

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
**District II**  
811 A. First St., Artesia, NM 88210  
**District III**  
1000 Rio Brazos Rd. Aztec, NM 87410  
**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources  
**HOBBS OCD**  
**OIL CONSERVATION DIVISION**  
APR 10 2017  
1220 South St. Francis Dr.  
Santa Fe, NM 87505  
**RECEIVED**

WELL API NO. <b>30-015-21539</b>
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease NO. <b>647</b>
7. Lease Name or Unit Agreement Name <b>Empire Abo Unit (309164)</b>
8. Well Number <b>261</b>
9. OGRID Numer <b>873</b>
10. Pool Name <b>Empire; Abo (22040)</b>

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR DEEPEN OR PLUG BACK TO A DIFFERENT RESERVIOR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

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

2. Name of Operator  
**Apache Corporation**

3. Address of Operator  
**303 Veterans Airpark Lane, Ste. 3000, Midland, TX 79705**

4. Well Location  
Unit Letter **N** : **150** feet from the **S** line and **1400** feet from th **W** line  
Section **32** Township **17S** Range **28E** NMPM County **Eddy**

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**3668' GL**

12. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

**NOTICE OF INTENTION TO:**

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☒  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐  
DOWNHOLE COMMINGLE ☐

OTHER: ☐

**SUBSEQUENT REPORT OF:**

REMEDIAL WORK ☐  
COMMENCE DRILLING OPNS. ☐  
CASING/CEMENT JOB ☐  
ALTERING CASING ☐  
P AND A ☐  
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work.) SEE RULE 1103. For Multiple Completions: Attach wellbore diagram or proposed completion or recompletion.

Apache Corporation proposes to P&A the above mentioned well by the attached procedure. A closed loop system will be used for all fluids from this wellbore and disposed of required by OCD Rule 19.15.17.

Approved for plugging of well bore only.  
Liability under bond is retained pending receipt  
of C-103 (Subsequent Report of Well Plugging)  
Form. It may be found at OCD Web Page under  
Forms. [www.state.nm.us/oed](http://www.state.nm.us/oed)  
Release Date: **4/13/18**

**NM OIL CONSERVATION**  
ARTESIA DISTRICT

APR 13 2017

**RECEIVED**

Spud Date:

**WELL MUST BE PLUGGED BY 4/13/18**

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE *Guinn Burks* TITLE Sr. Reclamation Foreman DATE 4/3/17

Type or print name Guinn Burks E-mail add. guinn.burks@apachecorp.com PHONE: 432-556-9143

APPROVED BY: *Salut B...* TITLE COMPLIANCE OFFICER DATE 4/13/2017

Conditions of Approval (if any): SEE ATTACHED POA-5

LEASE NAME	Empire Abo Unit
WELL #	261
API #	30-015-21539
COUNTY	Eddy, NM

# WELL BORE INFO.

0

622

11" Hole  
8 5/8" 24# @ 1000'  
w/ 400 sx, top of w/ 8 yds redi-mix from surf

1244

1867

2489

3111

3733

DVT @ 4018'

TOF @ 4356' - 2 3/8" tbg & TAC

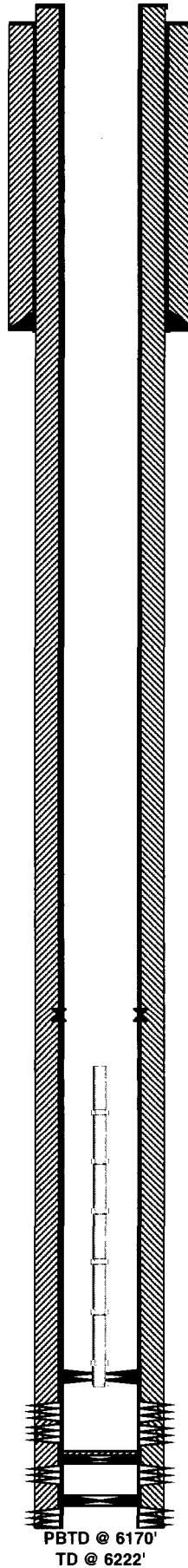
4355

4978

5600

6222

7 7/8" Hole  
5 1/2" 14 & 15.5# @ 6222'  
w/ DVT @ 4018' w/1st stage - 500 sx,  
2nd stage - 875 sx to surf



