Form 3160-5
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB NO. 1004-0135
Expires: November 30, 2000

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.

SUBMIT IN TRIPLICATE - Other instructions on reverse side.

5. Lease Serial No.
SF 078513

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.
ARNAUD A 2

2. Name of Operator
BP AMERICA PRODUCTION COMPANY
Contact: CHERRY HLAVA
E-Mail: hlavacl@bp.com

9. API Well No.
30-045-28183

3a. Address
P.O. BOX 3092
HOUSTON, TX 77253-3092

3b. Phone No. (include area code)
Ph: 281.366.4081

10. Field and Pool, or Exploratory
BASIN FRUITLAND COAL

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 17 T32N R9W SWSW 790FSL 930FWL

11. County or Parish, and State
SAN JUAN COUNTY, NM

RECEIVED JUL 2004 OIL CONS. DIV. DIST. 3

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

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

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.)

It was BP's intent to clean out the wellbore of above mentioned well and bring well back to production but it was noted a fish is in the hole.

Therefore BP America respectfully requests permission to sidetrack, install liner, log, run tubing & return well to production per the attached procedure.

If you have any technical questions please call Teruko Thomas @281-366-0769.

CONDITIONS OF APPROVAL
Adhere to previously issued stipulations.

14. I hereby certify that the foregoing is true and correct.
Electronic Submission #33003 verified by the BLM Well Information System
For BP AMERICA PRODUCTION COMPANY, sent to the Farmington
Committed to AFMSS for processing by MATTHEW HALBERT on 07/13/2004 ()

Name *(Printed/Typed)* CHERRY HLAVA — Title REGULATORY ANALYST

Signature (Electronic Submission) — Date 07/13/2004

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By Ann Lovato — Title Petr. Eng. — Date 7/14/04

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.

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

HOLD C104 FOR Dir. Survey

NMOCD

Arnaud A 2
API # 300452818300
Sec 17 - T32N - R9W
San Juan County, NM

Teruko Thomas
281-366-7252 office
281-366-7836 fax
713-301-9081 cell

July 12, 2004

Objective:

Sidetrack, stabilize wellbore, install 5.5" liner, log, perforate, run 2-3/8" tubing with reduced collars and return the well to production.
NOTE: Per well records, fish (BIT, SUB, FLOAT, DC's) inside open hole section (see attached). Top of fish @ 3260'.

Procedure:

1. Check anchors. Check ID wellhead, if earth pit is required have One Call made 48 hours prior to digging.

2. Check and record tubing, casing, and bradenhead pressures. Ensure production casing has double casing valves installed. Double valve all casing strings.

3. RU slickline unit. RIH and set **two** barriers for isolation (CIBP, tbg collar stop w/plug, or plug set in nipple - 1.78" ID "F" nipple @ 3151' kb). Rig down slickline. Record fluid level.

4. MIRU workover rig.

5. Blow down well. Kill with 2% KCl water ONLY if necessary. Check all casing strings to ensure no pressure exists on any annulus. ND WH.

6. NU BOPs and diversion spool with 3" outlets and 3" pipe to the blow tank. Pressure test BOPs to 200 psi above BHP (BHP estimated at 650 psig). Monitor flowing casing pressure with gauge (with casing flowing to blow tank) throughout workover.

7. Pull tubing hanger and shut pipe rams and install stripping rubber.

8. TOH with 2-3/8" tubing landed at 3176' kb using approved "Under Balance Well Control Tripping Procedure". Visually inspect tubing for signs of scale and/or corrosion and report results in DIMS.

9. **NOTE: Per well records, fish (BIT, SUB, FLOAT, DC's) inside open hole section. Top of fish @ 3260'.**

10. Pick up drill bit and drill collars to clean out open-hole and surge the well using air and mist for one day. **Attempt to retrieve fish** in order to run liner to the bottom of the well (3440' kb). If **unsuccessful** at retrieving fish - sidetrack well and cavitate (go to step 11). If **successful** at retrieving fish – cavitate existing well (go to step 15).

