

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0135
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.**5. Lease Serial No.
NMSF078387A

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.8. Well Name and No.
KERNAGHAN B 4A9. API Well No.
30-045-22422-00-S110. Field and Pool, or Exploratory
BLANCO MESAVERDE11. County or Parish, and State
SAN JUAN COUNTY, NM

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

BP AMERICA PRODUCTION CO.

Contact: CHERRY HLAVA

E-Mail: hlavac@bp.com

3a. Address

200 ENERGY COURT
FARMINGTON, NM 87401

3b. Phone No. (include area code)

Ph: 281-366-4081

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 30 T31N R8W SESE 0830FSL 0890FEL
36.86406 N Lat, 107.70999 W Lon**12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent☐ Subsequent Report☐ Final Abandonment Notice☐ Acidize☐ Alter Casing☐ Casing Repair☐ Change Plans☐ Convert to Injection☐ Deepen☐ Fracture Treat☐ New Construction☒ Plug and Abandon☐ Plug Back☐ Production (Start/Resume)☐ Reclamation☐ Recomplete☐ Temporarily Abandon☐ Water Disposal☐ Water Shut-Off☐ Well Integrity☐ Other

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 shall 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 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

November 2010 Compliance Well

BP finds no further uphole potential for the above mentioned well and therefore requests permission to P&A the entire wellbore.

Please see the attached P&A procedure.

RCVD NOV 1 '10

OIL CONS. DIV.

DIST. 3

14. I hereby certify that the foregoing is true and correct.

**Electronic Submission #95830 verified by the BLM Well Information System
For BP AMERICA PRODUCTION CO., sent to the Farmington
Committed to AFMSS for processing by STEVE MASON on 10/28/2010 (11SXM0350SE)**

Name (Printed/Typed) CHERRY HLAVA

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 10/26/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By STEPHEN MASON

Title PETROLEUM ENGINEER

Date 10/28/2010

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 Farmington

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.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

NMOC

SJ Basin Well Work Procedure

Well Name: Kernaghan B 4A API#: 30-045-22422
Date: October 25, 2010
Repair Type: P&A
County: San Juan
State: New Mexico
Engr: David Wages Ph: 281-366-7929 Cell: 406-231-4679
BM Engr: Mike Morgan Ph: 281-366-5721

Well Information:

API Number: 30-045-22422
BP WI: 50.00%
Run #: 33
Unit P-Sec 30-T31N-
Surface Location: R08W
Meter Number: 90007
Well FLAC: _____
Cost Center: _____
Lease FLAC: _____
Restrictions: Nov. Compliance
Regulatory Agency: BLM & NMOCD
Compressed (Y/N): N

Production Data:

Tubing Pressure: 14 psi
Casing Pressure: 14 psi
Line Pressure: 150 psi
Pre-rig Gas Rate: 0 MCFD
Anticipated Uplift: N/A
Water Rate: 0
CO2 (%): 1.2520
H2S (PPM): 0
Gas BTU: 1151
Artificial Lift Type: Plunger

Budget and Work Order Information

Rig Budget: _____ Total AFE Amount: _____
P&C Budget: _____ AFE #: _____

Objective: P&A for wellbore.

1. Ensure wellbore is clear of obstructions.
2. Pump cement plugs and remove wellhead.

Well History:

Spud date 9/11/1977
Sidetracked 10/1977
Completed 4/4/1978

Note: Will use Class G neat cement or Type III cement to P&A this well.

Completion Information

End of Tubing:	_____	Tubing Size	_____
Liner Size and Top:	4-1/2" @ 2716'	Casing size	7"
PBTD:	5920'		

P&A Procedure:

Standard Site Preparations

1. Perform pre-rig site inspection. Per Applicable documents, check for:
 - Size of location,
 - Gas taps,
 - Other wells,
 - Other operators,
 - Production equipment,
 - Wetlands,
 - Wash (dike requirements),
 - H₂S,
 - Barriers needed to protect equipment,
 - Landowner issues,
 - Location of pits (buried or lines in pits),
 - Raptor nesting,
 - Critical location,
 - Check anchors,
 - ID wellhead, etc.
 - Allow 48 hours for One Call if earth pit is required.
2. Identify wellhead for proper flange connections and BOP equipment.
3. Work with San Juan through CoW and w/P&S to develop a plan to move or temporarily relocate equipment that prohibits well servicing/plugging objectives.
4. Notify land owners with gas taps on well.
5. Perform second site visit after lines are marked to ensure all lines locations are clearly marked and that Planning & Scheduling has stripped equipment and set surface barricades as needed.
6. Ensure all necessary production equipment is isolated (LOTO) including, but not limited to the meter run, automation, and separator, etc.
7. Have wellhead ID'd by wellhead company. Wellhead company to work lock-down pins, wellhead bolts (one at a time), and use hand pump to pressure test hanger and secondary seals to wellhead working pressure if wellhead is so designed.