Abo perms @ 5690'-6034'

CIBP @ 6075' w/ 10' cmt  
Abo perms @ 6112'-6126"  
CIBP @ 6140'  
Abo perms @ 6154'-6164'

PBTD @ 6170'  
TD @ 6222'

## Empire Abo Unit

261

**30-015-21539**

Eddy, NM

## WELL BORE INFO.

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**11" Hole  
8 5/8" 24# @ 1000'  
w/ 400 sx, top of w/ 8 yds redi-mix from surf**

DVT @ 4018'

TOF @ 4356' - 2 3/8" tbg & TAC

3-7-17 - We MIRU WO rig to POOH w/ tbg & TAC & prep to TA well. Attempted to release TAC, POOH w/ 25' tbg. RIH & latched on & RIH w/WL & backed off @ 130'. POOH & LD. RIH & backed off @ 3500', POOH, LD tbg. Could not get WL tools down tbg so ran a string shot & backed off & tbg parted again @ 3525', POOH & LD tbg. Latched back on tbg, RIH w/ string shot & backed off @ 4356', POOH & LD tbg. Well was taking fluid.

7 7/8" Hole  
5 1/2" 14 & 15.5# @ 6222'  
w/ DVT @ 4018' w/1st stage - 500 sx,  
2nd stage - 875 sx to surf

## PROPOSED PROCEDURE

5. PUH & spot 70 sx Class "C" cmt from 667' to surf. (7 Rvrs, Yates & Water Board)

4. PUH & perf @ 1256' & attempt to sqz 85 sx Class "C" cmt from 1256'-950' WOC/TAG (Queen, Bowers & Surf Shoe)

3. PUH & spot 40 sx Class "C" cmt from 2041' -1613'  
WOC/TAG (Grayburg & San Andres)

2. PUH & spot 25 sx Class "C" cmt from 3573' - 3338'.  
(Yeso & Glorieta) *WOL & TAG*

1. Spoke with Robert Byrd prior to submittal of P&A procedure. MIRU P&A rig. RIH w/ pkr, set @ 3700' & establish a PIR. Sqz 200 sx Class "C" cmt & displace to 3900' WOC/TAG (Abo perfs, Blinebry & DVT) Repeat if necessary. CIRC w/ MLF.

Abo perfs @ 5690'-6034'

**CIBP @ 6075' w/ 10' cmt**  
**Abo perfs @ 6112'-6126"**  
**CIBP @ 6140'**  
**Abo perfs @ 6154'-6164'**

PBTD @ 6170'  
TD @ 6222'

## CONDITIONS FOR PLUGGING AND ABANDONMENT

### District II / Artesia N.M.

The following is a guide or checklist in preparation of a plugging program, this is not all inclusive and care must be exercised in establishing special plugging programs in unique and unusual cases, **Notify NMOCD District Office II at (575)-748-1283 at least 24 hours before beginning work.**

