Form 3160-5
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANGEMENT

FORM 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
SF - 078903-A

6 If Indian, Allottee or tribe Name

SUBMIT IN TRIPLICATE – Other instructions on reverse side

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

DEC 05 2007
Bureau of Land Management
Farmington Field Office

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

8 Well Name and No.
GCU 166

2 Name of Operator
BP America Production Company Attn: Cherry Hlava

9 API Well No
30-045-07002

3a Address
P.O. Box 3092 Houston, TX 77253

3b Phone No *(include area code)*
281-366-4081

10 Field and Pool, or Exploratory Area
Basin Dakota

4 Location of Well *(Footage, Sec , T , R , M or Survey Description)*
1650' FSL & 1650' FWL Sec. 34 T28N, R12W NESW

11 County or Parish, State
San Juan County, New Mexico

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OR NOTICE, REPORT, OR OTHER DATA

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

RCVD DEC 7 '07
OIL CONS. DIV.
DIST. 3

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 recomplete 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 recompletion 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

If possible - please expedite approval to Plug & Abandon

BP America has reviewed the above mentioned well and finds no further reserves potential remaining Well is uneconomic to repair due to bradenhead issues

BP respectfully requests permission to plug and abandon said well.

Please find attached the P&A procedure. Should you have any questions please call Nona Morgan @281-366-6207 or Richard Bonham @505-326-9298

14 I hereby certify that the foregoing is true and correct
Name (Printed/typed)
Cherry Hlava | Title Regulatory Analyst

Signature *Cherry Hlava* | Date 11/30/2007

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by **Original Signed: Stephen Mason** | Title | Date DEC 0 6 2007

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

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.

NMOCD

SJ Basin Plug & Abandon Procedure

Well Name: GCU 166
API: 30-045-07002
Date: November 30, 2007

Objectives: **P&A Wellbore. Locate TOC on 4 -1/2" casing. Ensure interval isolation throughout the wellbore. Plug off Bradenhead Leak.**

1. TIH and pull out "fish" and completion
2. Cleanout wellbore
3. Set CIBP and Pressure test
4. Run CBL of 4-1/2" casing
5. Set cement plugs to isolate intervals.
6. Locate and isolate/close-off bradenhead leak
7. Rig down move out.
8. Restore location.

Well History: Spud date: 6/1964: Broached tubing and plunger installed :10-26-1980: Bradenhead tests chronology:

6/16/06	BH flowed	1min 40 s	Tbg 240 psi; Csg = 285 psi; BH = 60 psi
5/16/03	BH flowed	45 s	Tbg 230 psi; Csg = 300 psi; BH = 85 psi
1/24/00	BH flowed	30 min 20 s	Tbg 160 psi; Csg = 314 psi; BH = 82 psi
7/11/97	BH flowed	30 s down to whisper	Tbg 120 psi; Csg = 340 psi; BH = 22 psi
8/07/92	BH flowed	< 1min	Tbg 571 psi; Csg = 576 psi; BH = 47 psi

Attempted to fish stuck plunger 8/21/07, instead ended up shearing off and getting plunger stuck at a depth of 5900' along with fish neck.

Current Status: *Well was on compliance list for Oct. 2007. Operations unloaded fluids and well has been producing steadily at 40 mcfd for approx. 6 weeks without the plunger operating. No reserves potential remains on well and RE recommends P&Aing the well. Uneconomic to repair due to bradenhead issues, tubing change out requirements, and new plunger equipment. Last bradenhead test Nov. 2, 2007 indicated Tubing = 280, Casing = 290 Intermediate = 0 Bradenhead = 75.*

Pertinent Information: Gas BTU content for this well = 1168; SG = 0.6741 Venting and Flaring document needs to be followed with the assumption that BTU content is above 950.

Location: T28N-R13W-Sec34
County: San Juan
State: New Mexico
Pipeline: Enterprise
Horizon: FC
H2S = None Expected
CO2 = 0.8159%

Gathering System: CHACO
Engr: Nona Morgan
ph (281) 366-6207
fax (281) 366-7099
cell(713) 890-2002

Work Guidelines: NOTICE: *Perform all work per these guidelines and considerations.* Health, safety, and the environment are a top priority within BP San Juan South Asset and all work shall be done in accordance with Company established policies.

Procedure:

Wellsite Preparations and Agency Notifications:

1. Contact BLM and NMOCD 24 hrs before beginning P&A process to ensure scheduling of personnel to witness casing pressure testing, CBL results and cement placement.

