

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED  
SEP 11 2018

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**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.

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		7. If Unit of CA/Agreement, Name and/or No.
2. Name of Operator <b>Hilcorp Energy Company</b>		8. Well Name and No. <b>Bolin Hardie 1</b>
3a. Address <b>382 Road 3100, Aztec, NM 87410</b>	3b. Phone No. (include area code) <b>505-599-3400</b>	9. API Well No. <b>30-045-20126</b>
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>Surface Unit D (NWNW), 880' FNL &amp; 1170' FWL, Sec. 34, T29N, R08W</b>		10. Field and Pool or Exploratory Area <b>Basin Dakota</b>
		11. Country or Parish, State <b>San Juan, New Mexico</b>

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"/> Fracture Treat	<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 checked="" type="checkbox"/> Other <u>MIT</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>w/ Contingent P&amp;A</u>
	<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 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.)

**Hilcorp Energy performed 3 squeeze attempts on the subject well. As of 7/31/2018 there was still some leak off. Attached is a procedure to perform an MIT w/ a contingent P&A procedure.**

Notify NMOCD 24 hrs prior to beginning operations

NMOCD  
SEP 24 2018  
DISTRICT III

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) <b>Christine Brock</b>		Title <b>Operations/Regulatory Technician - Sr.</b>
Signature <i>Christine Brock</i>	Date <i>9/11/18</i>	

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by <i>Chip Harwood</i>	Title <i>Geologist</i>	Date <i>9/20/18</i>
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 <i>BLM-FFO</i>

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.

# SQUEEZE TEST WITH CONTINGENT PLUG AND ABANDONMENT PROCEDURE

August 24, 2018

## Bolin – Hardie #1

### Basin Dakota

880' FNL / 1170' FWL Section 4, T29N, R8W, San Juan County, New Mexico

API 30-045-20126 / Lat. 36.687300N / Long. 107.669029W

Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class G, mixed at 15.8 ppg with a 1.15 cf/sx yield.

1. This project will use a steel tank to handle waste fluids circulated from the well and cement wash up.
2. Install and test location rig anchors. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP.
3. Rods: Yes\_\_\_, No\_\_\_, Unknown\_\_\_\_.  
Tubing: Yes\_\_\_, No X\_\_\_, Unknown\_\_\_\_, Size \_\_\_\_\_, Length \_\_\_\_\_.  
Packer: Yes\_\_\_, No X\_\_\_, Unknown\_\_\_\_, Type \_\_\_\_\_.

**Note: This may be done prior to contingent P&A work.**

- May RIH with bit and/or string mill to ~4294'.
  - May RIH and set 4.5" RBP at ~4294'. Load casing and pressure test to 600# for 30 minutes. Record rates. If the casing fails the MIT then contact CE and P&A the well. If it passes, additional testing may be performed.
4. **Plug #1 (Dakota perforations and top, 7190' – 7090')**: R/T .45" gauge ring or mill to 7190' and tag existing BP at 7190'. PU tubing workstring and RIH. Pressure test tubing to 800#. Circulate hole clean. Mix and pump 12 sxs Class G cement and spot a balanced plug inside casing to isolate the Dakota interval. PUH.
  5. **Plug #2 (Gallup and Mancos tops, 6161' - 5557')**: Mix and pump 45 sxs Class G cement and spot a balanced plug inside casing to cover the Gallup and Mancos top. PUH.
  6. **Plug #3 (Mesaverde and Chacra top, 4610' – 3860')**: Mix and pump 55 sxs Class G cement and spot a balanced plug inside casing to cover the Mesaverde and Chacra top. PUH.
  7. **Plug #4 (7" casing shoe and PC top, 3249' – 2894')**: Mix and pump 28 sxs Class G cement and spot a balanced plug inside casing to cover the 7" shoe and PC top. PUH.
  8. **Plug #5 (Fruitland top, 2710' - 2610')**: Mix and pump 12 sxs Class G cement and spot a balanced plug inside casing to cover the Fruitland top. TOH.

