

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.***SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. HEATON LS 20
2. Name of Operator BP AMERICA PRODUCTION CO. Contact: CHERRY HLAVA E-Mail: hlavacl@bp.com		9. API Well No. 30-045-11785-00-S1
3a. Address 200 ENERGY COURT FARMINGTON, NM 87401	3b. Phone No. (include area code) Ph: 281-366-4081	10. Field and Pool, or Exploratory AZTEC PICTURED CLIFFS
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 29 T31N R11W SWNE 1705FNL 1750FEL 36.87254 N Lat, 108.01057 W Lon		11. County or Parish, and State SAN JUAN COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input checked="" type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 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.)

BP finds no further uphole potential for said well and respectfully request permission to plug the entire wellbore.

Please see the attached P&A procedure.

**H₂S POTENTIAL EXIST**RCVD APR 20 '10
OIL CONS. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct. Electronic Submission #84825 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 04/16/2010 (10SXM0162SE)	
Name (Printed/Typed) CHERRY HLAVA	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 04/14/2010

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>STEPHEN MASON</u>	Title <u>PETROLEUM ENGINEER</u>	Date <u>04/16/2010</u>
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 <u>Farmington</u>

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 ****

NMOCB 4/23

Heaton LS 20 – PC PxA Procedure (Version 1)

General Information:

Formation:	PC	Job Objective:	Plug and Abandon
Project #:		Date:	3/17/2010
Engineer:	Anne Hansford	p. 281.366.8619	c. 713-540-3386
Production Contact:	Rocky Deromedi	p. 505.326.9471	c. 505.486.0942
Optimizer:	Mike McMahan	p. 505.326.9231	
Backup Engineer:			

Well Information:

API Number: 30-045-11785

Production Data:

Tubing Pressure: 0 psi

:	Sec. 29, T31N, R11W	Pre-rig Gas Rate:	0 MCFD
Meter Number:	75464	Anticipated Uplift:	None
Well FLAC:		Water Rate:	
Cost Center:		CO2 (%):	0.5 to 0.7%
Lease FLAC:		H2S (PPM):	N/A
Restrictions:	N/A	Gas BTU:	1190
Regulatory Agency:	BLM	Artificial Lift Type:	Coil Tubing 1" or 1-1/4" TBC
Compressed (Y/N):	Y		

Basic Job Procedure:

1. POOH 1" OR 1-1/4", coil tubing @ unknown depth (~2482 to 2492')
2. Set CIBP @ 2432
3. Pressure test 2-7/8" casing. Run CBL
4. Cement 2432' to 1150' (This will be based on CBL results) inside.
5. Based on CBL results, Perf @ 930'. Set retainer @ 880' and cement 930' to 748' inside and outside to cover the Kirtland and Ojo formations.
6. Perf @ 190' and pump a 190' cement surface plug from 190' to surface inside and outside.

Safety and Operational Details:

ALL work shall comply with DWOP E&P Defined Operating Practice.

Well History:

The Heaton LS 20-PC, originally completed in 1966. A compressor was set on the well in March 2007. The well is currently not producing.

Standard Location Work:

1. Perform pre-rig site inspection, size of location, gas taps, other wells, other operators, running equipment, wetlands, wash, H2S barriers if needed for equipment. Landowner issues, buried lines in pits, raptor nesting, critical location, check anchors. Check ID wellhead, determine if equipment is acceptable or obsolete and replace if necessary, if digging is required have One Call made 48 hours. Follow ground disturbance policy.

2. Perform second site visit, checking anchors and barriers if needed. Ensure lines are marked so that they clearly designate pit locations. Discuss and turnover handover sheet with someone from operations team and wells team. LOTO all necessary equipment including but not limited to: meter run, automation, separator, and water line.