2. Perform pre-rig site inspection. Per Applicable documents, check for: (1) size of location, (2) gas taps, (3) other wells, (4) other operators, (5) production equipment, (6) wetlands, (7) wash (dikes requirements), (8) H2S, (9) barriers needed to protect equipment, (10) landowner issues, (11) location of pits (buried or lines in pits), (12) raptor nesting, (13) critical location, (14) check anchors, (15) ID wellhead, etc. Allow 48 hours for One Call if earth pit is required.

3. Have location stripped prior to rig move as this is a final wellbore PXA.

4. Perform and 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.

5. Notify land owners with gas taps on well.

6. Lock out/tag out any remaining production equipment.

Initial Well Checks & Preparations:

7. Check gas H2S content and treat if the concentration is > or equal to 10 ppm/Treat for H2S, if necessary per H2S Wells NOTICE. *Note: No H2S is expected at this wellsite location.*

8. Nipple up second master valve on well. Reference dispensation to rig up on well with single barrier (to be provided by wellwork team).

9. RU slickline unit or wireline unit. RIH and set tubing stop and "G" packoff with pump through plug for isolation. Note that "fish" is stuck @ 5900 ft. This will require that the tubing stop and G packoff be set above stuck "fish".

10. Set two way check in BPV profile. If BPV profile is not present, set second tubing stop and "G"packoff with positive plug at +/- 100'.

11. MIRU workover rig. Hold safety meeting and perform JSA. Complete necessary paperwork and risk assessment. Ensure all necessary production equipment is isolated (LOTO) including, but not limited to the meter run, automation, and separator, etc.

12. Check and record tubing, casing and bradenhead pressures daily. Ensure production casing and bradenhead valves are double valved. Double valve all casing strings. Check hold down pins on hanger.

13. Pressure test tree and hanger to 200 psi above SITP. Make up 3" flowback line, if necessary and blow down well. Kill with 2% KCL water or fresh water, as necessary. Check all casing strings to ensure no pressure exist on any annulus.

14. *Nipple down Wellhead. Reference "No Dual Barrier in Annulus During All Well* Servicing" dispensation. NU BOPs and diversion spool with 3" outlets and 3" pipe to the blow tank. Pressure test BOPs to 200 psi on the low end and on the high range at 1000 psi. Monitor flowing casing pressure with gauge (with casing flowing to blow tank), if available, throughout workover.

15. Install stripping rubber. Pull tubing hanger up to rubber and shut pipe rams. Bleed pressure above rams. Pull stripping rubber and hanger up to floor. Remove hanger and replace stripping rubber.

Remove Completion & Cleanout Wellbore & Pressure Test Casing:

16. Open rams and TOOH w/ 2-3/8 production tubing currently set at 6055'. Use approved "Under Balance Well Control Tripping Procedure". Visually inspect tubing while POOH. *(It is acceptable to use the existing tubing as workstring, if it appears to be good. - WSL's discretion.)*

17. TIH w/ bit & scraper for 4-1/2" casing to the top of the Dakota perfs at 6048' and clean out.

18. RIH with 4- ½" CIBP on workstring and set at 6028'.

19. Load hole and circulate out any produced fluids. Pressure test wellbore to 500 psi for 15 minutes. Monitor bradenhead for indications of communication while this is done.

20. RU wireline and run Schlumberger USIT/CBL for 4-1/2" casing from 6028' to surface. Report casing load, cement quality, and pressure test results, bradenhead pressure and bleed details, and TOC to the BLM, NMOCD, and Production Engineer.

Spot Plug Locations and Pump Cement:

21. RIH with 2-3/8" open-ended workstring to 6048'. Spot 150' or ~11 sacks - **(14 cu. Ft.)** of G-Class cement on top of CIBP from 6028'-5878''. This will isolate the entire Dakota productive intervals. WOC.

→ Gallup 5167'-5067' Mesaverde 3130'-3030'

23. Based on 4-1/2" USIT/CBL results it will be determined if and where cement will be required behind casing to cover PC/FT intervals. The next 6 steps listed below assume the TOC behind the 4-1/2" casing is at the estimated depth of 1730'. The order and detail of the next six steps could change based on the casing pressure test and USIT/CBL results. The e*ngineer will be consulted throughout the procedure to plug and abandon the well and isolate the bradenhead leak zone.*

24. RU wireline w/ perforating gun to depth 100' above TOC from CBL report (Expect ~1730'). Perforate 4-1/2" casing and POOH with guns. RD wireline.

25. RIH w/ 2-3/8" workstring and 4-1/2" cement retainer and set @ 1680'

26. Stab into retainer and squeeze **104 cu. ft** of G-Class cement to spot cement behind 4-1/2" casing to isolate PC and FT interval.

