

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 87240  
District II  
1301 W. Grand Ave., 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

Form C-103  
May 27, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO. <b>30-015-01704</b>
5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No.
7. Lease Name or Unit Agreement Name: <b>CARPER -LEVERS</b>
8. Well Number <b>1</b>
9. OGRID Number <b>*</b>
10. Pool name or Wildcat <b>ARTESIA</b>

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

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type \_\_\_\_\_ Depth to Groundwater \_\_\_\_\_ Distance from nearest fresh water well \_\_\_\_\_ Distance from nearest surface water \_\_\_\_\_

Pit Liner Thickness: \_\_\_\_\_ mil Below-Grade Tank: Volume \_\_\_\_\_ bbls; Construction Material \_\_\_\_\_

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

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

2. Name of Operator  
**BP AMERICA PRODUCTION COMPANY**

3. Address of Operator  
**501 WESTLAKE PARK BLVD, RM 6.115; HOUSTON, TEXAS 77079**

4. Well Location  
Unit Letter **L**; **2930** feet from the **SOUTH** line and **330** feet from the **WEST** line  
Section **34** Township **17S** Range **28E** NMPM County **EDDY**

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

Pit or Below-grade Tank Application ☐ or Closure ☐

Pit type \_\_\_\_\_ Depth to Groundwater \_\_\_\_\_ Distance from nearest fresh water well \_\_\_\_\_ Distance from nearest surface water \_\_\_\_\_

Pit Liner Thickness: \_\_\_\_\_ mil Below-Grade Tank: Volume \_\_\_\_\_ bbls; Construction Material \_\_\_\_\_

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 COMPLETION ☐  
OTHER: Re-enter/PA in prep for injection ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐  
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 of proposed completion or recompletion.

SEE ATTACHED PROPOSED PROCEDURE & WELLBORE SCHEMATIC FOR RE-ENTRY TO PROPERLY PA IN PREPATION FOR COMMENCING INJECTION INTO NEARBY WASHINGTON "33" STATE #12 WIW.

PRIMARY OBJECTIVE IS TO PLACE A PLUG AT THE TOP OF THE QUEEN SAND TO PROVIDE MINIMUM 200' BARRIER ABOVE THIS INJECTION ZONE. THIS WORK IS REQUIRED OFURSUAANT TO THE WTER INJECTION PERMIT FOR THE 33 12 WIW & INEJECTION CANNOT COMMENCE UNTIL THIS RE-PLUG OPTERTION IS COMPLETED & APPROVED BY NMOCD.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒ , a general permit ☐ or an (attached) alternative OCD-approved plan ☐

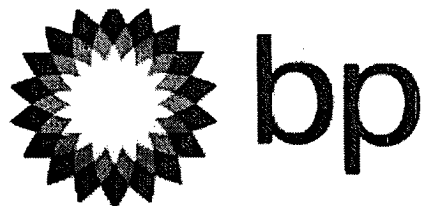
SIGNATURE Susan Becnel TITLE REGULATORY STAFF ASSISTANT DATE 11/15/05

Type or print name SUSAN BECNEL FOR SUE SELLERS E-mail address: HECNS1@BP.COM Telephone No. 281/366-1842

For State Use Only

APPROVED BY Mike Branner TITLE Asst DATE 11/22/05

Conditions of Approval, if any: Registration/approval required if earthen pit is utilized



## RE-ENTRY & RE-PLUG PROCEDURE (Setting 8 5/8" Surface Pipe)

### Well Information (API No. 30-015-01704)

Lease & Well No.	Field	Paykey No.	AFE No.
Carper-Levers #1	Artesia		
Drilled	TD	PBD	Datum
1939 – 1940 Cable Tools	3383'	P&A	GL
Legal	S – T – R	County	State
2390' FSL & 330' FWL	34 – T17S – R28E	Eddy	New Mexico
Prepared By	Date	Approved By	Date
D. C. Dodd	October 25, 2005		

### Wellbore Data

Casing	Size	Weight	Grade	Depth	Cmt	TOC	Pulled
Surface	10"	40#	N/A	475'	51 sx	N/A	Est 390'
Intermediate	7"	N/A	N/A	1819'	10 sx	N/A	Est 1700'
Production	None						
Liner	None						

### History:

Drilled w/ Cable Tools and P&A in 1940. Records are inadequate for determining plug placement and exact depths from which casing strings were pulled – attached wellbore schematic is “best guess”. An attempt to re-enter well was made with cable tools in 1959 but operations were ceased when they could not get beyond “shot off pipe” at 390'; a 15 sk plug was set @ 390', a 5 sk top plug was set and a dry hole marker installed.

During September, 2005, the well bore was located and the One Call notification performed. 48 hours after the One Call was made and no hazards identified, the dry hole marker was removed and the cellar area dug out to approx 3'. There was no surface plug in place and no casing was found but the wellbore was open – measuring line went to approx 350' before making a “soft” tag, hole appears to be dry to this depth. A 6' x 6' tinhorn cellar was installed, the area was fenced and operations suspended pending regulatory filings and AFE approval.