1. A notice of intent to plug and abandon a wellbore is required to be approved before plugging operations are conducted. A cement evaluation tool is required in order to ensure isolation of producing formations, protection of water and correlative rights. A cement bond log or other accepted cement evaluation tool is to be provided to the division for evaluation if one has not been previously run or if the well did not have cement circulated to surface during the original casing cementing job or subsequent cementing jobs.
2. Closed loop system is to be used for entire plugging operation. Upon completion, contents of steel pits are to be hauled to a permitted disposal location.
3. Trucking companies being used to haul oilfield waste fluids to a disposal – commercial or private – shall have an approved NMOCD C-133 permit. A copy of this permit shall be available in each truck used to haul waste products. It is the responsibility of the operator as well as the contractor, to verify that this permit is in place prior to performing work. Drivers shall be able to produce a copy upon request of an NMOCD Field inspector.
4. Filing a subsequent C-103 will serve as notification that the well has been plugged.
5. A final C-103 shall be filed (and a site inspection by NMOCD Inspector to determine if the location is satisfactorily cleaned, all equipment, electric poles and trash has been removed to Meet NMOCD standards) before bonding can be released.
6. **Squeeze pressures are not to exceed 500 psi, unless approval is given by NMOCD.**
7. Produced water **will not** be used during any part of the plugging operation.
8. Mud laden fluids must be placed between all cement plugs mixed at 25 sacks per 100 bbls of water.
9. All cement plugs will be a minimum of 100' in length or a minimum of 25 sacks of cement, whichever is greater. 50' of calculated cement excess required for inside casing plugs and 100% calculated cement excess required on outside casing plugs.
10. **Class 'C' cement will be used above 7500 feet.**
11. **Class 'H' cement will be used below 7500 feet.**
12. **A cement plug is required to be set 50' above and 50' below, casing stubs, DV tools, attempted casing cut offs, cement tops outside casing, salt sections and anywhere the casing is perforated, these plugs require a 4 hour WOC and then will be tagged**
13. **All Casing Shoes Will Be Perforated 50' below shoe depth and Attempted to be Squeezed, cement needs to be 50' above and 50' Below Casing Shoe inside the Production Casing**
14. When setting the top out cement plug in production, intermediate and surface casing, wellbores should remain full at least 30 minutes after plugs are set
15. **A CIBP is to be set within 100' of production perforations, capped with 100' of cement, WOC 4 hours and tag.**

16. A CIBP with 35' of cement may be used in lieu of the 100' plug if set with a bailer. This plug will be placed within 100' of the top perforation, **(WOC 4 hrs and tag)**.
17. **No more than 3000' is allowed between cement plugs in cased hole and 2000' in open hole.**
18. Some of the Formations to be isolated with cement plugs are: These plugs to be set to isolate formation tops
  - A) Fusselman
  - B) Devonian
  - C) Morrow
  - D) Wolfcamp
  - E) Bone Springs
  - F) Delaware
  - G) Any salt sections
  - H) Abo
  - I) Glorieta
  - J) Yates.
  - K) **Potash---** (In the R-111-P Area (Potash Mine Area), a solid cement plug must be set across the salt section. Fluid used to mix the cement shall be saturated with the salts that are common to the section penetrated and in suitable proportions, not more than 3% calcium chloride (by weight of cement) will be considered the desired mixture whenever possible, **WOC 4 hours and tag, this plug will be 50' below the bottom and 50' above the top of the Formation.**
19. **If cement does not exist behind casing strings at recommended formation depths, the casing can be cut and pulled with plugs set at recommended depths. If casing is not pulled, perforations will be shot and cement squeezed behind casing, WOC and tagged. These plugs will be set 50' below formation bottom to 50' above formation top inside the casing**

#### **DRY HOLE MARKER REQUIREMENTS**

The operator shall mark the exact location of the plugged and abandoned well with a steel marker not less than four inches in diameter, 3' below ground level with a plate of at least ¼" welded to the top of the casing and the dry hole marker welded on the plate with the following information welded on the dry hole marker:

**1. Operator name 2. Lease and Well Number 3.API Number 4. Unit Letter 5. Quarter Section (feet from the North, South, East or West) 6. Section, Township and Range 7. Plugging Date 8. County**

#### **(SPECIAL CASES)**

##### **AGRICULTURE OR PRARIE CHICKEN BREEDING AREAS**

In these areas, a below ground marker is required with all pertinent information mentioned above on a plate, set 3' below ground level, a picture of the plate will be supplied to NMOCD for record, the exact location of the marker (longitude and latitude by GPS) will be provided to NMOCD (We typically require a current survey to verify the GPS)