Form 3160-5
(June 2015)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
JIC122

6. If Indian, Allottee or Tribe Name
JICARILLA APACHE

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
AXI APACHE O 13

2. Name of Operator
HILCORP ENERGY COMPANY
Contact: ETTA TRUJILLO
E-Mail: ettrujillo@hilcorp.com

9. API Well No.
30-039-21432-00-S1

3a. Address
382 ROAD 3100
AZTEC, NM 87410

3b. Phone No. (include area code)
Ph: 505-324-5161

10. Field and Pool or Exploratory Area
SOUTH BLANCO

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 4 T25N R4W NESE 1535FSL 805FEL
36.425528 N Lat, 107.251172 W Lon

11. County or Parish, State
RIO ARRIBA COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☒ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
BP	☐ Change Plans	☒ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

The subject well was P&A'd on 12/06/2019 per the attached notification, summary report and wellbore schematic.

NMOCD
DEC 18 2019
DISTRICT III

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #495965 verified by the BLM Well Information System
For HILCORP ENERGY COMPANY, sent to the Rio Puerco
Committed to AFMSS for processing by JOE KILLINS on 12/16/2019 (20JK0008SE)

Name *(Printed/Typed)* ETTA TRUJILLO — Title OPERATIONS REGULATORY TECH SR

Signature (Electronic Submission) — Date 12/16/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By ACCEPTED — JOE KILLINS Title PETROLEUM ENGINEER — Date 12/16/201

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Rio Puerco

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

API: **30-039-21432**
Well Name: **AXI Apache O 13**
Plugged & Abandoned Notifications

Received verbal approval from Joe Killins (BLM), Brandon Powell (NMOCD) and Orson Harrison (JOGA) for the following notifications:

10/23/2019 – Rig will be moving off the subject well due to a stuck tubing and lack of wireline availability. We plan on moving back on location within 30days.

11/21/2019 – Extension granted due to weather issues.

11/27/2019 – Stuck 1.66" tubing and cut @ 3,634' (the lowest point in the tubing where free point read 100% free). The original P&A proposal was to set the CIBP @ 3,734'. After cutting the tubing, Hilcorp set a CICR @ 3,633' and pumped 12 sacks of cement below the retainer (full casing capacity + 100% excess). Hilcorp then ran a CBL from the CICR @ 3,633' to surface; TOC was determined to be +/- 2,745'. Hilcorp will stick to the original P&A proposal, with the only change being that the balance plug for plug #1 will be from 3,145'-3,663' instead of 3,145'-3,734'.

12/4/2019 - Fruitland, Kirtland, and Ojo Alamo Plug: Hilcorp pumped a balance plug from 3,145'-3,633' (17 sx which includes 100' excess cement. Hilcorp WOC'd and tagged the plug low @ 3,175'. Hilcorp pumped an additional 12 sx on top of the previous cement plug, WOC's and tagged @ 2,916'

Nacimiento Plug (BLM top @ 1,800') : Based on CBL, Hilcorp was given approval by BLM to pump an inside plug for adequate cement coverage across the Nacimiento. Hilcorp pumped a balance plug from 1,750'-1,850' (7 sx which includes 125' of excess cement. Hilcorp WOC'd and did not tag a plug. Hilcorp pump another balance plug from 1,750'-1,850' (7 sx which includes 125' of excess cement. Hilcorp WOC'd and did not tag a plug. Hilcorp pumped a 3rd plug from 1,750'-1,850' (8 sx which includes 150' of excess cement). Hilcorp WOC'd and tagged the plug @ 1,657'.

Nacimiento Plug (NMOCD top @ 1,510'): Hilcorp shot squeeze holes @ 1,560', set cement retainer @ 1,510', and had intentions to squeeze 51 sx behind pipe (100' of cement plus 100% excess). Hilcorp squeezed 17 sx before locking up, stung out of the retainer and spotted 13 sx on top of the retainer. Hilcorp was given approval by NMOCD for this plug, pending where the TOC was tagged. Hilcorp WOC'd and tagged @ 1,004', giving adequate cement coverage for the NMOCD Nacimiento Top.