9. **Plug #6 (Kirtland and Ojo Alamo tops, 2154' – 1907')**: Perforate 3 deep penetrating squeeze holes at 2154'. Attempt to establish circulation in 7" x 8.75" OH. Set 4.5" CR at 2104'. Mix and pump 78 sxs Class G cement, squeeze 57 sxs outside 7" x 8.75" annulus and leave 21 sxs inside casing. TOH.
10. **Plug #7 (Nacimiento top, 520' – 420')**: Perforate 3 deep penetrating squeeze holes at 520'. Attempt to establish circulation into 4.5" x 7" annulus and 7" x 8.75" OH. Set 4.5" CR at 470'. Mix and pump 53 sxs Class G cement, squeeze 18 sxs into 4.5" x 7" annulus and 23 sxs outside 7" x 8.75" annulus and leave 12 sxs inside casing. TOH and LD tubing.
11. **Plug #8 (9-5/8" Surface casing shoe, 259' - Surface)**: Perforate 4 squeeze holes at 259'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 100 sxs cement and pump down the 4.5" casing to circulate good cement out bradenhead. Shut in well and WOC.
12. ND cementing valves and cut off wellhead. Fill annuli with cement as necessary. Install P&A marker to comply with regulations. Record GPS coordinate for P&A marker on tower report. Photograph P&A marker in place. RD, MOL and cut off anchors. Restore location per BLM stipulations

