

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

Heather Riley, Division Director
Oil Conservation Division



New Mexico Oil Conservation Division approval and conditions listed below are made in accordance with OCD Rule 19.15.7.11 and are in addition to the actions approved by BLM on the following 3160-4 or 3160-5 form.

Operator Signature Date: 11/16/2018
Well information:

30-045-20256 HUERFANO UNIT #179
HILCORP ENERGY COMPANY

Application Type:

- P&A Drilling/Casing Change Location Change
 Recomplete/DHC (For hydraulic fracturing operations review EPA Underground injection control Guidance #84; Submit Gas Capture Plan form prior to spudding or initiating recompletion operations)
 Other:

Conditions of Approval:

- Notify NMOCD 24hrs prior to beginning operations.
- Extend Plug #5 up to 2630' to cover the Chacra top. OCD Chacra pick @ 2680'

A handwritten signature in black ink, appearing to read "Heather Riley".

NMOCD Approved by Signature

12/21/18
Date

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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		5. Lease Serial No. SF-077806
2. Name of Operator Hilcorp Energy Company		6. If Indian, Allottee or Tribe Name
3a. Address 382 Road 3100, Aztec, NM 87410	3b. Phone No. (include area code) 505-599-3400	7. If Unit of CA/Agreement, Name and/or No. Huerfano Unit
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Surface Unit F (SENW) 1750' FNL & 1650' FWL, Sec. 14, T26N, R10W		8. Well Name and No. Huerfano Unit 179
		9. API Well No. 30-045-20256
		10. Field and Pool or Exploratory Area Basin DK / Huerfano PC
		11. Country or Parish, State San Juan, New Mexico

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 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 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 requests permission to P&A the subject well per the attached procedure. The Pre-Disturbance Site Visit was held on 11/9/2018 with Bob Switzer/BLM. The Re-Vegetation Plan is attached. A Closed Loop system will be used.

NMOC

DEC 21 2018

DISTRICT III

**SEE ATTACHED FOR
CONDITIONS OF APPROVAL**

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) Christine Brock		Title Operations/Regulatory Technician - Sr.
Signature <i>Christine Brock</i>		Date <i>11/16/18</i>

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by <i>[Signature]</i>	Title PE	Date 12/19/18
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 FTO	

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.

NMOC ^{BP} _{FV}

PLUG AND ABANDONMENT PROCEDURE

November 8, 2018

Huerfano Unit #179

Basin Dakota / Huerfano PC

1750' FNL, 1650' FWL, Section 14, T26N, R10W, San Juan County, New Mexico

API 30-045-20256 / Long _____ / _____

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 an A-Plus 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 _____, Unknown _____, Size 2-3/8", Length 2215'.
Packer: Yes _____, No , Unknown _____, Type _____.
4. **Plug #1 (Dakota perforations and top, 6640' – 6544')**: R/T 4.5" gauge ring or mill to 6640' and tag existing CIBP @ 6640'. Mix and pump 12 sxs Class G cement and spot a balanced plug inside casing to isolate the Dakota interval. TOH
5. **Plug #2 (Gallup top, 5750' – 5650')**: Perforate 3 squeeze holes at 5750'. Attempt to establish rate into squeeze holes. Set 4.5" cement retainer at 5700'. Establish rate into squeeze holes. Mix and pump 52 sxs Class B cement, squeeze 40 sxs outside the casing and leave 12 sxs inside casing to cover the Gallup top. PUH.
6. **Plug #3 (Mancos tops, 4954' – 4854')**: Mix and pump 12 sxs Class G cement and spot a balanced plug inside casing to cover the Mancos top. PUH.
7. **Plug #4 (Mesaverde top, 3832' – 3732')**: Mix and pump 12 sxs Class G cement and spot a balanced plug inside casing to cover the Mesaverde top. PUH.
8. **Plug #5 (Chacra top, 3130' – 3030')**: Mix and pump 12 sxs Class G cement and spot a balanced plug inside casing to cover the Chacra top. PUH.
9. **Plug #6 (Pictured Cliffs and Fruitland tops, 2155' – 1945')**: RIH and set 4.5" CR at 2155'. Mix and pump 21 sxs Class G cement and spot a balanced plug inside casing to cover the PC and Fruitland tops. PUH.
10. **Plug #7 (Kirtland and Ojo Alamo tops, 1454' – 1325')**: Mix and pump 14 sxs Class G cement and spot a balanced plug inside casing to cover the Kirtland and Ojo Alamo tops. PUH.

