

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.*

5. Lease Serial No.  
NMSF078213

6. If Indian, Allottee or Tribe Name

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

**SUBMIT IN TRIPLICATE - Other instructions on page 2**

8. Well Name and No.  
TIGER 6

1. Type of Well  
 Oil Well  Gas Well  Other

9. API Well No.  
30-045-29581-00-S1

2. Name of Operator  
HILCORP ENERGY COMPANY  
Contact: AMANDA WALKER  
E-Mail: mwalker@hilcorp.com

3a. Address  
1111 TRAVIS STREET  
HOUSTON, TX 77002

3b. Phone No. (include area code)  
Ph: 505-324-5122

10. Field and Pool or Exploratory Area  
FULCHER KUTZ PICTURED CLIFFS

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 35 T30N R13W NWNW 790FNL 860FWL  
36.774458 N Lat, 108.181544 W Lon

11. County or Parish, State  
SAN JUAN COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recomple 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 recomple 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.

**\*\*THIS IS A RUSH PROJECT\*\***

Hilcorp Energy Company requests permission to P&A the subject well per the attached procedure, current and proposed wellbore schematic. A closed loop system will be used.

**\*\*Please note the surface is FEE, therefore a pre-disturbance onsite is not required.**

NMOC

DEC 18 2019

DISTRICT III

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #494594 verified by the BLM Well Information System  
For HILCORP ENERGY COMPANY, sent to the Farmington  
Committed to AFSS for processing by JOHN HOFFMAN on 12/05/2019 (20JH0085SE)**

Name (Printed/Typed) AMANDA WALKER

Title OPERATIONS/REGULATORY TECH SR.

Signature (Electronic Submission)

Date 12/05/2019

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By JOHN HOFFMAN

Title PETROLEUM ENGINEER

Date 12/18/2019

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 Farmington

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 \*\***

AV

8



Hilcorp Energy Company

TIGER 6

NOI - Plug and Abandon

API #: 3004529581

**PROCEDURE**

1. Hold a pre-job safety meeting prior to beginning all operations or during a change in operational scope or initiation of SIMOPs. Properly document all operations via the JSA process. Insure that all personnel onsite abide by HEC safety protocol, including PPE, housekeeping, and procedures. Verify cathodic protection is off and wellhead instrumentation is properly disconnected from wellhead. Comply with all NMOCD, BLM, and HEC safety and environmental regulations. Verify there is no H2S present prior to beginning operations. If H2S is present, take the necessary actions to insure that the operation is safe prior to beginning operations. Observe and record pressures across all strings daily, prior to beginning operations. **Notify NMOCD and BLM 24 hours in advance of beginning operations**

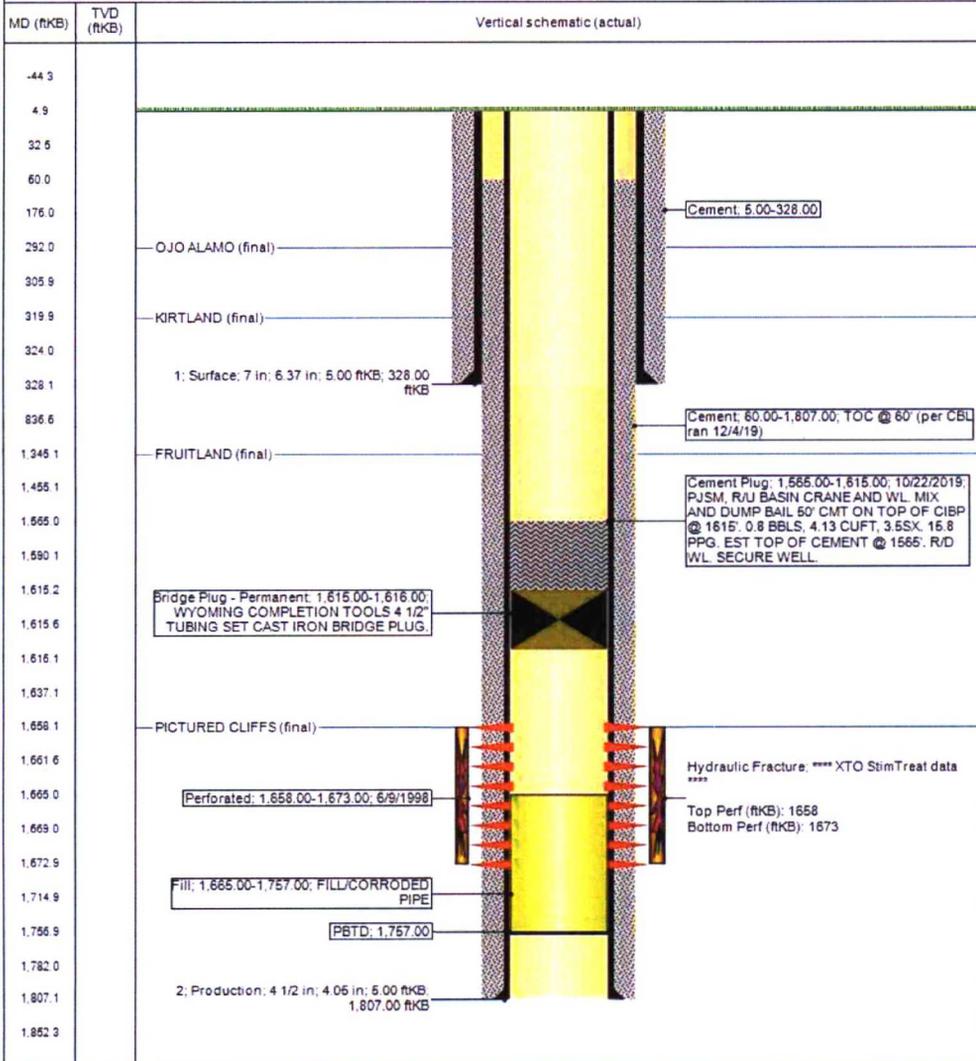
**NOTE: this procedure is contingent upon P&A sundry approval by both the BLM and the NMOCD.** All cement volumes use 100% excess outside pipe and 50' excess inside (unless stated otherwise). All cement will be Class G, mixed at 15.8 ppg with a 1.15 cf/sx yield. 8.3 ppg fluid will be used to balance the well during this operation.

