



bp

MAR 10 2009  
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March 9, 2009

30-015-22823

NMOCD District 2  
Via FedEx

Attn: Mr. Phil Hawkins

RE: Revised C-103 to P&A

Empire Abo Unit "G" #361  
2400' FNL & 300' FEL  
Section 34 – T17S – R28E  
Eddy County, New Mexico

API No. 30-015-22823

Phil:

The attached C-103 revises the P&A procedure that was submitted by the C103 dated 12/8/08 and approved by the NMOCD on 12/15/08. The revisions include (1) correcting the bottom plug requirements to compensate for the actual perforating depths used in testing cement bond integrity within the wellbore – please note that the WB Schematic attached to the C-103 lists these perf depths; and (2) setting the surface casing shoe / top plug from 905' to surface rather than setting two separate plugs.

If you have questions or need additional information regarding the revisions or abandonment procedure, please call me at 432 / 688-5207.

Sincerely,

Dan C. Dodd  
Sierra Engineering / for BP America Production Company

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
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

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

MAR 10 2009

Form C-103  
May 27, 2004

WELL API NO. <b>30 - 015 - 22823</b>
13. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
13. State Oil & Gas Lease No. <b>B-11538-7</b>
7. Lease Name or Unit Agreement Name <b>Empire Abo Unit "G"</b>
8. Well Number <b>361</b>
9. OGRID Number <b>000778</b>
10. Pool name or Wildcat <b>Empire Abo</b>

**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  
**P. O. Box 1089 Eunice, New Mexico 88231**

13. Well Location  
Unit Letter **H** : **2400** feet from the **North** line and **300** feet from the **East** line  
Section **34** Township **17S** Range **28E** NMPM **Eddy** County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**3670.5' 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 \_\_\_\_\_

13. 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 ☐  
OTHER: ☐

SUBSEQUENT REPORT OF:

- REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ P AND A ☐  
CASING/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.

BP completed tests in February, 2009 to determine the vertical integrity of the cement bond between the production casing and the formation via perfs between 4806' to 5856' and now seeks approval for final abandonment. The P&A procedure has been revised from that previously approved by the NMOCD on C-103 dated 12/8/08 to adjust and correct plug setting depths. Proposed P&A procedure is as listed below and depicted on attached WB schematic:

1. Spot 120 sx Class "C" from 4715' - 5901' across test perfs 4806' - 5856'. WOC & tag - plug should be no deeper than 4756'. Circulate hole w/ 9.0 ppg mud laden fluid.
2. Spot 25 sx Class "C" from 4315' - 4560' across DV tool @ 4507'.
3. Spot 25 sx Class "C" from 3605' - 3850' across top of Glorieta @ 3750'.
4. Spot 25 sx Class "C" from 1330' - 1575' across top of Queen @ 1456'.
5. Spot 95 sx Class "C" from 0' - 905', which covers top of Seven Rivers @ 855', 8 5/8" surface casing shoe @ 800', top of Yates @ 620' and sets the top plug. Fill 5 1/2" csg to 3' below GL after POH w/ tbg. RD PU.
6. Cut WH, casings and anchors to 3' below GL & install regulation Dry Hole Marker, prep location and notify NMOCD when site is ready for final inspection.

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 M. D. Westmoreland TITLE Wells Operations Superintendent DATE 3/9/09

Type or print name M. D. Westmoreland E-mail address: dan.westmoreland@bp.com Telephone No. 432 / 688-5245

For State Use Only

APPROVED BY: [Signature] TITLE Approval Granted providing work is complete by 3/11/09 DATE 3/11/09

Conditions of Approval (if any):

# Empire Abo Unit "G" #361

Empire Abo Field

API No. 30-015-22823

2400' FNL & 300' FEL

Sec 34 - T17S - R28E

Eddy County, New Mexico

## Proposed P&A

RKB 11.0'  
GL 3670.5'

8 5/8" Shoe - Yates - Top Plug  
95 sx  
0' - 905'

EAU  
TG  
361

Yates 620'

7R 855'

Queen Plug  
25 sx  
1330' - 1575'

Queen 1456'

San Andres 2280'

Glorieta Plug  
25 sx  
3605' - 3850'

Glorieta 3750'

Isolation Plug  
25 sx  
4315' - 4560'  
across DV Tool

Isolation Plug  
120 sx  
4715' - 5901'  
Covers perms shot for  
Vertical Integrity Test  
TAG

Abo 5960'

CICR @ 6100'  
No cmt cap  
8/2/88

Pulled mandrel from  
Halliburton R-3 pkr &  
left body in hole @  
6137'.

8 5/8" 24# K-55 STC @ 800'  
Cmt'd w/ 250 sx Dowell LW, 5 pps Kolite & 1/4 pps  
cello flake & 200 sx "C" w/ 2% CaCl<sub>2</sub>, circ 30 sx

DV @ 4507'

### Vertical Integrity Test - Perf Intervals

#1 5834' & 5856' - 8 SPF  
#2 5770' & 5795' - 8 SPF  
#3 5429' & 5444' - 8 SPF  
#4 4828' & 4840' - 8 SPF  
#5 4806' - 8 SPF

CIBP @ 5936' w/ 35' cmt cap

5966' - 5976' (21 holes) tested all water

CIBP @ 6011', no cmt cap

6028' - 6030', 6034' - 6036' & 6040' - 6042' (15 holes)  
(Never Produced??)

6230' - 6240' w/ 2 SPF OPT = 673 BO, 385 MCF &  
3 BW

CR set on WL @ 6260'

6268' - 6288' w/ 2 JSPF used Vann Gun  
Tested wet. Set CR & sq to 1000 psi w/ 20 sx LWL cmt  
in perms, reversed out 115 sx.

5 1/2" 15 5# K-55 STC @ 6350' TD, DV @ 4507'  
Stage 1 200 sx Dowell 50/50 LP III w 4% gel, 5 pps  
Kolite, 1/4 pps cello flake & 2% CaCl<sub>2</sub> & 215 sx RFC  
con't 12% Gypseal & 2% CaCl<sub>2</sub>, circ'd 85 sx from DV

Stage 2 1100 sx Dowell 50/50 LP III w 4% gel & 8 pps  
salt & 200 sx RFC w 12% Gypseal & 2% CaCl<sub>2</sub>, circ'd  
270 sx to surface

6315' PBD

6350' TD

Spud  
RR

### Event Date

2/12/79  
3/1/79

2/14/79

3/1/79

9/15/04

9/8/04

4/30/91

8/2/88

3/19/79

3/16/79

3/10/79

3/1/79

3/1/79