### Scope of Work:

Re-enter P&A'd well and place cement plugs as required to properly P&A in preparation for commencing injection into nearby Washington “33” State #12 WIW. Primary objective is to place a plug at the top of Queen to provide minimum 200' barrier above this injection zone. This work is required pursuant to the water injection permit for the 33-12 WIW and injection can not commence until this re-plug operation is completed and approved by the NMOCD.

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## PROCEDURE

File NMOCD Form C-103 for re-entry and replugging of well bore. Notify Phil Hawkins of the NMOCD District 2 office of intention to re-enter wellbore prior to commencing operations (505 / 748-1283 ext 106) or (505 / 626-0836 cell).

1. Repeat One Call notification. Determine if any flow lines need re-routed from location – contact Production group for any required re-routing. After receiving One Call response, follow Ground Disturbance requirements for installation of guy-wire anchors. Install and test anchors.
2. Dig, line and fence 500 bbl emergency pit – comply with NMOCD requirements for pit construction. Fence pit and place barrier around WH while waiting on PU to resume operations.
3. MI PU. Conduct pre-job rig inspection and safety meeting, RUPU.

Hazard	Effect	Mitigation
Pulling Unit Equipment Failure Objects falling from derrick	Possible injury or death to personnel, damage to equipment or wellbore	<ul style="list-style-type: none"> <li>➤ Inspection of derrick</li> <li>➤ Pre job inspection of rig after RU.</li> </ul>

4. RU reverse unit and ancillary equipment. PU 11" bit on 6 - 4¾" DC's and clean out to top of cement plug, estimated to be at 375'. Do not drill plug - POH w/ 11" bit and stand-back DC's.

Hazard	Effect	Mitigation
High pressure pumping equipment	Possible injury or death to personnel, damage to equip	<ul style="list-style-type: none"> <li>➤ Line of fire practices</li> <li>➤ Pressure test lines</li> </ul>
Moving Equipment	Possible injury or death to personnel	<ul style="list-style-type: none"> <li>➤ Keep hands &amp; other body parts away from moving parts</li> <li>➤ Ensure wearing no loose clothing</li> </ul>
Dropped pipe	Possible damage to well	<ul style="list-style-type: none"> <li>➤ Pipe handling practices – slips, clamps, tongs, complete MU/BO before lifting as appropriate</li> </ul>
Loss of well control	Possible injury to personnel, damage to wellbore, damage to environment	<ul style="list-style-type: none"> <li>➤ Constant supervision</li> <li>➤ Line of fire practices</li> </ul>

5. RU casing crew & equip and run 340' of 8 5/8" 24# J-55 STC casing w/ TPGS and insert float. RU HES and cement casing with 275 sx Class "C" w/ 2% CaCl<sub>2</sub>. WOC 24 hrs.

Hazard	Effect	Mitigation
Moving Equipment	Possible injury or death to personnel	<ul style="list-style-type: none"> <li>➤ Keep hands &amp; other body parts away from moving parts</li> <li>➤ Ensure wearing no loose clothing</li> </ul>
Simultaneous operations – Casing Crew and Pulling Unit Crews working together	Possible injury to personnel, damage to wellbore, unable to complete operations	<ul style="list-style-type: none"> <li>➤ Spotters for each operation during simultaneous operating conditions</li> <li>➤ Have clearly defined responsibilities for each crew</li> <li>➤ JSA with all personnel present</li> <li>➤ Additional supervision as deemed necessary</li> </ul>
High pressure pumping equipment	Possible injury or death to personnel, damage to equip	<ul style="list-style-type: none"> <li>➤ Line of fire practices</li> <li>➤ Pressure test lines</li> </ul>
Harmful chemicals, cement dust	Injury to personnel	<ul style="list-style-type: none"> <li>➤ Proper PPE</li> </ul>
Moving Equipment	Possible injury or death to personnel	<ul style="list-style-type: none"> <li>➤ Keep hands &amp; other body parts away from moving parts</li> <li>➤ Ensure wearing no loose clothing</li> </ul>
Simultaneous operations	Possible injury to personnel, damage to wellbore, unable to complete operations	<ul style="list-style-type: none"> <li>➤ Spotters for each operation during simultaneous operating conditions</li> <li>➤ Have clearly defined areas for each operation and separate as much as possible</li> <li>➤ Review duties with all personnel present</li> <li>➤ Additional supervision as deemed necessary</li> </ul>

6. Install 11" – 3K psi WH equipment w/ 2 – 2000 psi ball valves on side outlet. Install BOP with piping to pits from WH. Test BOP and casing w/ 500 psi.

