Form 3160-5 (August 1999)

Approved by

Conditions of approval, it 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.

FORM APPROVED **UNITED STATES** OMB No. 1004-0135 DEPARTMENT OF THE INTERIOR Expires November 30, 2000 BUREAU OF LAND MANGEMENT Lease Serial No. SUNDRY NOTICES AND REPORTS ON WELLS SF - 077123 Do not use this form for proposals to drill or to re-enter an If Indian, Allottee or tribe Name Abandoned well. Use Form 3160-3 (APD) for such proposals. SUBMIT IN TRIPLICATE - Other instructions on reverse side RECEIVED Type of Well 8. A Well Name and No. Oil Well Other Gas Well Warren Com 2 Name of Operator 9. API Well No. **BP AMERICA PRODUCTION COMPANY** 30-045-20063 Address Field and Pool, or Exploratory Area Phone No. (include area code) BASIN DAKOTA PO BOX 3092 HOUSTON, TX 77253 281-366-4081 Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. County or Parish, State 1990' FSL & 1585' FEL: SEC 14 T28N R09W SWNE Mer NMP SAN JUAN, NM 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OR NOTICE, REPORT, OR OTHER DATA TYPE OF ACTION TYPE OF SUBMISSION Production (Start/Resume) Deepen Deepen Water shut-Off Acidize Notice of Intent Reclamation Well Integrity Fracture Treat Recomplete Other Casing Repair Casing Repair **New Construction** Subsequent Report NMOCD Demand Plug and Abandon Water Disposal Change Plans Final Abandonment Notice Convert to Injection Plug Back 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. BP requests permission to repair casing leak per the procedure attached. Please call Andrew Berhost should you have any technical questions @ 505-326-9208 BP America received certified letter sent June 22, 2006 from NMOCD regarding Bradenhead failure on the above mentioned well. Attached please find the procedure to repair the casing leak and also requested documents: 1. Last 2 bradenhead tests 2. Current wellbore schematic with formation tops 3. Gas analysis from both the production & intermediate casing. I hereby certify that the foregoing is true an dcorrect Name (Printed/typed) Cherry Hlava Title Regulatory Analyst Date 07/19/06 THIS SPACE FOR FEDERAL OR STATE OFFICE USE

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 witin its jurisdiction.

Office

SJ Basin Casing Repair Procedure

Well Name:

Warren Com 2 DK

Version:

1.0

Date:

June 26, 2006

Repair Type: Intermediate Casing Repair

Location:

T28N-R9W-Sec14

API #:

30-045-20063

State:

New Mexico

County:

San Juan

Horizon:

DK

Engr: Andrew Berhost ph (505) 326-9208 mobile: (505) 486-0139

fax (505) 326-9262

Objective: Pull tubing, RIH with RBP and packer to locate casing leak, squeeze casing, Pressure test casing, remove RBP, cleanout wellbore, and return to production.

- 1. TOH with completion string.
- 2. RIH with RBP and packer to locate casing leak.
- 3. Squeeze casing leak
- 4. Pressure test casing
- 5. Pull RBP
- 6. Cleanout wellbore
- 7. Return well to production.

History: Well completed in 6/67 as single DK. Well failed bradenhead test with over 700psig on the intermediate casing. Intermediate casing blew down to 100psig in 15mins built back up to 125 psig in 15mins. The well has not shown bradenhead pressure and intermediate casing pressures have been equal to casing pressure. Well pressure data leads to suspect leak on 4-1/2" into 7" casing above 2600'.

Pertinent Information: Gas BTU content for this well is 1221; Sp gr. is 0.7149. Last sample was taken 9/1/05. Venting and Flaring document needs to be followed if BTU content is above 950.

Reference:

NOP 7812-01 Normal Operating Procedure Under balanced Well Control Tripping Procedure.

NOP 7804-01 Normal Operating Procedure Wellbore Air Purge.

NOP 7803-01 Procedure for At Risk Well Locations.