11. **Plug #8 (8-5/8" Surface casing shoe, 260' - Surface):** Perforate 4 squeeze holes at 260'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 86 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

Huerfano Unit #179

Current

Basin Dakota / Huerfano PC

1750' FNL, 1650' FWL, Section 14, T-26-N, R-10-W, San Juan County, NM

Lat: _____ N / Lat: _____ W, API #30-045-20256

Today's Date: 11/8/18

Spud: 4/8/68

Completion: 6/5/68

Elevation: 6660' GL
6672' KB

Ojo Alamo @ 1375'

Kirtland @ 1404'

Fruitland @ 1995'

Pictured Cliffs @ 2200'

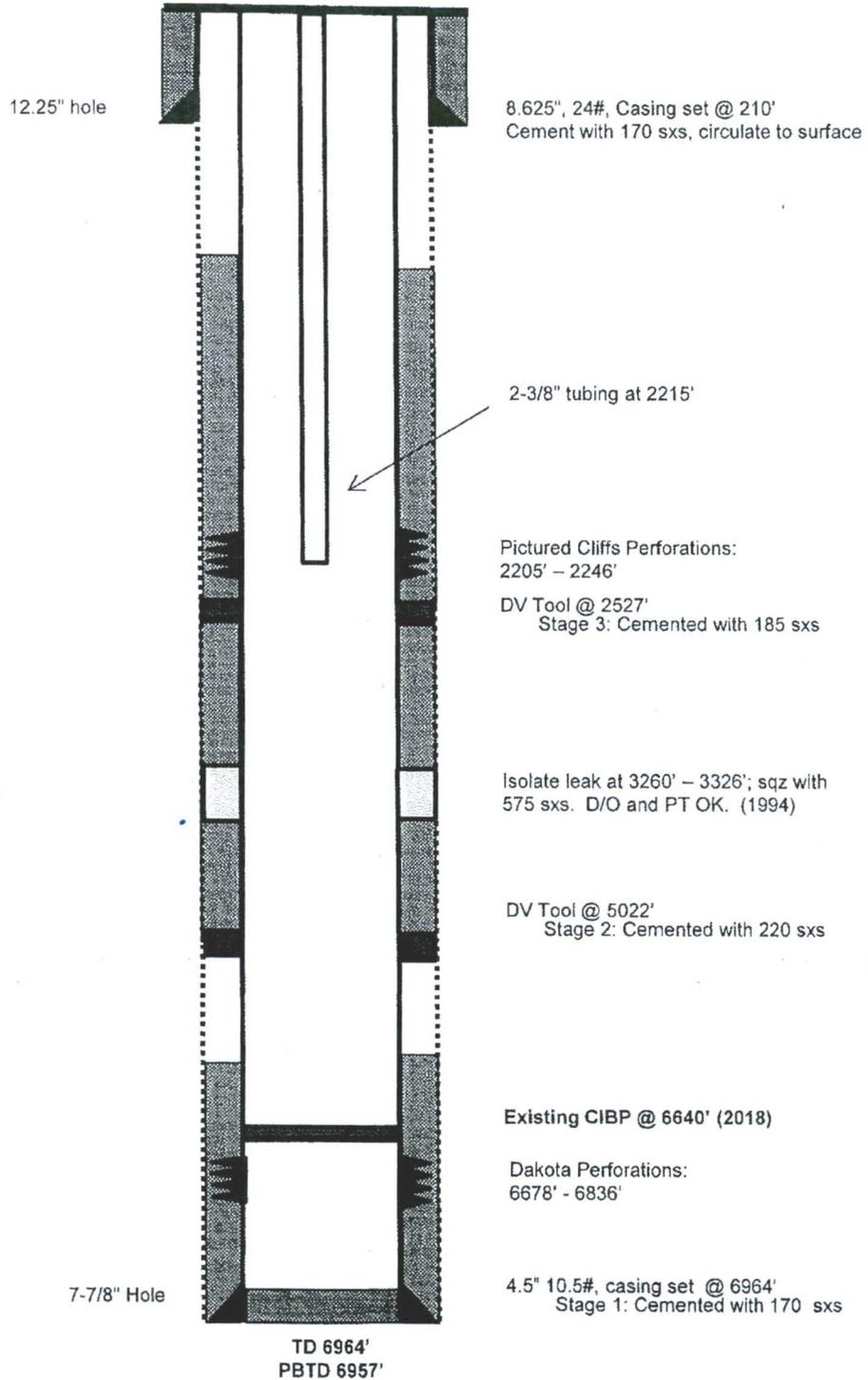
Chacra @ 3080'

Mesaverde @ 3782'