# Bolin – Hardie #1

## Proposed P&A

### Basin Dakota

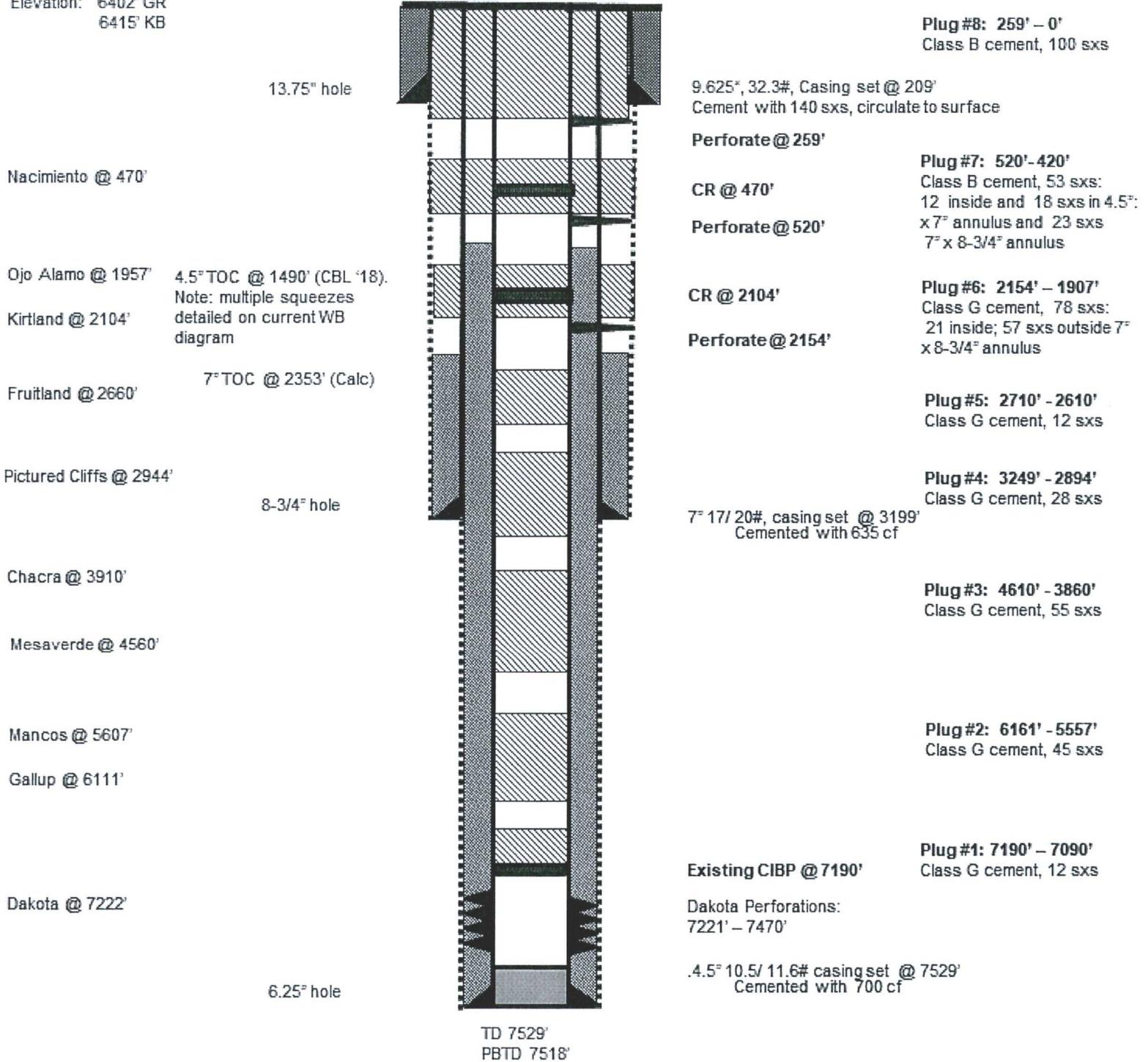
Today's Date: 8/23/18

880' FNL / 1170' FWL Section 4, T-29-N, R-8-W,

Spud: 8/15/67  
Comp: 9/9/67

San Juan County, NM, API #30-045-20126

Elevation: 6402' GR  
6415' KB



**Plug #8: 259' – 0'**  
Class B cement, 100 sxs

9.625", 32.3#, Casing set @ 209'  
Cement with 140 sxs, circulate to surface

**Perforate @ 259'**

**Plug #7: 520' - 420'**  
Class B cement, 53 sxs:  
12 inside and 18 sxs in 4.5"  
x 7" annulus and 23 sxs  
7" x 8-3/4" annulus

**CR @ 470'**

**Perforate @ 520'**

**Plug #6: 2154' – 1907'**  
Class G cement, 78 sxs:  
21 inside; 57 sxs outside 7"  
x 8-3/4" annulus

**CR @ 2104'**

**Perforate @ 2154'**

**Plug #5: 2710' - 2610'**  
Class G cement, 12 sxs

**Plug #4: 3249' - 2894'**  
Class G cement, 28 sxs

7" 17/20#, casing set @ 3199'  
Cemented with 635 cf

**Plug #3: 4610' - 3860'**  
Class G cement, 55 sxs

**Plug #2: 6161' - 5557'**  
Class G cement, 45 sxs

**Plug #1: 7190' – 7090'**  
Class G cement, 12 sxs

**Existing CIBP @ 7190'**

Dakota Perforations:  
7221' – 7470'

.4.5" 10.5/ 11.6# casing set @ 7529'  
Cemented with 700 cf

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: Bolin Hardie 1

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. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.
3. The following modifications to your plugging program are to be made:
  - a) Set Plug #7 (684 – 584) ft. to cover the Nacimiento top. BLM picks top of Nacimiento at 634 ft.

Operator must run CBL to surface to identify TOC. Submit electronic copy of the log for verification to the following addresses: [jwsavage@blm.gov](mailto:jwsavage@blm.gov) [brandon.powell@state.nm.us](mailto:brandon.powell@state.nm.us)

Low concentrations of H<sub>2</sub>S (4 ppm GSV) have been reported in wells within a 1 mile radius of this location.

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.

NMOC  
OCT 01 2018  
DISTRICT III