NOP 7814 Procedure for Flowback Operations

Procedure:

- 1. Contact State and Federal agencies prior to starting well repair work.
- 2. Perform pre-rig site inspection. Check for: size of location, Gas Taps, other wells, other operators, running equipment, wetlands, wash (dikes req.), H2S, barriers needed for equipment, Landowner issues, location of pits (buried lines in pits), Raptor nesting, critical location, check anchors. Check ID wellhead; if earth pit is required have One Call made 48 hours prior to digging.
- 3. Perform second site visit after lines are marked to ensure all lines clear marked pit locations. Planning and scheduling to ready location for rig.
- 4. RU slickline unit. Pressure test lubricator and equipment. RIH and set **two** barriers (CIBP, tbg collar stop w/plug, or plug set in nipple) for isolation in tubing string.
- 5. Check and record tubing, intermediate casing, casing, and bradenhead pressures. Ensure production casing has double casing valves installed. Double valve all casing strings.
- 6. MIRU workover rig. LOTO all necessary equipment including but not limited to: meter run, automation, separator, and water line.
- 7. Blow down well. Kill with 2% KCL water ONLY if necessary.
- 8. Check all casing strings to ensure no pressure exist on any annulus. The operations of removal of wellhead and installation of BOP's will be performed under a dispensation for one (1) barrier on the backside.
- 9. Nipple down Wellhead. NU BOPs and diversion spool with 3" outlets and 3" pipe to the blow tank. Pressure test BOPs to 200 psi above BHP. Monitor flowing casing pressure with gauge (with casing flowing to blow tank) throughout workover.
- 10. Install stripping rubber, pull tubing hanger and shut pipe rams. Strip tubing hanger out of hole.
- 11. RIH and tag PBTD 7020', then TOOH with 2-3/8" production tubing currently set at 7005'. Visually inspect tubing while POOH.
- 12. TIH with bit and scraper for 4-1/2" casing to top of DK perforations @ 6800'. TOH.
- 13. TIH with 4-1/2" RBP and packer. Set RBP 100' above DK perforations @6700'. TOH one joint and set packer. Pressure test RBP to 1,000psi.
- 14. After RBP pressure test is confirmed good, move up hole to 4500' with work string and packer and pressure test lower portion of 4-1/2" casing to 1,000psi. Pressure test upper interval above packer thru casing while testing lower portion thru tubing packer at 500psig. (DV tool is set at ~5100' and expect approximately 1000' of cement on top of DV tool expect lower portion, below 4500', to test good.)

Warren Com #2-DK Page 3 of 5

15. If no leak found on lower end (tubing side) and pressure will not hold on upper end (casing side) move uphole to 2600' and set packer. Pressure test upper and lower portion of casing at 500psig lower and 500 psig upper.

- 16. Continue up hole in same fashion at 500' intervals until leak is found and leak interval can be isolated. If leak interval length is greater than 100' than contact engineer before proceeding on repair work.
- 17. Establish injection rate into leak and attempt to circulate to surface. If leak found below 5100' circulation to surface will not be possible as DV tool and 2nd stage cement should be present at 5100' (no cement top information).
- 18. Release packer and spot sand on RBP and TOH with packer.
- 19. Perforate thru 4-1/2" casing around depth of located leak.
- 20. Depending on depth of hole and circulating pressure, a packer or cement retainer may be needed.
- 21. Mix and pump sufficient cement to circulate to surface if leak found above 1500'. If leak is found below 1500' contact engineer for squeeze repair plan and volumes. In general if the leak is above 4500' attempt to squeeze cement with bradenhead valve shut and attempt to walk squeeze to obtain a 750 psi squeeze pressure. WOC.
- 22. TIH with bit and scraper and drill out cement. Pressure test casing to 750 psi. TOH with bit and scraper.
- 23. RU air package and clean out to top of RBP.
- 24. Load casing with fluid and run CBL from 6700' to surface.
- 25. TIH with retrieving head for RBP. Circulate sand off of RBP and TOH RBP.
- 26. RU WL and tag for fill. Cleanout to PBTD, if needed. TOH.
- 27. RIH with new 2-3/8" original production tubing, if tubing inspected to be in good condition. (With muleshoe, F-nipple with plug, 4 ft pup, X-nipple with plug).
- 28. Land 2-3/8" production tubing at +/- 6960'. Lock down tubing hanger.
- 29. Pressure test tubing to 500 psi with air unit, make sure tubing spool valves are open. Care should be taken during pressure testing of the tubing due to potential problem caused if tubing parts close to the surface. Check all casing string for pressure. The operations of removal of BOP's and installation of wellhead will be performed under a dispensation for one (1) barrier on the backside.