Hilcorp Energy Company
PO Box 4700
Farmington, NM 87499

PLUS WELL SERVICE SINCE 1992
P.O. Box 1979, Farmington, NM 87499
(505) 325-2627

Name: AXI Apache O 13
API:30-039-21432

Well Plugging Report

Work Detail

Plug # 1	(PC perfs) Mix and Pump 12 SXS 1.15 Yield 13.8 cuft 15.6# G cement from 3634' to 3796' with sting out pressure at 800 psi. Tag @ 3634'.
Plug # 1 A	(pc, Fruitland, Kirtland, and OJO Alamo Formation Tops) Mix and Pump 17 Sxs, 1.15 yield, 19.5 cuft, 15.7#, G Cement with 1% Calcium, From 3634' to 3033'. (NOTE: during plug established circulation out BH). Tag @ 3179'.
Plug #1 B	Mix and Pump 12 Sxs, 1.15 yield, 13.8 cuft, 15.6#, G cement from 3179' to 2754'. Tag @ 2916'.
Plug #2A	BLM Nacimiento Top 1850'-1634' Mix & Pump 7 SXS, 15.8 PPG, 1/15 Yield, 8 CUFT, 1.4 BBL Slurry, Class G Cement, DISP W/ 2 BBL H2O. No tag.
Plug #2B	Plug #2B BLM Nacimiento Top 1850'-1634' Mix & Pump 7 SXS, 15.8 PPG, 1.15 Yield, 8 CUFT, 1.4 BBL Slurry, Class G Cement, DISP W/ 2 BBL H2O. Tag @ 1850'.
Plug #2C	BLM Nacimiento Top 1850'-1600' Mix & Pump 8 SXS, 15.8 PPG, 1.15 Yield, 9.2 CUFT, 1.6 BBL Slurry, Class G Cement, DISP W/ 2 BBL H2O. Tag @ 1657'.
Plug #3	Plug #3 Nacimiento Top Per NMOCD Request 1560'-1050' Mix & Pump 29.5 SXS, 15.8 PPG, 1.15 Yield, 33.9 CUFT, 6 BBL Slurry, Class G Cement, leaving 15 SXS in 2-7/8" X 7-7/8" OH, 1.5 SXS below CR, 13 SXS above CR, Initial Pump Rate 1/2 BPM @ 350 PSI, Final S/O Pressure 600 PSI Lockup, DISP W/ 1.5 BBL H2O. Tag @ 1004'.
Plug #4	Surface 556'-0' Mix & Pump 172 SXS, 15.8 PPG, 1.15 Yield, 197.8 CUFT, 35.2 BBL Slurry, Class G Cement, saw good Cement Returns @ Surface.
Top Off	Surface Top Off Mix & Pump 32 XS, 15.8 PPG, 1.15 Yield, 36.8 CUFT, 6.5 BBL Slurry, Class G Cement.

10/21/2019

Load supplies, travel to LOC.
Service & start Equip, Ready Rig & Equip for Road.
Road Rig & Equip to LOC.
HSM on JSA.
Spot in Equip, RU Daylight Pulling Unit, RU Pump Truck, RU Pump Line.
Check PSI 1-1/4" TBG-260, 2-7/8" CSG-50, BH-30 PSI, RU Relief Lines, BD CSG & BH, BD within 10 SEC. Attempt to BD TBG, Pump 20 BBL Kill, ND WH, attempt to install Companion Flange would not make up.
Make call to Big Red Tool, Wait for new Companion Flange.
Attempt to MU 3 different Big Red Flanges, none would MU, secure Well & LOC.

10/22/2019

Load supplies, travel to LOC.
HSM on JSA, service & start Equip.
Check PSI TBG-0, CSG-25, BH-20 PSI, BD CSG to 0 in less than 1 MIN, BH BD Immediately.
PU TBG to 18K, break TBG Head from CSG Collar, Function Test & Strip on BOP, RU Work Floor.
Work TBG up & down PU to 21K while Pumping H2O, Pump 25 total BBLS, no success.
Drain Pump & Lines, secure Well & LOC.
Travel to Yard.

10/23/2019

Standby for Hilcorp. Decision to RD & move to next Well.
Travel to LOC.
HSM on JSA, service & start Equip.
ND BOP, NU WH, RD Work Floor.
RD Daylight Pulling Unit, RD Pump Truck, ready Equip for Road.

