

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'

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.		5. Lease Serial No. <b>SF-077806</b>
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator <b>Hilcorp Energy Company</b>		7. If Unit of CA/Agreement, Name and/or No. <b>Huerfano Unit</b>
3a. Address <b>382 Road 3100, Aztec, NM 87410</b>		8. Well Name and No. <b>Huerfano Unit 179</b>
3b. Phone No. (include area code) <b>505-599-3400</b>		9. API Well No. <b>30-045-20256</b>
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>Surface Unit F (SENW) 1750' FNL &amp; 1650' FWL, Sec. 14, T26N, R10W</b>		10. Field and Pool or Exploratory Area <b>Basin DK / Huerfano PC</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 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 recompleat 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 recompleat 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.

**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) <b>Christine Brock</b>		Title <b>Operations/Regulatory Technician - Sr.</b>
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 <i>PE</i>	Date <i>12/19/18</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>FTO</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.

(Instruction on page 2)

**NMOC** *BP*  
*AV*



## 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 X, Unknown \_\_\_\_\_.  
Tubing: Yes X, No \_\_\_\_\_, Unknown \_\_\_\_\_, Size 2-3/8", Length 2215'.  
Packer: Yes \_\_\_\_\_, No X, 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

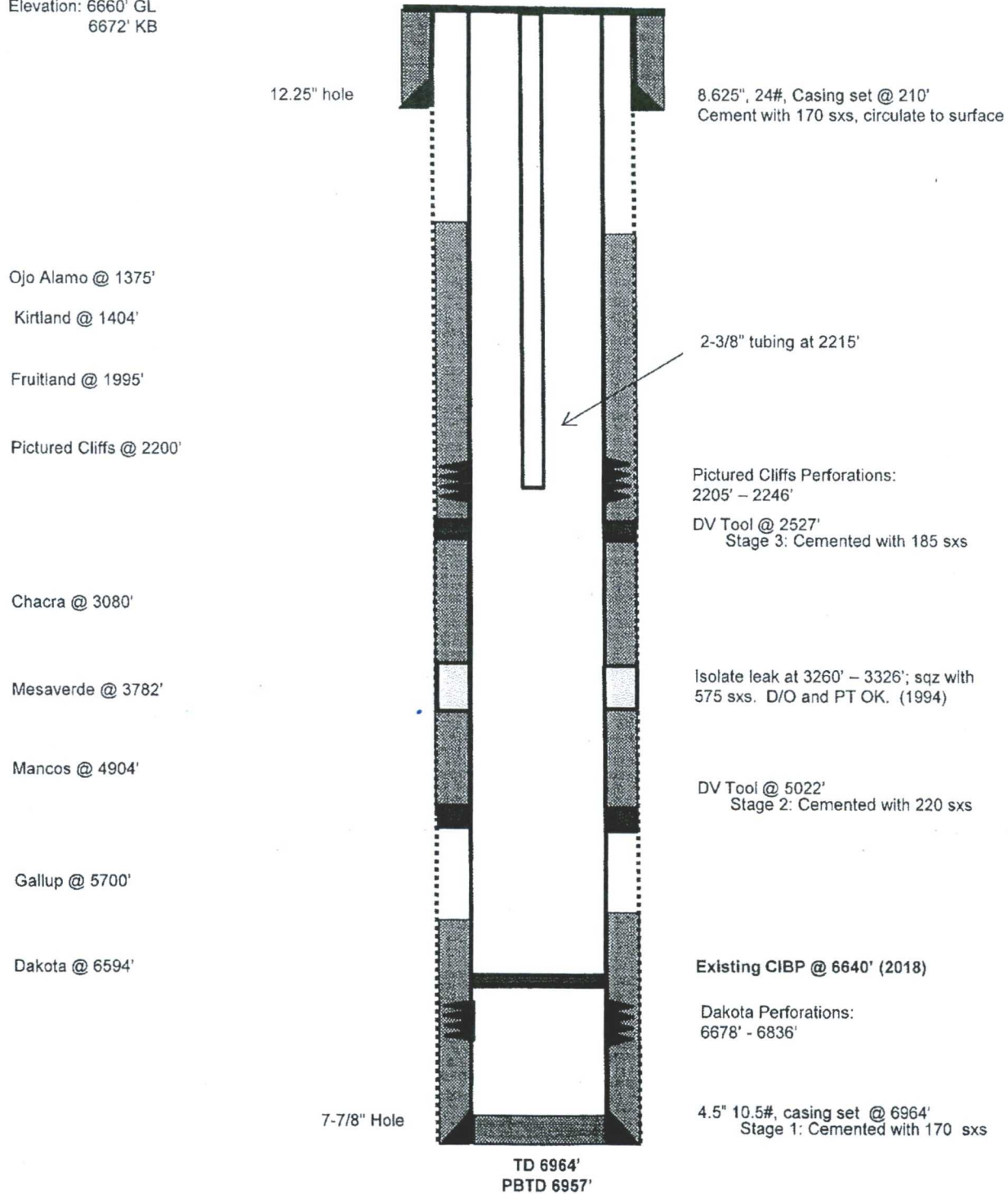
Lat: \_\_\_\_\_ N / Lat: \_\_\_\_\_ W, API #30-045-20256

Today's Date: 11/8/18

Spud: 4/8/68

Completion: 6/5/68

Elevation: 6660' GL  
6672' KB



# 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'

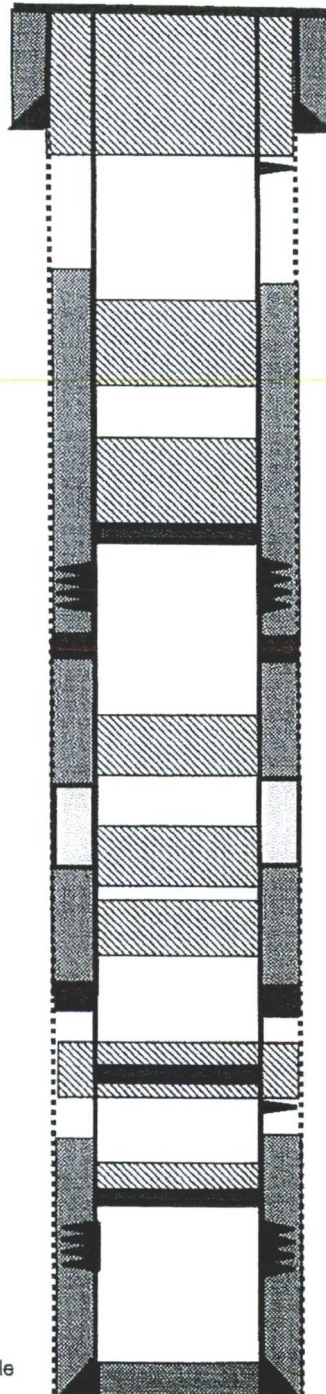
Mancos @ 4904'

Gallup @ 5700'

Dakota @ 6594'

12.25" hole

7-7/8" Hole



TD 6964'  
PBTD 6957'

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

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



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](mailto:jwsavage@blm.gov) [tsalyers@blm.gov](mailto:tsalyers@blm.gov) [Brandon.Powell@state.nm.us](mailto: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.