Mancos @ 4904'

Gallup @ 5700'

Dakota @ 6594'



Huerfano Unit #179

Proposed P&A

Basin Dakota / Huerfano PC

1750' FNL, 1650' FWL, Section 14, T-26-N, R-10-W, San Juan County, NM

Lat: _____ N / Lat: _____ W, API #30-045-20256

Today's Date: 11/8/18

Spud: 4/8/68

Completion: 6/5/68

Elevation: 6660' GL
6672' KB

Ojo Alamo @ 1375'

Kirtland @ 1404'

Fruitland @ 1995'

Pictured Cliffs @ 2200'

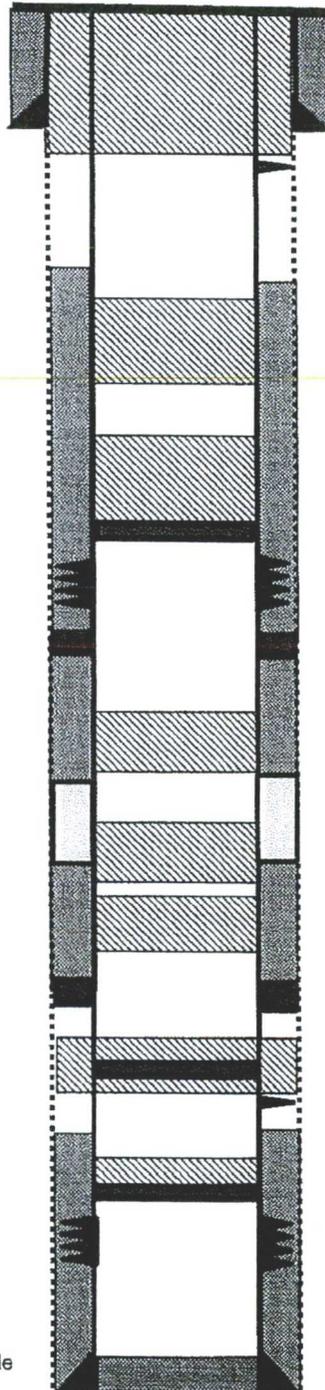
Chacra @ 3080'

Mesaverde @ 3782'

Mancos @ 4904'

Gallup @ 5700'

Dakota @ 6594'



12.25" hole

7-7/8" Hole

Plug #8: 260' - 0'
Class G cement, 86 sxs

8.625", 24#, Casing set @ 210'
Cement with 170 sxs, circulate to surface

Perforate @ 260'

Plug #7: 1454' - 1325'
Class G cement, 14 sxs

Plug #6: 2155' - 1945'
Class G cement, 21 sxs

Cmt Retainer @ 2155'

Pictured Cliffs Perforations:
2205' - 2246'

DV Tool @ 2527'
Stage 3: Cemented with 185 sxs

Plug #5: 3130' - 3030'
Class G cement, 12 sxs

Isolate leak at 3260' - 3326'; sqz with
575 sxs. D/O and PT OK. (1994) **Plug #4: 3832' - 3732'**
Class G cement, 12 sxs

Plug #3: 4954' - 4854'
Class G cement, 12 sxs

DV Tool @ 5022'
Stage 2: Cemented with 220 sxs

Plug #2: 5750' - 5650'
Class G cement, 52 sxs
12 inside and 40 outside

Cmt Retainer @ 5700'

Perforate @ 5750'

Plug #1: 6640' - 6544'
Class G cement, 12 sxs

Existing CIBP @ 6640' (2018)

Dakota Perforations:
6678' - 6836'

4.5" 10.5#, casing set @ 6964'
Stage 1: Cemented with 170 sxs

TD 6964'
PBTd 6957'

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: Huerfano Unit 179

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 #3 (4992 – 4892) ft. to cover the Mancos top. BLM picks top of Mancos at 4942 ft.
- b) Set Plug #4 (3180 – 3080) ft. to cover the Cliff House top. BLM picks top of Cliff House at 3130 ft.
- c) Set Plug #6 (2155 – 1857) ft. to cover the Pictured Cliffs perms and Fruitland top. BLM picks top of Fruitland at 1907 ft.
- d) Set Plug #7 (1453 – 1222) ft. to cover the Kirtland and Ojo Alamo tops. BLM picks top of Kirtland at 1403 ft. BLM picks top of Ojo Alamo at 1272 ft.

Operator must run CBL to verify cement top. Submit the electronic copy of the log for verification to the following addresses: jwsavage@blm.gov tsalyers@blm.gov Brandon.Powell@state.nm.us

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.