2. MIRU service rig and associated equipment, ND casing risers
3. ND tree and NU BOPs. Pressure and function test BOPs to 150/1500 psi.
4. Run CBL # TOC (1550') on CIBP at 1615' (completed on 12/4/19)
5. **PLUG #1:** PU tbg, RIH open-ended to 1400'. Mix and pump a 126 sx, Class G cement plug from 1400' to 200' to cover Fruitland, Kirtland and Ojo Alamo tops and the 7" surface casing shoe. PUH and RO excess cement. WOC  
**NOTE:** plug is designed with 30% excess to account for possible holes in casing
6. **PLUG #2:** LIH and tag TOC. PUH to 110'. PT bradenhead and production csg to 500 psi. IF the csg does not PT, attempt to circulate thru the annulus to the surface (thru a possible hole in csg), mix and pump an ~10 sx inside/outside, Class G cement plug from ~60' to 0', or until cement has reached the top of both strings. IF unable to PT and establish an injection rate or circulation, perforate at 50' and attempt to pump the plug mentioned above.  
**NOTE:** CBL indicates solid cement from PBTD to 60'
7. ND BOPs, cementing valves. Cut csg and remove wellhead. Fill annulus with cement, as needed. Install P&A marker to comply with regulations, record GPS coordinate for P&A marker, and photograph P&A marker in place. RDMO.

Well Name: TIGER #6

API / UWI 3004529581	Surface Log Location T30N-R13W-S35	Field Name Fulcher Kutz PC	Route 0206	State/Province New Mexico	Well Configuration Type Vertical
Ground Elevation (ft) 5,702.00	Original KBRT Elevation (ft) 5,707.00	KB-Ground Distance (ft) 5.00	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)	