SIDETRACK:

11. TOH with drill string and PU work string with 7" bridge plug. RIH with bridge plug and set plug at 3000' kb. TOH with work string.
+ 50' cement cap

12. RIH with whipstock and set whipstock above bridge plug.

13. PU drill string and RIH to cut window in 7" casing at approximately 2980' kb and drill sidetrack to TD of 3440' kb.

14. POH with drill string and drill bit and RIH with under-reamer. Under ream open hole to 8.5" diameter.

CAVITATION:

15. Pick up drill bit and 600' of 4 ¾" drill collars to clean out open-hole and cavitate the well using air and mist. After each cavitation, monitor pressure build-up (maximum pressure and rate of pressure build-up (1 hour build-up is sufficient)). Record all pressure build-up results in DIMS or Excel spreadsheet.

16. Plan for approx. 30 cavitations. The actual number will depend upon well response. Confine cavitations during last 1 – 2 days to naturals, or minimal air assist, with decreasing surface pressure. (This should promote stable downhole geometry). **NOTE: Perform 3-4 flow tests during overall cavitation operations and record data.** Confirm early pressure build-up data has peaked and switch over to clean-up. Evaporate water, otherwise report any water movements offsite for BLM sundry notice.

17. Commence breakdown & cavitation:

- Recommend breaking down formation with bit at casing shoe
- Surge during daylight. Begin soap cavs immediately if daylight allows, otherwise shut in and lock rams.
- Once the hole broken down, POH to BOP (lock rams) and continue water and air cavitations.
- JHA – cavitating (blow horn, head count, note wind direction, fire watchman, shut off all non essential engines onsite)
- JHA – setting crown-o-matic to prevent power swivel from hitting fingerboard.
- JHA – well control procedure if casing (OR BLOOIE LINE) suspected to be packed off with coal. (Pump 40 bbl water into well to equalize bridge, strip in, tag and drill)
- JHA – Blooie line lighting procedure using igniter and slide (do not light cavs)
- Note daily and cumulative cavs on daily report
- After each cavitation, monitor pressure build-up (maximum pressure and rate of pressure build-up). Record all pressure build-up results in DIMS. Attempt to increase maximum pressure build-up with successive cavitations.
- Plan for 10-14 days of cavitating (approx. 30 cavs).

- RIH to clean out. Check and tighten surface equipment (BOP, blooie lines) before POH. POH.
- Record pressure build-ups at night – report data in attached spreadsheet and look for early pressure data improvements.
- Confine cavitations during last 1 – 2 days to naturals, or minimal air assist, with decreasing surface pressure. (This should promote a stable downhole geometry.)
- Confirm early pressure build-up data has peaked and switch over to clean-up.
- Evaporate water, otherwise report any water movements offsite for BLM sundry notice.

18. Clean Up

- After all cavitations are completed, clean the well using a foam/air mixture.
- Basic foam recipe of 1500 scf/m, 23 BPH (8 gal/20 bbl 485, .8 gal/20 bbl C100 corrosion, 0.7 gal/20 bbl SHC100 shale inhibitor.
- Optimize chemical concentration by using foam height testing when recycling pit.
- Pull to shoe, flow 4 hrs through ¾" choke, RIH
- If persistent bridging, resume natural cavs, with drillstring at shoe, to establish stable geometry.
- If after 2 days hole is not clean, then the completion liner will be drilled into place (use small setting ball and run string floats in dp).

RUN LINER:

19. After wellbore has been stabilized, RIH with a 5.5" flush-joint liner to 3440' kb TD with approximately 50 ft overlap with 7" casing. Hang liner and lay down drill pipe.