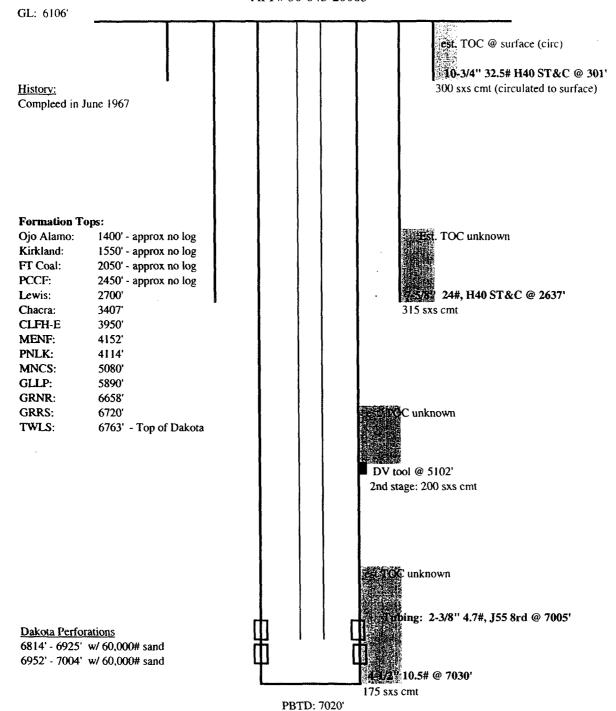
Warren Com #2-DK Page 4 of 5

30. ND BOP's. NU Wellhead. During Master valve placement ensure the top of hanger has spacer nipple in place to bottom of bonnet flange so plunger equipment will not hang up through tree. Pressure test Wellhead.

- 31. RU WL unit. Run gauge ring for 2-3/8" tubing. Pull plugs and set tubing stop for plunger. Communicate plunger equipment status to IC room personnel.
- 32. RD slickline unit.
- 33. Test well for air. Return well to production. RD and release all equipment. Remove all LOTO equipment.
- 34. Ensure all reports are loaded into DIMS. Print out summary of work and place in Wellfile. Have discussion with production about particulars of well when handing off the well file.

Warren Com #2

Sec 14, T28N, R9W API # 30-045-20063



NOTES:

- Tested tubing for leak in Jan 2002. Blew csg to 0 psi.
 Field commented well acted like it had a packer. There is no packer in the well.
- 2) Failed intermetiate casing pressure test tested over 700 psig (May 2006)



OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE 1000 RIO BRAZOS ROAD AZTEC, NM 87410 (505 334-6178 FAX: (505) 334-6170 http://www.emnrd.state.nm.us/ocd/