Initial Well Checks & Preparations:

8. Notify BLM and NMOCD 24 hours prior to beginning P&A operations to ensure scheduling of personell to witness CBL results and cement placement.
9. Check gas H₂S content and treat if the concentration is > or equal to 10 ppm/Treat for H₂S, if necessary per H₂S Wells NOTICE.
10. Fill out hot work permit for spotting rig to wellhead. MIRU workover rig. Complete necessary paperwork and risk assessment.
11. Check and record tubing, casing and bradenhead pressures and record in OpenWells daily.
12. BLOWDOWN braden head (BH) pressure as required, especially if there is *evidence of communication between the production casing and bradenhead or the well has a history of bradenhead pressure problems.*
13. Record pressure and notify engineer if tubing pressure exceeds 50 psi or if there is any water or gas flow.

14. Ensure production casing and bradenhead valves are double valved. Follow guidelines as directed by DWOP.
15. Monitor flowing casing pressure with gauge (with casing flowing to blow tank) throughout workover.
16. Make up flowback line.

Completion Removal

17. RU SL using Slickline NOP for San Juan.
18. Pressure test lubricator to 250 psi low side and 1000 psi high side, each for 5 minutes. Record in Open Wells.
19. RIH and set an "F" collar stop at safe depth determined by slickline tag runs. RIH and set a "CW" plug on top of the F collar stop.
20. RIH and set a 3-slip stop at +/- 1000'.
21. RIH and set a second "CW" plug on stop at 1000'.
22. RIH and set a 3-slip stop on top of the second CW plug.
23. Release pressure on tubing to test plug.
24. Kill casing strings if necessary.
25. RD slickline.
26. Hold JHA and fill out permit for critical lift of raising derrick and scoping up top section. Rig up unit.
27. Hold JHA and fill out permit for nipping down wellhead tree and nipping up BOP critical lift. ND wellhead and install 2-way check valve and adapter in top of hanger.
28. NU BOPs and diversion spool with outlets and flowback lines to the blow down tank tank. Inspect flowcross for significant wear or erosion prior to NU.
29. Rig up floor, tongs, and slips.
30. Pressure test BOPs to 250 psi on the low end for 15 min and on the high range at 1500 psi for 15 minutes.
31. Install stripping rubber, unscrew lock-down pins on tubing head, open pipe rams, and pull hanger to bottom of stripper rubber. Close pipe rams, bleed off pressure between stripper rubber and pipe rams, then release stripper rubber from stripper head and pull hanger to rig floor. Unscrew and lay down tubing sub.
32. RU wellhead lubricator.
33. Pull two way check. Open bleed-off valve on lubricator and bleed down any pressure that may be present. RD lubricator. Install stripper rubber.
34. RU SL and pressure test lubricator to 250 psi low side and 1000 psi high side, each for 5 minutes. Record in OpenWells.
35. RIH and pull stops and plugs.
36. RD SL.
37. Kill well. Pump water as necessary to keep well dead.
38. Trip out of the hole with old tubing. It is acceptable to use old tubing as workstring. Check tubing while POOH for wear.
39. If unable to pull tubing then discuss options with WIE.
40. Makeup the following BHA:
 - Bit for 4 1/2" casing
 - Scraper for 4 1/2" casing
 - String float.
 - Workstring
41. RIH with BHA to top of MV perforations.
42. Work scraper through MV perforations at 4434'.
43. RU e-line. Run gauge ring for 4-1/2" casing (ID=4.052") down to top of perms to ensure wellbore is clear and CIBP will set. RIH w/ CIBP and set +/-50' above perforations +/- 5000'.
44. Load well with fluid and pressure test casing to 500 psig. This will confirm the integrity of the casing and CIBP.
45. Run CBL to determine cement top behind 4-1/2". Based on cement top it will be determined where perforations and cement placement behind casing will be required to properly P&A well. Contact Engineer to discuss steps forward. Top of cement is

estimated at surface based on well history. Report CBL results to regulatory agencies and engineer. **The order and detail of the next steps could change based on the CBL results but assumes cement does not cover the Ojo Alamo zone.**

46. RIH w/ workstring and spot **300'** (~4.7 bbls, 27 cu ft) plug on top of CIBP (+/- **5000'**). This should P&A the Mesa Verde formations from **4700'-5000'**. POOH.