27. Un-stab from retainer and spot 363' **(32 cu. ft.)** G-Class cement on top of retainer. POOH w/ workstring. This will put cement across the PC and FT intervals inside the 4-1/2" casing from 1680'-1317'.

NOTE: Proceed with the steps below starting at 28 only if USIT logs indicated cementing or casing integrity issues existing with the 4 -1/2" casing. Consult with engineer and NMOCD/BLM regarding steps to locate Bradenhead leak, if necessary. Otherwise move down to STEP 36 .

Set CIBP and Isolate Zone to Locate Bradenhead Leak

28. RIH with 4- ½" CIBP on workstring and set at 1267'

29. TIH w/ RBP & Packer. Set RBP just above CIBP @ 1257'. TOH one joint and set packer. Pressure test RBP to 1500 psi.

30. Pressure test casing above packer. Isolate leak, if any, by moving packer up hole and repeating pressure test of packer. *Contingency: If no casing leak is found it will be necessary to perform further diagnostic work in order to find bradenhead pressure source and either perforate and squeeze or reverse squeeze. Contact engineer for further discussions.*

Perform Cement Squeeze at Bradenhead Leak

31. Once leak is located, establish injection rate into leak and attempt to circulate to surface, *if possible.*

32. Release packer, spot sand on RBP and set packer 50' above leak.

33. RU Schlumberger cementer and squeeze leak as per Schlumberger procedure. Circulate cement to surface if possible. WOC.

Remove Packer and Pressure Test Squeeze

34. Unset packer and TOH. Pressure test squeeze to 500 psi. Clean out to top of RBP. Latch RBP and TOH. If squeeze does not test, contact engineer for further measures to repair leak

35. If pressure test won't hold, Engineer will work to notify NMOCD/BLM to discuss requirements to repair leak. Procedures may have to be modified per the NMOCD/BLM.

Set Cement Plugs to Isolate & Plug off Shallow Productive Zones

36. RU wireline w/ perforating gun to 550' and perforate 4-1/2" casing. POOH with guns. RD wireline.

37. RIH w/ 2-3/8" workstring and 4-1/2" cement retainer and set @ 500'.

38. Stab into retainer and squeeze **49.4 cu ft.** of G-Class cement to spot cement behind 4-1/2" casing to isolate the Ojo Alamo interval.

39. Un-sting from retainer and spot 250' **(25 cu. ft.)** G-Class cement on top of retainer. POOH w/ workstring. This will put cement across the Ojo Alamo aquifer intervals inside the 4-1/2" casing from 500' - 250'.

40. RU wireline w/ perforating gun to 240' and perforate 4-1/2" casing. POOH with guns. RD wireline.

Set Cement Plug from Bottom Depth of Conductor Casing to Surface

41. RIH w/ 2-3/8" workstring w/ 4-1/2" cement retainer and set @ 200'.

42. Stab into retainer and squeeze **79.8 cu ft.** of G-Class cement to cover the 8-5/8" casing shoe and fill the 4-1/2" x 8-5/8" annulus. Circulate clean cement from the 4-1/2" x 8-5/8" annulus.

43. Un-stab from retainer and spot 200' **(20 cu. ft.)** G-Class cement from top of retainer to the surface. POOH w/ work string and top off 4-1/2". This will fill the 4-1/2" casing from the surface casing shoe to the surface.

44. If cement cannot be seen on all annulus and casing strings after removing wellhead, remedial cementing at the surface will be required.

45. Install 4' well marker and identification plate per NMOCD requirements.

46. RD and release all equipment. Remove all Wells Team LOTO equipment.

47. Ensure all well work details and well bore equipment report are entered in DIMS. Print DIMS summary of work and wellbore diagram and put in well file. Notify Sherri Bradshaw and Cherry Hlava of completed P&A for final regulatory agency reporting and database clearing.