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test	05/0	3/06	Operator -	Amoco Proc	luction Con	mpany A	API# 30	04520063
Property Name	w	ARREN (OM 002-DK	Locatio	n: Unit G	Section 14 To	ownship 28	Range 9
		(Well Name	and Number)	···				
Pressure (Shu	t-in or Prod	lucing)	Tubing	250 Interme	diate	00 Casing <u>2</u>	55 Bradent	nead <u>10</u>
OPEN	BRADENHI	EAD AND	INTERMEDIA	TE TO ATMOSF	HERE INC	DIVIDUALLY FOR	15 MINUTES I	EACH
Γ	E	Bradenhe	ad	Interme	diate	1	Bradanhaad	Intermediate
<u>Time</u>	BH Blowdown	Casing Monitor	Intermediate Monitor	Intermediate Blowdown	Casing Monitor		Flowed	Flowed
5 minutes	0	255	700	500	255	Steady Flow		Х
10 minutes	0	255	700	250	250	Surges		
15 minutes	0	255	700	105	238	Down to Nothing	X	
20 minutes						No Flow		
25 minutes						Gas	X	X
30 minutes						Gas and Water		
5 minute SI	0			122		Water		
If bradenhe		vater, che	ck all of the d	escriptions tha	<u>t apply be</u> _ Sulfur	low: Bla	ick	
REMARKS:								
Bradenhead prominute shut-in.	essure dowr 1" valve on	n to nothin bradenhe	g in 25 second: ad.	s. Intermediate	pressure s	leady flow for 15 m	inutes, 122 aft	er 5
Ву		Ray Ledes	sma	w	itness _			



NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE 1000 RIO BRAZOS ROAD AZTEC, NM 87410 (505 334-6178 FAX: (505) 334-6170 http://www.emnrd.state.nm.us/ocd/

BRADENHEAD TEST REPORT

(Submit 2 copies to above address)

Date of Test	08/2	7/03	Operator 	An	noco Proc	luction Com	npany	API#	300)4520063 ———	3
Property Name			I COM 002		Locatio	n: Unit G	Section 14	Township	28	Range	9
		(Well Name	and Number)								
Pressure (Shi	ut-in or Prod	lucing)	Tubing	390	Interme	diate <u>50</u>	Casing _	360 B	radenh	ead	0
OPEN	BRADENHE	EAD AND	INTERMEDIA	TE TO	ATMOSF	PHERE IND	IVIDUALLY FOR	R 15 MINU	JTES E	ACH	
	E	Bradenhe	ad		Interme	diate		Brade	nhead	Interme	diate
Time	BH Blowdown	Casing Monitor	Intermediate Monitor		ermediate Iowdown	Casing Monitor			wed	Flow	
5 minutes							Steady Flo	w			
10 minutes							Surge	s			
15 minutes							Down to Nothin	9		Х	· ·
20 minutes							No Flo	w	<		
25 minutes					-		Ga	is		X	
30 minutes							Gas and Wat				
5 minute SI	0				0		Wate	er 		<u> </u>	
If bradenhed Clear REMARKS:	F	resh _	Salinutes.		tions tha	t apply bel Sulfur		lack _		_	
Ву		darry Whit			Wi	itness		1			



2030 AFTON PLACE FARMINGTON, N.M. 87401 (505) 325-6622

ANALYSIS NO.

BP260004

CUST. NO.

12305 - 10010

WELL/LEASE INFORMATION

CUSTOMER NAME

BP AMERICA/FARMINGTON

WELL NAME WARREN COM 2

SAN JUAN

COUNTY/ STATE LOCATION

EPCO

FIELD

FORMATION DAKO 75709

DAKOTA 75709 RTU 425 NM

SOURCE PRESSURE CASING 530 PSIG

SAMPLE TEMP

70 DEG.F

WELL FLOWING

N/A

DATE SAMPLED SAMPLED BY 7/11/2006

FOREMAN/ENGR.

JIM PENROD BRENT BENNETT

REMARKS

ANALYSIS

		AITAL 1010		
COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR *
NITROGEN	0.312	0.0000	0.00	0.0030
CO2	0.292	0.0000	0.00	0.0044
METHANE	85.896	0.0000	869.53	0.4758
ETHANE	7.503	2.0055	133.09	0.0779
PROPANE	3.700	1.0188	93.31	0.0563
I-BUTANE	0.662	0.2165	21.58	0.0133
N-BUTANE	0.851	0.2683	27.83	0.0171
I-PENTANE	0.260	0.0951	10.43	0.0065
N-PENTANE	0.184	0.0666	7.39	0.0046
HEXANE PLUS	0.340	0.1496	17.48	0.0109
TOTAL	100.000	3.8204	1,180.64	0.6699