20. Rig up Schlumberger Oilfield Services to run GR/CCL log to identify coal seams for perforating liner. The open-hole mud log shows coal seams at approximately the following intervals: (Intervals to perforate will be determined based on the results of the Gamma Ray log)

Perforation Interval	**Total Ft.**	**Shots per ft**	**Total Shots**
3193 - 3197		4	
3213 - 3215		4	
3235 - 3243		4	
3243 - 3260		4	
3400 - 3405		4	
3406 - 3419		4	
3425 - 3430		4	

21. RIH with 2 3/8" tbg, with plug in place using the following assembly:

2 3/8" 4.7# J-55 EUE 8RD (reduced collars all the way to surface) land tbg @ 3175' kb

- 18' muleshoe collar w/ 5/8"weep holes at top of mule shoe
- 1.78" ID Pump seating nipple
- 1 jts of 2-3/8"od tbg
- 1.875" ID "X" nipple **(with plug in place)**
- Balance of 2-3/8" tbg

22. Rig up slickline unit, run gauge ring, pull plug from X nipple. Rig down slickline unit.

23. NDBOP, NUWH.

24. RDMOSU. Turn well over to production.

ARNAUD A 2

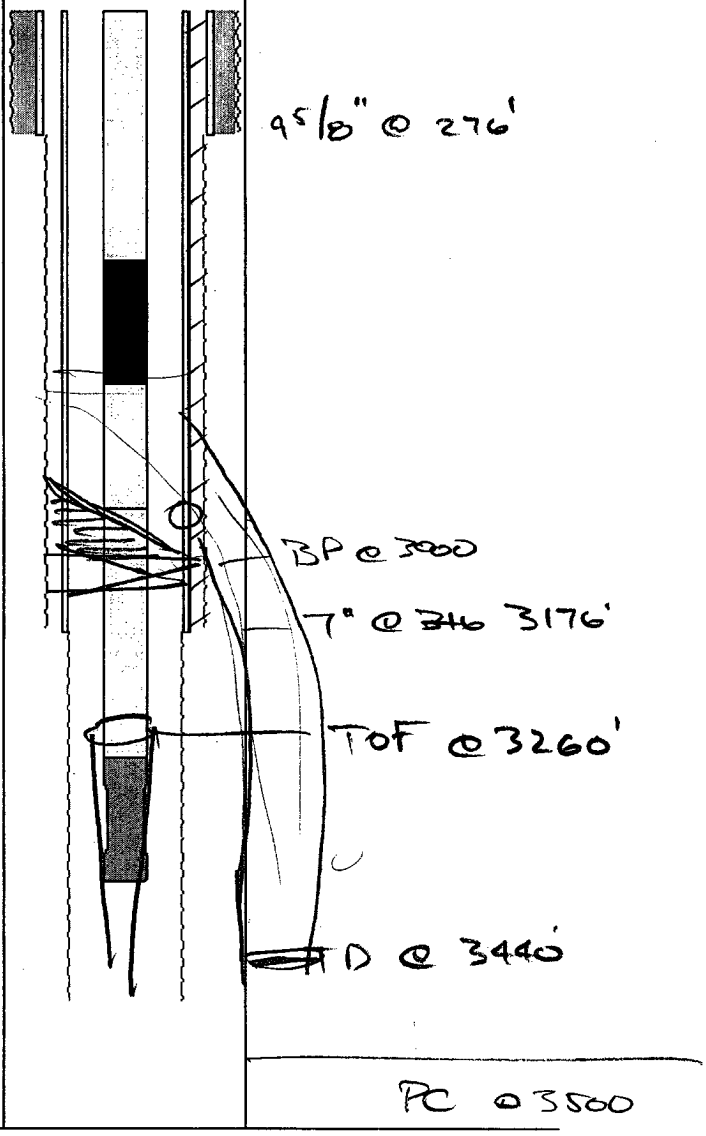
Country:	UNITED STATES	County:	SAN JUAN	Event:	WELL SERVICING	Wellbore:	OH
Region:	NORTH AMERICA	State:	NEW MEXICO	Event Start:	5/10/2000	Top TMD:	13.0 ftKB
Bus. Unit:	ONSHORE US	District:	FARMINGTON	Event End:	<no data>	Bottom TMD:	3,440.0 ftKB
Perf Unit:	WESTERN			Objective:	REPAIR - RODS	Spud:	12/6/1950
Asset:	SAN JUAN SOUTH			Contractor:	AZTEC WELL SERVICING		
Field:	BASIN-FRUITLAND COAL GAS POOL						