Cherry Plug
4038'-3938'

47. Based on CBL results, RU wireline w/ perforated gun. RIH to +/- **3700'** and perforate 4-1/2" casing and POOH with guns. RD wireline.

3580

48. Consult with regulatory agencies to determine if it is necessary to pump cement into the annulus (top of liner prevents circulation). Pump **880'** cement plug inside production casing (**12.7 bbls, 71 cu ft inside, 32.4 bbls, 182 cu ft outside** includes 100% excess). This should put cement across the Fruitland Coal and Pictured Cliff formations.

4 1/2" liner run
2766'-2666'

49. Based on CBL results, RU wireline w/ perforated gun. RIH to +/- **2240'** and perforate 7" casing and POOH with guns. RD wireline.

50. If circulation to surface can be established, pump **340'** cement plug inside and outside production casing (**13.8 bbls, 77 cu ft inside, 12 bbls, 68 cu ft outside** includes 100% excess) from **1900'-2240'**.

51. If circulation cannot be established, RIH w/ workstring. Pump a **340'** plug inside casing (**13.8 bbl, 325 cu ft inside**) from **1900'-2240'**. This should put cement across the PC and FC formations. POOH with workstring. This should put cement across the Ojo Alamo formation.

Naciminto Ave
690'-590'

52. RU wireline w/ perforating gun. RIH to +/- **284'** and perforate 7" casing. POOH with guns and RD wireline.

53. Establish circulation behind casing to surface. Pump a cement plug behind and inside 7" casing from **284'** to surface (~ **20 bbls**). Pump excess cement as necessary.

54. Perform underground disturbance and hot work permits. Cut off tree.

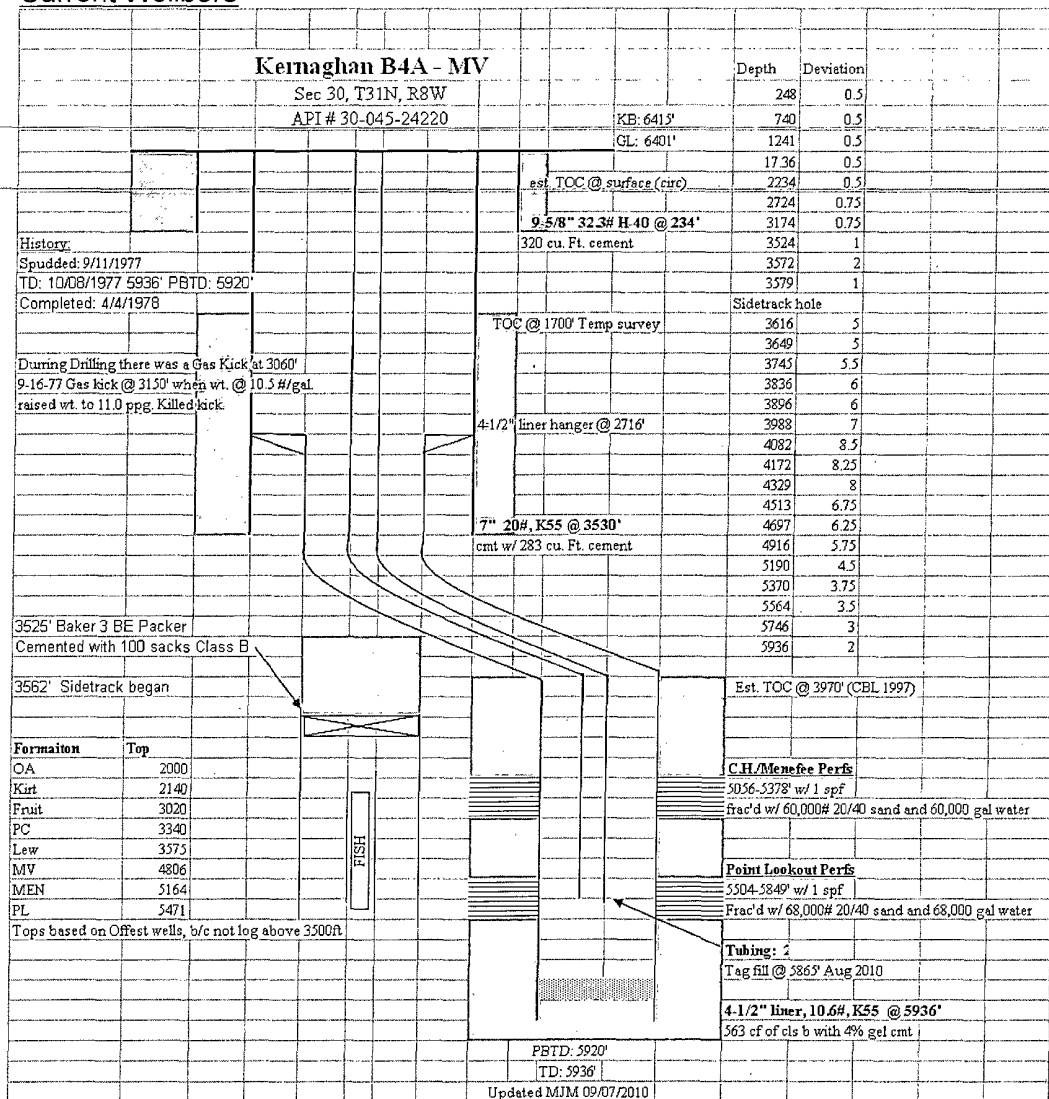
55. If cement cannot be seen on all annulus and casing strings remedial cementing will be required from surface. Watch for cement fall back or seepage. All annulus and casings must be full of cement with no fall back prior to installing abandonment marker.