11/25/2019

Load Rig Supplies, travel to SJ 29-5 unit #49.
Service & start Rig and equipment Ready to Road, MOL
Road Rig and Equipment to Location.
HSM on JSA. Check WH Pressures SICP 0 psi, SITP 260 psi, SIBHP 0 psi.
Spot in Base Beam and G-Pad. Spot in Rig. RUSU.
Rig up Blow down lines and Blow Down 1 1/4" TBG to light blow, RU Pump Unit to TBG and pump 10 BBLS H2O down TBG. TBG on Vacuum ND WH Remove TBG Hanger, Remove WH Strip on 2 7/8" companion Flange, NU BOP, RU floor and 1 1/4" handling equipment.
RU Cutters WL service, RIH with free point tools and find Tbg 100% stuck at 3650' and 100% free at 3650'. POOH with Free Point Tools and LD.
Wait on Orders BLM Jeff Hoffman ok with cutting TBG at 3634' and setting CIBP. Brandon Powell wants CR with cement below and no TA well needs to be P&A.
RIH with Jet Cutter and cut 1 1/4" TBG at 3634' POOH with WL dragging out of well. LD Tolls RD WL unit.
TOOH with 1 1/4" TBG IJ 2.33 # 111 TBG JTS and 1 Cut off JT.
Drain Equipment, Secure well and location SDFN.
Travel to Yard.

11/26/2019

Travel to Location
HSM on JSA. Service Rig and Equipment.
Check WH Pressure, SICP 0 psi, SITP N/A, SIBHP 0 psi, RU Blow Down Lines and open well to pit.
RU A-Plus WL RIH with 2 7/8" GR to 3634' POOH, RIH with 2 7/8" CR and set at 3634' POOH RD WL unit. (NOTE: air lines on WL Unit Froze had to Thaw Out.)
MU 2 7/8" Stinger on 1 1/4" TBG TIH and Tally, 111 tbg jts and 2 -8' subs tag CR Sting into CR Load CSG with 9 BBLS water attempt pressure test, Established rate at 1 BPM at 300 psi. RU pump to TBG Establish Rate below CR at 1 BPM at 150 PSI.
Plug # 1 (PC perfs) Mix and Pump 12 SXS 1.15 Yield 13.8 cuft 15.6# G cement from 3634' to 3796' with sting out pressure at 800 psi.
Circulate well with 20 BBLs H2O TOOH with TBG and 2 7/8" stinger. Top off CSG with 6 BBLS H2O.

unit.
PU JT of TBG and Flush BOP fluid below ground level. Drain PT, and equipment
Travel to yard

11/27/2019

Travel to Location
HSM on JSA, Service Rig and Equipment, Check WH pressure 0 psi on well RU blow down lines open well to pit.
MU 1 1/4" plugging sub TIH with 111 TBG JTS pu 1-10' x 1 1/4" sub tag CICR at 3634'
RU pump to TBG and established circulation with 5 BBLS water circulate well clean with total of 21 BBLs,
Plug # 1A (PC, Fruitland, Kirtland, and Ojo Alamo Formation Tops) Mix and Pump 17 Sxs, 1.15 yield, 19.5 cuft, 15.7#, G Cement with 1% Calcium, From 3634' to 3033'. (NOTE: during plug established circulation out BH).
LD SUB, 21 TBG JTS to 2916' TOOH with 17 STDS to 1815'. Shut in Well.
WOC
TIH with TBG and Tag TOC at 3179' RU pump to TBG establish circulation out CSG and BH valve with 5 BBLS water.
Plug #1 B Mix and Pump 12 Sxs, 1.15 yield, 13.8 cuft, 15.6#, G cement from 3179' to 2754'
LD to 2657' RU pump to TBG circulate well with 25 BBLS clean with small amount cement returns. LD 20 TBG JTS to 2010'.
Drain pump truck and Equipment Secure well and Location SDFWE.
Travel to Yard.

12/02/2019

Load supplies, travel to LOC.
HSM on JSA, service & start Equip.
Check PSI TBG-0, CSG-90, BH-0 PSI, open Well to Pit, CSG BD to 0 within 5 SECS.
TIH, Tag Plug #1B @ 2916', good Tag, LD to next Plug, RU to Pump Plug #2, load Well W/ 8 BBL H2O, CIRC 10 BBL total, saw good Returns to Pit. Received Verbal Approval from Monica Kuehling of NMOCD & Joe Killins of BLM to Plug #2 due to differing Nacimiento Formation Tops.
Plug #2A BLM Nacimiento Top 1850'-1634' Mix & Pump 7 SXS, 15.8 PPG, 1/15 Yield, 8 CUFT, 1.4 BBL Slurry, Class G Cement, DISP W/ 2 BBL H2O.
LD 8 JTS, SB 10 STDS.
Wait on Cement Sample to Set.
Attempt to Tag Plug #2A, no Tag, TOOH. Received Verbal Approval from Derrick Mcculler of BLM to Set CIBP @ 1850', Pump 200' Plug on top to cover BLM Nacimiento Top.
RU A-Plus WL, RIH to 1850', set WL Set 2-7/8" CIBP, POOH, LD Tool, RD WL.
TIH to 1850', RU to Pump Plug #2B.
Plug #2B BLM Nacimiento Top 1850'-1634' Mix & Pump 7 SXS, 15.8 PPG, 1.15 Yield, 8 CUFT, 1.4 BBL Slurry, Class G Cement, DISP W/ 2 BBL H2O.
LD 10 JTS, SB 10 STDS.
Secure Well & LOC.
Travel to Yard.