Vertical, Original Hole, 12/4/2019 12:05:49 PM

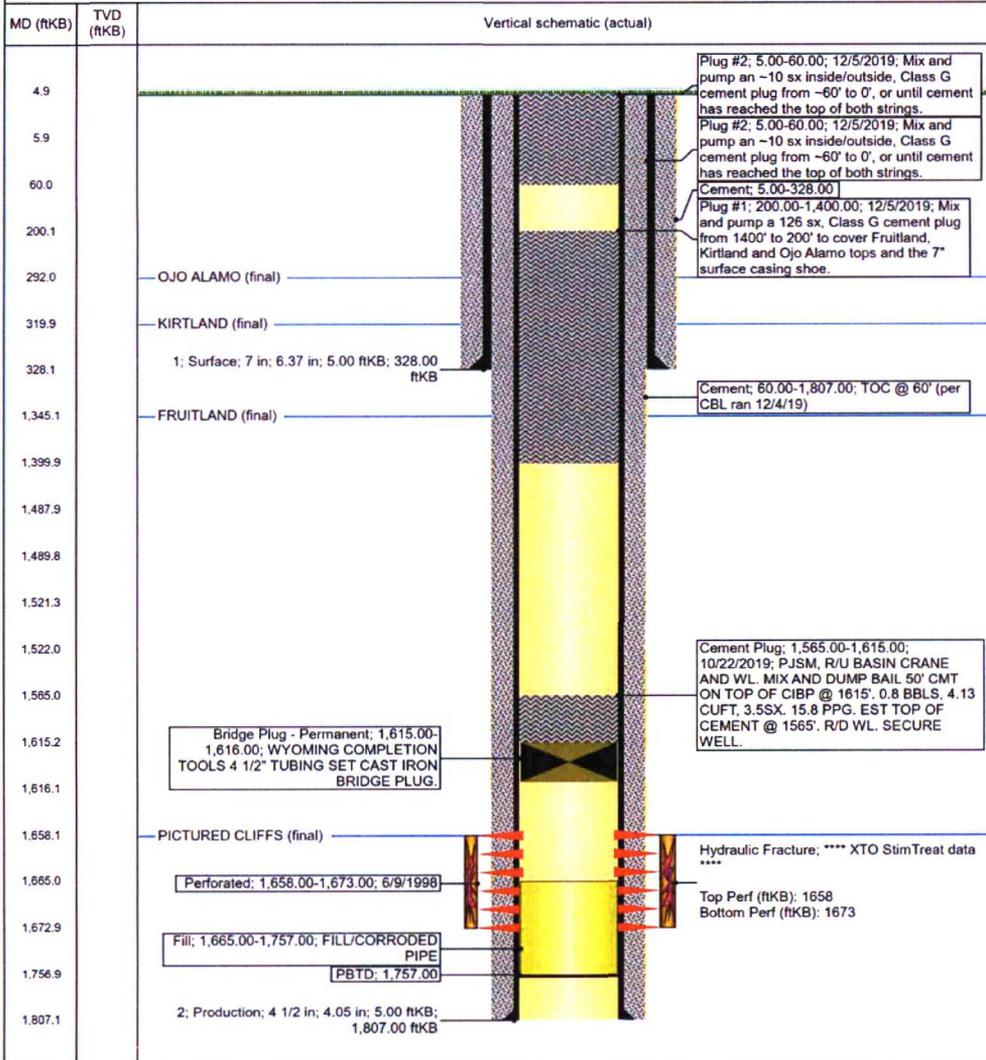


PROPOSED SCHEMATIC

Well Name: TIGER #6

API/LWI 3004529581	Surface Legal Location T30N-R13W-S35	Field Name Fulcher Kutz PC	Route 0206	State/Province New Mexico	Well Configuration Type Vertical
Ground Elevation (ft) 5,702.00	Original KB/RT Elevation (ft) 5,707.00	KB-Ground Distance (ft) 5.00	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)	

Vertical, Original Hole, 12/5/2019 6:49:38 AM



**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<sub>2</sub>S.

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**

Attachment to notice of  
Intention to Abandon:

Re: Permanent Abandonment  
Well: Tiger 6 API: 30-045-29581

**CONDITIONS OF APPROVAL**

1. Plugging operations authorized are subject to the "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
2. Forward CBL to Joe Killins [jkillins@blm.gov](mailto:jkillins@blm.gov), John Hoffman [jhoffman@blm.gov](mailto:jhoffman@blm.gov) and Brandon Powell [brandon.powell@state.nm.us](mailto:brandon.powell@state.nm.us).
3. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.
4. BLM picks formation tops as indicated in Geo Report attachment for use in determining TOC for all plugs. Please adjust plugs according to BLM tops.
5. Surface plug: perforate and circulate cement.

**BLM FLUID MINERALS  
Geologic Report**

**Date Completed: 12/5/2019**

Well No.	Tiger #6	Location	790	FNL	&	860	FWL
Lease No.	NMSF078213	Sec. 35	T30N			R13W	
Operator	Hilcorp Energy Company		County	San Juan		State	New Mexico
Total Depth	1807	PBTD	1757		Formation	Pictured Cliffs	
Elevation (GL)	5702		Elevation (KB)	5707			

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					Surface/Fresh water sands
Nacimiento Fm			Surface	252	Fresh water sands
Ojo Alamo Ss			252	332	Aquifer (fresh water)
Kirtland Shale			332	1308	
Fruitland Fm			1308	1640	Coal/Gas/Possible water
Pictured Cliffs Ss			1640	PBTD	Gas
Lewis Shale					
Chacra					
Cliff House Ss					Water/Possible gas
Menefee Fm					Coal/Ss/Water/Possible O&G
Point Lookout Ss					Probable water/Possible O&G
Mancos Shale					
Gallup					O&G/Water
Graneros Shale					
Dakota Ss					O&G/Water

**Remarks:**

P & A

- BLM geologist's pick for the top of the Ojo Alamo, Kirtland, Fruitland, and Pictured Cliffs formations varies from operator's.
- Log analysis of reference well #2 (attached worksheet) indicates the Ojo Alamo sands investigated contain fresh water ( $\leq 5,000$  ppm TDS).
- Please ensure that the tops of the Pictured Cliffs, Fruitland, and Kirtland Formations, as well as the entire Ojo Alamo fresh water aquifer identified in this report are isolated by proper placement of cement plugs. This will protect the fresh water sands in this well bore.

**Reference Well:**

- |   |                   |
|---|-------------------|
| 1) Same   | Fm. Tops          |
| 2) Burlington Resources<br>City of Fmgt #1<br>790' FNL, 790' FEL<br>Sec. 35, T30N, R13W<br>GL 5685', KB 5696' | Water<br>Analysis |

**Prepared by: Chris Wenman**