56. Install well marker and identification plate per BLM requirements.

57. RD and release all equipment.

58. Ensure all reports are loaded into DIMS. Print out summary of work and place in well file. Notify Sherri Bradshaw of completed P&A.

Current Wellbore



bp

Kernaghan B4A - MV

Sec 30, T31N, R8W

Depth **Deviation**

1736 0.3

2234 0.5

2724 0.75

3174 0.75

3524 1

3572 2

3579 1

Surface to 284'
11.5 bbls
65 cu ft

est. TOC @ surface (circ)

9 5/8" 323# H-40 @ 234'

Outside w/ 100% excess

9 bbls

50 cu ft

TOC @ 1700' Temp survey

Outside w/ 100% excess

12 bbl

68 cu ft

4 1/2" liner hanger @ 2716'

7" 20#, K55 @ 3530'

cmt w/ 283 cu. Ft. cement

Outside w/ 100% excess

32.4 bbl

182 cu ft

Est. TOC @ 3970' (CBL 1997)

40-38-3938

12 5/8" 800/11.167 = 71.2 ft

50/ 7.143 = 7 ft

150/ 8.556 = 8.8 ft

167 ft

4700'-5000'
4.7 bbl
27 cu ft

11 bbl
62 cu ft

800/11.167 = 27 ft

CIBP @ 5000'

C.H. Menefee Perfs
5036-5378' w/ 1 spf
frac'd w/ 60,000# 20/40 sand and 60,000 gal water

Point Lookout Perfs
5504-5849' w/ 1 spf
Frac'd w/ 68,000# 20/40 sand and 68,000 gal water

Tag fill @ 5865' Aug 2010

4 1/2" liner, 10.5#, K55 @ 5936'
563 cf of cls b with 4% gel cmt

History:
Spudded: 9/11/1977
TD: 10/08/1977 5936' PBTD: 5920'
Completed: 4/4/1978

During Drilling there was a
Gas Kick at 3060'
9-16-77 Gas kick @ 3150'
when wt. @ 10.5 #/gal.
raised wt. to 11.0 ppg. Killed kick.

Formation **Top**

OA 2008

Kirt 2198

Fruit 2928

PC 3285

Lew 3575

MV 4844

MEN 5164

PL 5471

Tops based on Offset wells,
b/c not log above 3500ft

PBTD: 5920'
TD: 5936'
Updated DBW 10/26/2010

**UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
FARMINGTON DISTRICT OFFICE
1235 LA PLATA HIGHWAY
FARMINGTON, NEW MEXICO 87401**

Attachment to notice of
Intention to Abandon:

Re: Permanent Abandonment
Well: 4A Kernaghan B

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) 599-8907.
3. The following modifications to your plugging program are to be made:
 - a) Place a cement plug from 4038' – 3938' to cover the Chacra top.
 - b) Place the 7" casing shoe/Pictured Cliffs/Fruitland plug from 3580' – 2870' inside and outside the 4 ½" casing.
 - c) Place a cement plug from 2766' – 2666' to cover the 4 ½" liner top.
 - d) Place a cement plug from 690' – 590' to cover the Nacimiento top

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.