12/03/2019

Load supplies, travel to Location.
HSM on JSA, service & start Equip.
Check PSI TBG-0, CSG-30, BH-0 PSI, open Well to Pit.
TIH, Tag Plug #2B @ 1850', will need to Top Off. RU to Pump Plug #2C.
Plug #2C BLM Nacimiento Top 1850'-1600' Mix & Pump 8 SXS, 15.8 PPG, 1.15 Yield, 9.2 CUFT, 1.6 BBL Slurry, Class G Cement, DISP W/ 2 BBL H2O.
LD 9 JTS, SB 10 STDS.
Wait on Cement Sample to set.
TIH, Tag Plug #2C @ 1657', good Tag, TOOH.
TIH to 1510', S/I CR, check ROI, 1/2 BPM @ 400 PSI.
Plug #3 Nacimiento Top Per NMOCD Request 1560'-1050' Mix & Pump 29.5 SXS, 15.8 PPG, 1.15 Yield, 33.9 CUFT, 6 BBL Slurry, Class G Cement, leaving 15 SXS in 2-7/8" X 7-7/8" OH, 1.5 SXS below CR, 13 SXS above CR, Initial Pump Rate 1/2 BPM @ 350 PSI, Final S/O Pressure 600 PSI Lockup, DISP W/ 1.5 BBL H2O.
LD 10 JTS, TOOH, LD Stinger.
Secure Well & LOC.
Travel to Yard.

12/04/2019

Load supplies, travel to LOC.
HSM on JSA, service & start Equip.
Check PSI TBG-N/A, CSG-0, BH-0 PSI, open Well to Pit.
TIH Tag Plug #3 @ 1004', good Tag, LD to next Plug, SB 8 STDS.
Secure Well & LOC.
Travel to Yard.

12/06/2019

Load supplies, travel to Location.
HSM on JSA, service & start Equip.
Check PSI TBG-N/A, CSG-20, BH-0 PSI, open Well to Pit.
RU A-Plus WL, TIH to 556', Shoot 4 Holes W/ 1-11/16 Bi-Wire Gun, POOH, LD Tool, RD WL.
Check ROI, 1 BPM @ 300 PSI, TIH to 556' RU to Pump Surface Plug.
Plug #4 Surface 556'-0' Mix & Pump 172 SXS, 15.8 PPG, 1.15 Yield, 197.8 CUFT, 35.2 BBL Slurry, Class G Cement, saw good Cement Returns @ Surface.
LD Work String, RD Work Floor, ND BOP, NU WH, dig out Cellar.
Perform Hot Work Permit, cut off WH, TOC @ 40' inside 2-7/8" CSG, TOC @ 7' in 2-7/8" X 8-5/8" Annulus, install & weld on DH Marker @ LAT 36.425223, LONG -107.250354.
RD Daylight Pulling Unit. Install Tire Chain on Equip.
Surface Top Off Mix & Pump 32 XS, 15.8 PPG, 1.15 Yield, 36.8 CUFT, 6.5 BBL Slurry, Class G Cement.
Clean & Secure LOC.
Travel to Yard.

On Site Reps:

Name	Association	Notes
Casey Arnett	BLM	On Loc
Derrick Mcculler	BLM	On Loc
Juan Cardenas	Co. Rep.	on Location
Vic Montoya	Co. Rep.	On Loc


Tallgrass Energy Partners

Hilcorp Energy Company

Current Schematic - Version 3

Well Name: AXI APACHE O #13

API / UWI	Surface Legal Location	Field Name	Route	State/Province	Well Configuration Type
3003921432	004-025N-004W-I	PC	1415	NEW MEXICO	Vertical

Ground Elevation (ft)	Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)
7,273.00	7,285.00	12.00		

Vertical, Original Hole, 12/16/2019 11:03:20 AM