48. Submit work request to Planning and Scheduling to prepare location for reclamation and reseeding.

Current Wellbore

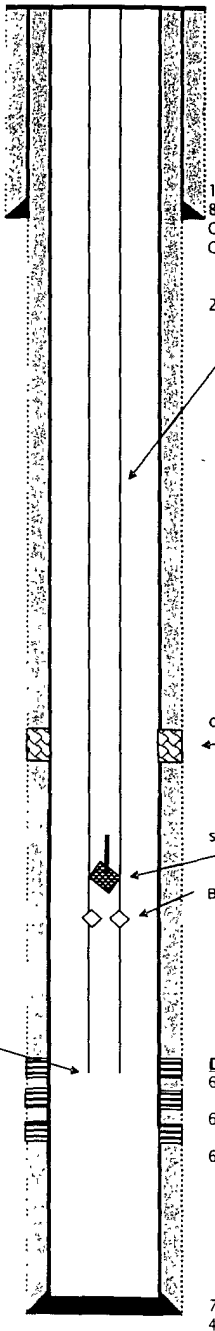
bp

Gallegos Canyon Unit 166
Dakota
API # 30-045-07002
T-28N, R-12-W, Sec 34
San Juan County, New Mexico

GL. 5840'
KB· 5852'

FORMATION TOPS

Ojo Alamo	300'	Mancos	4240'
Kirkland	390'	Gallop	5117'
FT Coal	1360'	GRNR.	5933'
PCCF	1521'	GRRS	5992'
Lewis	1693'	TWLS	6048'
Chacra	2424'	PGTE	6095'
CLFH-E	NR'	CBRO	6137'
CLFH	3073'	L CBRO	NR'
MENF	3131'	ENCN	6175'
PNLK	3976'	BRCN	6249'
		MRSN	6268'



12 -1/4" Hole
8-5/8", K-55, 24# @ 357'
Cmt w/ 225 sxs
Circ. to surface

2 3/8", 4 7#, J-55

diverter tool @ 4339'

stuck fish at 5900' - (fish neck & plunger pad)

Baker B-nipple @ 6017'

End of Production String @ 6055'

Dakota Perforations
6048' - 6060', 4 SPF
6105' - 6115', 2 SPF
6142' - 6152', 2 SPF

Did not frac zone communicated

55,272 gal water & 50,000 lb sand

PBTD· 6250'
TD· 6286'

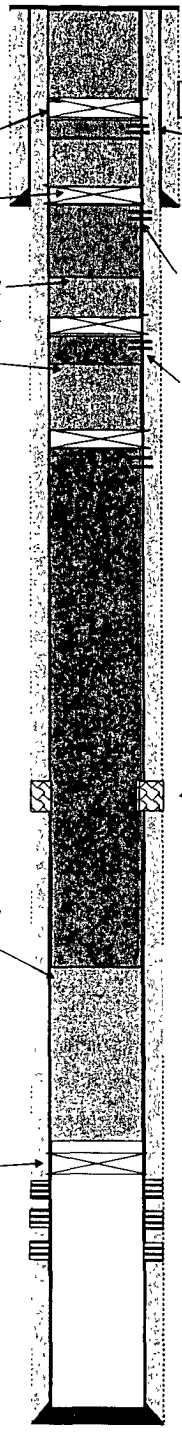
7-7/8" Hole
4-1/2", J-55, 10 5# @ 6286'
1st stage cmt w/ 400 sxs, w/6% gel, 2 lbs TUF Plug/sack
100 sxs NEAT cement
2nd stage: cmt w/ 1100 sxs , 6% gel, 2 lbs TUF Plug/sack
circ. to surface

Proposed PXA Wellbore

bp

Gallegos Canyon Unit 166
Dakota
API # 30-045-07002
T-28N, R-12-W, Sec 34
San Juan County, New Mexico

GL 5840'
KB 5852'



Wellbore diagram depicted assumping USIT logs indicate good cement quality to surface and very small Bradenhead Leak

cement retainer set @ 200'

locate perfs @ 240'

cement retainer set @ 500'

12-1/4" Hole
8-5/8", K 55, 24# @ 357'
Cmt w/ 225 sxs
Circ to surface

locate perfs @ 550'

TOC = 1100'
To isolate Ojo Alamo Aquifer zone

cement retainer set @ 1250'

TOC = 1317'
To isolate FT& PC zones

locate perfs @ 1300'

cement retainer set @ 1680'

est top of cement @ 1730'

FORMATION TOPS

Ojo Alamo	300	Mancos	4240'
Kirkland	390'	Gallop	5117'
FT Coal	1360'	GRNR	5933'
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diverter tool @ 4339'

TOC = 5878'

CIBP @ 6028'

original
Dakota Perforations
6048' - 6060', 4 SPF
6105' - 6115', 2 SPF
6142' - 6152', 2 SPF

Did not frac zone communicated

55,272 gal water & 50,000 lb sand

PBTD 6250'
TD 6286'

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100 sxs NEAT cement
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circ to surface

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: 166 Gallegos Canyon Unit

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) Spot a cement plug from 5167' – 5067' to cover the Gallup top.

b) Spot a cement plug from 3130' – 3030' to cover the Mesaverde 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.