Hazard	Effect	Mitigation
Potential Confined Space	Possible injury to personnel	➤ Complete Confined Space Permit if cellar >4' in depth.
Ignition Source if welding required	Possible injury or death to personnel, damage to well & equipment	➤ Complete Hot Work Permit and assign responsibility for Fire Watch ➤ Check for hydrocarbon vapors
Pressuring lines & casing	Possible injury to personnel, damage to environment	➤ Increase pressure slowly & steadily ➤ Keep all personnel clear of lines & tree & out of line of fire of valves, etc.

7. GIH with 7 7/8" bit on 4 3/4" DC's – drillout insert float and shoe joint. Continue in hole to top of cement plug, estimated top at approx 370' – 380'. Drill out plug and attempt to re-enter and clean out stub. If successful, go to Step 11. If unsuccessful, POH and continue to next step.

Hazard	Effect	Mitigation
Loss of well control	Possible injury to personnel, damage to wellbore, damage to environment	➤ BOP's, full open TIW valve for 2 7/8" tubing,
Dropped pipe	Possible injury to personnel, damage to well	➤ Pipe handling practices – slips, clamps, tongs, complete MU/BO before lifting as appropriate

8. GIH 6 1/8" bit w/ DC's and attempt to enter and clean out stub. If successful go to Step 11. If unsuccessful, POH & LD bit and 4 3/4" DC's and continue to next step.
9. Make trip with 4 3/4" bit on 3 1/8" DC's and attempt to enter stub. If successful go to Step 11. If unsuccessful, POH & stand-back DC's – LD bit.
10. GIH with mule-shoed jt of 2 7/8" tbg on work string and attempt to enter pipe @ 390'. If unsuccessful and hole conditions indicate that no further mechanical options are available, discuss with NMOCD District 2 representatives and determine course of action. If NMOCD approves abandoning at this point, establish plug requirements and set same. Go to Step 16. If successful, continue in hole and find bottom.
- A. If bottom is found to be near the assumed 7" stub depth of +/- 1700', discuss with NMOCD and see if this is sufficient clean-out depth and we will be allowed to set Queen isolation plug. If NMOCD approves ceasing the clean out operations, set additional 200' plug on bottom (+/- 50 sx Class "C").
- B. POH to 1300' and spot plug from 1300' – 1000' (top of Queen estimated at 1230') with 100 sx Class "C". POH to 475' and WOC 4 hrs. TIH and tag plug. If OK, POH to 525' and spot 75 sk plug from 525' to 290', across original and new surface pipe shoes. POH w/ tbg, WOC 4 hrs and tag plug. If OK, set top plug from 60' – surface.
- C. RD & RPU. Install dry-hole marker with new P&A date, clean and level location and prep for NMOCD inspection. Go to Step #17.

Hazard	Effect	Mitigation
High pressure pumping equipment	Possible injury or death to personnel, damage to equip	➤ Line of fire practices ➤ Pressure test lines
Harmful chemicals, cement dust	Injury to personnel	➤ Proper PPE
Simultaneous operations	Possible injury to personnel, damage to wellbore, unable to complete operations	➤ Spotters for each operation during simultaneous operating conditions ➤ Have clearly defined areas for each operation and separate as much as possible ➤ Review duties with all personnel present ➤ Additional supervision as deemed necessary

11. Continue in hole w/ bit to next plug - could be at approx 1700'. If plug is found above suspected 7" stub at or near this depth, discuss with NMOCD and determine if clean-out may cease here or if we will have to clean out 7" stub and continue. Remaining procedures assume that clean out will cease with finding 7" stub plug.
12. POH & LD bit and DC's. (Note: if hole conditions indicate that we should not risk POH w/ bit due to concern about ability to re-enter stub, proceed to set plugs through bit at depths listed in following procedures.
13. TIH w/ open-ended 2 7/8" tbg to btm and set additional 200' plug on bottom (+/- 50 sx Class "C"). POH to 1300'.
14. Spot plug from 1300' – 1000' (top of Queen estimated at 1230') with 100 sx Class "C". POH to 475' and WOC 4 hrs. TIH and tag plug. If OK, POH to 525'.
15. Spot 75 sk plug from 525' to 290' across original and new surface pipe shoes. POH w/ tbg, WOC 4 hrs and tag plug. If OK, POH to 60'. Circulate cement to surface using Class "C".
16. RD & RPU. Install dry-hole marker with revised P&A information, remove guywire anchors, clean and level location and prep for NMOCD inspection.

Hazard	Effect	Mitigation
Pulling Unit Equipment Failure Objects falling from derrick	Possible injury or death to personnel, damage to equipment or wellbore	➤ Pre-job safety meeting & inspection of rig prior to RD.
Ignition Source	Possible injury or death to personnel, damage to well & equipment	➤ Hold JSA meeting & complete Hot Work Permit

17. Complete *Well Handover Form* with a Production representative, provide a copy to Production, fax copy to Midland office and send original to well file.

# Washington 33 State Lease Proposed Waterflood Artesia Field, Eddy County, New Mexico

