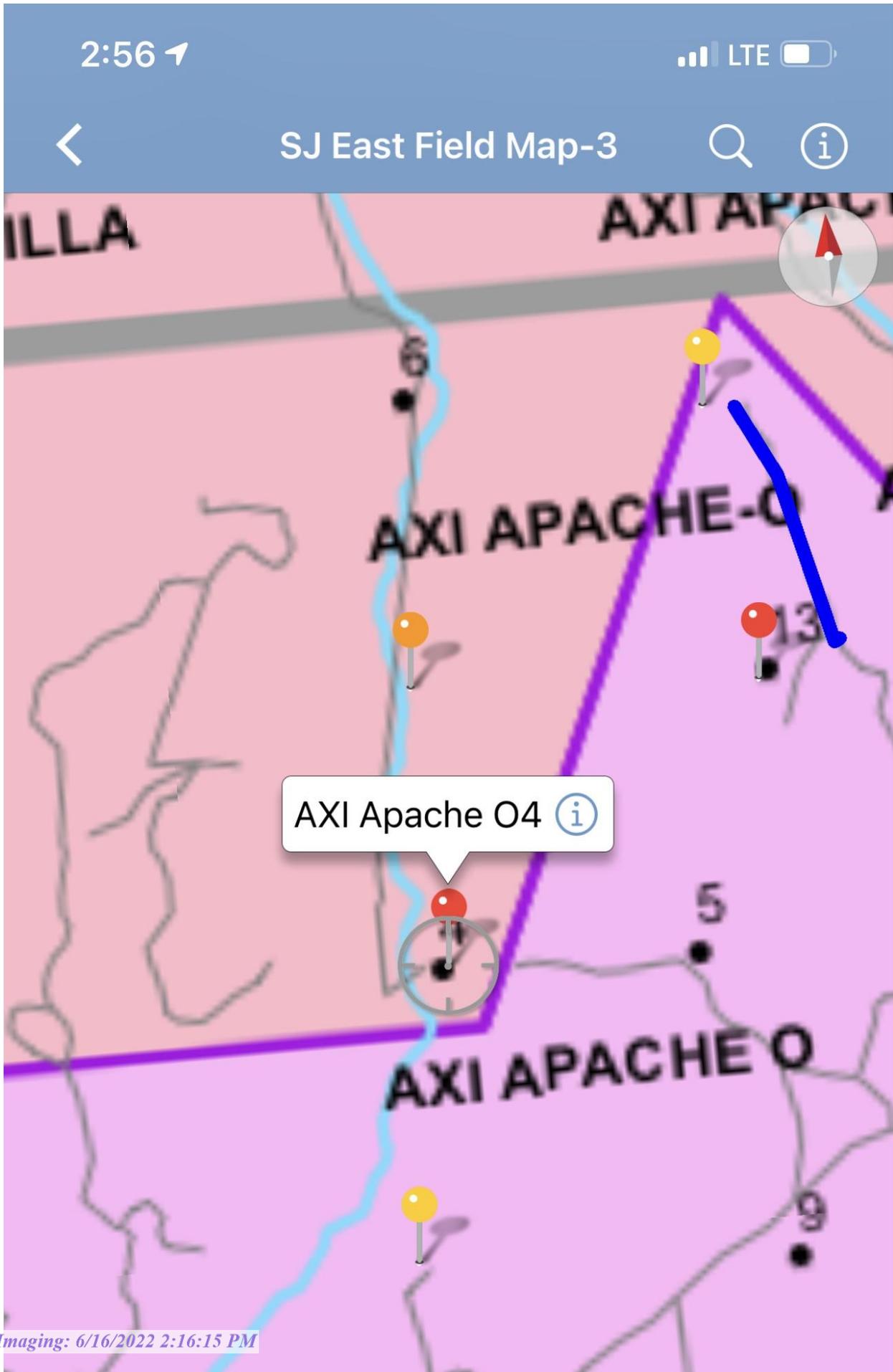
Final Reclamation Plan

Onsite 4/19/2022 with Kurt Sandoval, Alfred Vigil, Lloyd Bell, Bryan Hall.

1. Pick up and remove all trash, metal, cable, and any foreign debris within 200' of location.
2. Remove anchors.
3. Strip equipment off of facility.
4. Harvest to remove meter run and piping back to dog leg.
5. Set surface wellhead marker plate.
6. Reclaim road back to closest well, the AXI Apache O6 approximately 5900 feet, adding water bars where necessary.
7. Lightly rip bare soil.
8. Rip road. Fence access at the edge of the AXI Apache O6.
9. Re-seed all disturbed areas. Drill where applicable at rate per acre defined by seed mix, and broadcast seed and harrow, at double the rate, all other disturbed areas. Mesa Mix seed mix will be used.







**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.

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

AFMSS 2 Sundry ID 2671500

Attachment to notice of Intention to Abandon

Well: Axi Apache O 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) Extend Plug 2 and combine it with Plug 3 such that the Ojo Alamo is completely covered: 3102'-2593'.
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 06/16/2022

BLM - FFO - Geologic Report

Date Completed 6/14/2022

Well No. Axi Apache O # 4 Surf. Loc. 1115 FNL 945 FWL
 Sec. 9 T25N R4W

Lease No. Jic 122
 Operator Hilcorp Energy Co. County Rio Arriba State New Mexico
 TVD 3563 PBSD 3528 Formation Pictured Cliffs
 Elevation GL 6960 Elevation Est. KB 6971

Geologic Formations	Est. tops	Subsea Elev.	Remarks
San Jose	Surface		Surface
Nacimiento Fm.	1345	5626	Fresh water sands
Ojo Alamo Ss	2648	4323	Aquifer (fresh water)
Kirtland Fm.	3052	3919	
Fruitland Fm.	3163	3808	Coal/gas/possible water
Pictured Cliffs Ss	3384	3587	Probable water

Remarks:

Reference Well:

-Note that the well is in Rio Arriba county, the operations plan lists San Juan.
 -Extend Plug 2 and combine it with Plug 3 such that the Ojo Alamo is completely covered: 3102'-2593'.

Same

Prepared by: Walter Gage

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 118071

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 118071
	Action Type: [C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	CBL Required	6/16/2022
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	6/16/2022
kpickford	Adhere to BLM approved COAs and plugs. See GEO report.	6/16/2022