Orig KB Elev:	6,648.00 ft
Ground Elev:	6,635.00 ft
KB to GL:	13.0 ft
Mud Line Elev:	0.00 ft

Tubing/CT/SS Components	Min ID	Top
99 - TUBING, 2.375, 4.7#, J-55, EUE TC	1.995 in	13.0 ftKB
1 - SN, API: 2.375 X 1.780 X 12, EUE	1.780 in	3,151.0 ftKB
1 - TUBING SUB, 2.375	1.995 in	3,152.0 ftKB
1 - TUBING SUB, 2.375	1.995 in	3,162.0 ftKB
1 - PERF. SUB, 2.375, 4.7#, J-55, U, 4 FT	1.995 in	3,172.0 ftKB

Wellsketch

Perf Interval / SPF / Phasing



Strings/Assemblies in the Hole on <no data>

ARNAUD A 2

Wellbore: OH

Event: WELL SERVICING

Event Dates: 5/10/2000 to <no data>

SURFACE CASING
Install Date: 12/7/1990
Top: 13.00 ft
Bottom: 267.0 ft
Status: INSTALLED
Pull Date: <no data>

Component Details	Size	Jts	Length	Weight	Grade	Threads	Min ID	Cond.	Comments
CASING, 9.625", 36#, K-55, ST&C	9.625 in	6	254.00 ft	36.00 lb/ft	K-55	ST+C	8.921 in		

PRODUCTION CASING 1
Install Date: 12/12/1990
Top: 13.00 ft
Bottom: 3,171.0 ft
Status: INSTALLED
Pull Date: <no data>

Component Details	Size	Jts	Length	Weight	Grade	Threads	Min ID	Cond.	Comments
CASING, 7", 23#, K-55, LT&C	7.000 in	76	3,158.00 ft	23.00 lb/ft	K-55	LT+C	6.366 in		

TUBING
Install Date: 7/31/1998
Top: 13.00 ft
Bottom: 3,176.0 ft
Status: INSTALLED
Pull Date: <no data>

Component Details	Size	Jts	Length	Weight	Grade	Threads	Min ID	Cond.	Comments
TUBING, 2.375, 4.7#, J-55, EUE T&C	2.375 in	99	3,136.00 ft	4.70 lb/ft	J-55		1.995 in	S	
SN, API: 2.375 X 1.780 X 12, EUE	2.375 in	1	1.00 ft	0.000 lb/ft			1.780 in	S	
TUBING SUB, 2.375	2.375 in	1	10.00 ft	0.000 lb/ft			1.995 in	S	
TUBING SUB, 2.375	2.375 in	1	10.00 ft	0.000 lb/ft			1.995 in	S	
PERF. SUB, 2.375, 4.7#, J-55, U, 4 FT	2.375 in	1	4.00 ft	4.70 lb/ft	J-55		1.995 in	S	

Perforating Information

ARNAUD A 2
Wellbore: OH

Event: WELL SERVICING
Event Dates: 5/10/2000 to <no data>

<no data> Date: <no data> Grou interval: <no data> to <no data>

Formation	Top Depth	Bottom Depth	SPF/SPM	Phasing	Gun Size	Gun Type	Charge

Cementing Information

PRIMARY
12/7/1980 Contractor: <no data>

Stage	Slurry Type	Slurry Description	Class	Top	Bottom	Density	Yield	Total Vol
STAGE 1	CEMENT		B	13.0 ft	267.0 ft	0.0 ppg	0.00 ft³/sk	0.0 bbl

PRIMARY
12/12/1980 Contractor: <no data>

Stage	Slurry Type	Slurry Description	Class	Top	Bottom	Density	Yield	Total Vol
STAGE 1 STAGE 1	CEMENT CEMENT	65/35 POZ.	B B	0.0 ft 0.0 ft	0.0 ft 0.0 ft	0.0 ppg 0.0 ppg	0.00 ft³/sk 0.00 ft³/sk	0.0 bbl 0.0 bbl