Rig Procedure:

3. Notify BLM and NMOCD 24 hours prior to performing the work.
4. Hold pre-job safety meeting and discuss JSA with everyone on location. JSA should cover: heavy lifts, pinch points, location hazards, pressure hazards, proper PPE and 8 golden rules of safety/IFF. Make sure everyone has preformed their LOTO and knows they have the right to stop the job.
5. Check and record casing pressure, intermediate, and Bradenhead pressures. Record all pressures into DIMS. Notify engineer if Bradenhead pressures exist. Check gas H2S content and treat if the concentration is > or equal to 10 ppm.
6. Insure double casing valves are installed. Spot and lay 3" line and tank to blow down well, record pressures while blowing well down if possible.
7. Blow down backside to flow back tank. Record the amount of time that it takes to blow down well.
8. RU pump truck and perform temporary kill.
 - a. 1" CT TUBULAR VOLUME = 0.00107 bbl/ft
 - i. Tubing depth =2492'
 - ii. 3 bbls down tubing
 - b. 1-1/4" CT TUBULAR VOLUME = 0.00185 bbl/ft
 - i. Tubing depth = 2492'
 - ii. 7 bbls down tubing.
 - c. CASING VOLUME 2-7/8" = 0.00579 bbl/ft
 - i. Depth = 2570' (perf at 2482')
 - ii. 15 bbls
 - d. **TOTAL = 22 bbls (this is based on 1-1/4" b/c worse case)**
9. Ensure well has gone on vacuum. Test that the well remains on vacuum for the amount of time that will be needed to ND wellhead and NU BOP (1 hour). Ensure extra kill fluid on location for ND of wellhead operation. The operations of removal of wellhead and installation of BOPS will be preformed under a dispensation SINCE NO MECHINCAL BARRIERS, ONLY KILL FLUID.
10. If well did not go on vacuum contact engineer for review of temporary kill step and permanant kill step.
11. Conduct a JSA and discuss the operation of ND wellhead and NU BOP with only kill fluid to ensure operation is as efficient as possible and exposure time is minimized during operation.
12. If well went on vacuum, perform permant kill.
 - a. 1" CT TUBULAR VOLUME = 0.00107 bbl/ft
 - i. Tubing depth =2492'
 - ii. 3 bbls down tubing
 - b. 1-1/4" CT TUBULAR VOLUME = 0.00185 bbl/ft
 - i. Tubing depth = 2492'

- ii. 7 bbls down tubing.
 - c. CASING VOLUME 2-7/8" = 0.00579 bbl/ft
 - i. Depth = 2570' (perf at 2482')
 - ii. 15 bbls
 - d. **TOTAL = 22 bbls (this is based on 1-1/4" b/c worse case)**
13. RU CTU. If threaded tree flanges perform proper risk assessment for threaded connections. Use dual choke manifold or production choke for flow back. Fully function and pressure test BOP's to 250-psi low-pressure test, 1000-psi high-pressure test. If Shear Rams are not used in BOP stack, refer to local standard operating practice. Lubricator should be of adequate length to cover BHA. Dual flapper check valves should be run above BHA. If dual flapper check valves are not used a detailed and current assessment of risks, mitigations and contingency responses should be refer to, or a local standard operating practice.
 14. RIH with coil-tubing to **2432'** and set CIBP.
 15. Load hole with fluid and pressure test 2-7/8" casing. If no fluid or pressure loss is apparent, run CBL.
 16. RU E-Line, pressure test lubricator. Pressure test lubricator and BOP to 250psi for 5 min and 700psi full test. Chart results and record passing test in DIMS.
 17. Run CBL from 2432' to surface inside the 2-7/8" casing. Based on results, contact engineer for remedial work.
 18. RIH with coil and spot **1282'** (41.7 cu ft) of G-Class cement inside 2-7/8" casing from **2432' to 1150'**. This will cover the Picture Cliff and Fruitland Coal Formations.
 19. POOH to **800'**. Based on CBL results determine if remedial work needs to be completed. Pump a ~~182'~~ **54.9 cu ft** (5.92 cu ft inside; 30.57 cu ft outside) of G-Class cement from ~~920' - 748'~~ on **980' - 740'** the inside and outside of the 2-7/8" casing. This will isolate the Kirtland and Ojo Alamo formation. POOH
 20. Rig down coil unit.
 21. Move in Wireline unit, equipment and crew. Be sure to fill out necessary work orders. Wireline must perform LOTO and JSA. RU unit with a lubricator with pump in sub that can accommodate CBL and BOP. **Since well is not an HCO no Pressure testing of lubricator is required.**
 22. RIH with perforating gun and shoot holes @ **190'**. RD wireline.
 23. RU pump truck. Establish circulation. Once circulation is established, pump and circulate **54.9 cu ft** cement from **190' to surface** behind 2-7/8" casing. **Pump 6.18 cu ft** cement from **190'** to surface inside of casing. This will put cement around the bottom of the 8-5/8" surface casing shoe to surface and both inside and behind the 2-7/8" casing. POOH.
 24. Perform underground disturbance and hot work permits. Cut off tree.
 25. If cement cannot be seen on all annulus and casing strings remedial cementing will be required from surface.
 26. Release coil tubing unit.
 27. Install well marker and identification plate per regulatory requirements. Dry hole marker should contain the following:

BP American Production Co.
Heaton LS 20
API 30-045-11785
Unit letter G, Sec 29, T31N, R11W
1705' FNL, 1750 FEL
San Juan, NM
Picture Cliffs Formation
Federal Lease number: SF 078097
P&A date - TBD

28. RD and release all equipment. Remove all LOTO equipment.
29. Ensure all reports are loaded into DIMS. Print out summary of work and place in Well file.
Notify Sherri Bradshaw (326-9260) of completed P&A and Cherry Hlava.

Heaton LS 20 - PC

Sec 29, T31N, R11W

API # 30-045-11785

GL: 5954'

History:

Spudded 7-11-66

Completed 8-12-66

Compressor set on 3/2007

Lateral has high line pressure - 225#

8-5/8", 32.2# J-55 @ 140' (12-1/4" hole)

110 sxs cmt

circulated cement to surface

CT installed with depth unknown

TOC 1150 (unknown method)

PC Perforations

2482-2494 2 spf

2506-2518' 2 spf

2534-2540' 4 spf

2-7/8", 6.4# J-55 @ 2570' (6-1/4" hole)

250 sxs cmt (50/50 diamix and class C 2% gel)

TD: 2570'

Formation tops:

Ojo 848'

kirtland 930'

Fruitland 2012'

PC 2480'

updated: 2/12/08

Heaton LS 20 - PC

Sec 29, T31N, R11W

API # 30-045-11785

GL: 5954'

History:

Spudded 7-11-66

Completed 8-12-66

Compressor set on 3/2007

Lateral has high line pressure - 225#

Ojo Alamo 790
Kirtland 930

Fruitland 2097'

Pictured Cliffs 2480'

PC Perforations

2482-2494 2 spf
2506-2518' 2 spf
2534-2540' 4 spf

Formation tops:

Ojo 848'
kirtland 930'
Fruitland 2012'
PC

TD: 2570'

updated: 2/12/08

$$190/30.771(1.15) = 5 \text{ sxs}$$

$$50/5.9534(1.15) = 7 \text{ sxs}$$

$$140/3.366(1.15) = \underline{36 \text{ sxs}}$$

48 sxs

190' plug
6.18 cu ft

8-5/8", 32.2# J-55 @ 140' (12-1/4" hole)

54.9 cu ft
110 sxs cmt
circulated cement to surface

980 - 740

980 - 740

5.915 cu ft

182' plug

30.57 cu ft

$$980 - 740 + 50 / 30.771(1.15) = 8 \text{ sxs}$$

$$(980 - 740)2 / 5.9534(1.15) = 70 \text{ sxs}$$

TOC 1150 (unknown method)
TS

1282' plug

41.67

cu ft

$$2482 - 1150 / 30.771(1.15) = 38 \text{ sxs}$$

CIBP @ 2432'

2-7/8", 6.4# J-55 @ 2570' (6-1/4" hole)
250 sxs cmt (50/50 diamix and class C 2% gel)

**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: 20 Heaton LS

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 the Kirtland/Ojo Alamo plug from 980' – 740' inside and outside the 2 7/8" casing.

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.