^{*@ 14.730} PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

^{**} **@** 14.730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR	(1/Z)	1.0030
BTU/CU.FT (DRY) CORRECTED F	OR (1/Z)	1,184.3
BTU/CU.FT (WET) CORRECTED F	OR (1/Z)	1,164.6
REAL SPECIFIC GRAVITY		0.6720

ANALYSIS RUN AT 14.730 PSIA & 60 DEGREES F

DRY BTU @ 14.650	1,177.9	CYLINDER #	1217
DRY BTU @ 14.696	1,181.6	CYLINDER PRESSURE	470 PSIG
DRY BTU @ 14.730	1,184.3	DATE RUN	7/14/2006
DRY BTU @ 15.025	1,208.0	ANALYSIS RUN BY	ROSEANN MUNIZ



2030 AFTON PLACE FARMINGTON, N.M. 87401 (505) 325-6622

ANALYSIS NO.

BP260005

CUST. NO.

12305 - 10015

WELL/LEASE INFORMATION

CUSTOMER NAME

WELL NAME

COUNTY/ STATE LOCATION

FIELD

FORMATION CUST.STN.NO. **BP AMERICA/FARMINGTON** WARREN COM 2

MM

NAUL NAS

EPCO

DAKOTA 75709 **RTU 425** SOURCE

PRESSURE

SAMPLE TEMP **WELL FLOWING**

DATE SAMPLED SAMPLED BY FOREMAN/ENGR.

CYLINDER#

DATE RUN

CYLINDER PRESSURE

ANALYSIS RUN BY

INTER.CASING 475 PSIG

DEG.F 70

N/A

7/11/2006 JIM PENROD **BRENT BENNETT**

1230

424

7/14/2006

PSIG

ROSEANN MUNIZ

REMARKS

ANALYSIS

		ANALTOIO		
COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR *
NITROGEN	0.336	0.0000	0.00	0.0033
CO2	0.313	0.0000	0.00	0.0048
METHANE	85.340	0.0000	863.90	0.4728
ETHANE	7.661	2.0477	135.89	0.0795
PROPANE	3.950	1.0876	99.62	0.0601
I-BUTANE	0.710	0.2322	23.14	0.0143
N-BUTANE	0.900	0.2837	29.43	0.0181
I-PENTANE	0.276	0.1010	11.07	0.0069
N-PENTANE	0.200	0.0724	8.04	0.0050
HEXANE PLUS	0.314	0.1381	16.14	0.0101
TOTAL	100.000	3.9628	1,187.23	0.6747

^{* @} 14.730 PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY

^{·· @} 14,730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR	(1/Z)	1.0030
BTU/CU.FT (DRY) CORRECTED FO	R (1/Z)	1,190.9
BTU/CU.FT (WET) CORRECTED FO	DR (1/Z)	1,171.1
REAL SPECIFIC GRAVITY		0.6770

ANALYSIS RUN AT

14,730 PSIA & 60 DEGREES F

DRY BTU @ 14.650	1,184.4	
DRY BTU @ 14.696	1,188.2	
DRY BTU @ 14.730	1,190.9	
DRY BTU @ 15.025	1,214.8	



2030 AFTON PLACE FARMINGTON, N.M. 87401 (505) 325-6622

ANALYSIS NO.

BP260006

CUST. NO.

12305 - 10020

WELL/LEASE INFORMATION

CUSTOMER NAME

WELL NAME

COUNTY/ STATE

LOCATION FIELD

FORMATION CUST.STN.NO. **BP AMERICA/FARMINGTON** WARREN COM 2

NM

SAN JUAN **EPCO**

DAKOTA 75709 **RTU 425** SOURCE

PRESSURE SAMPLE TEMP TUBING 290 PSIG DEG.F 70

WELL FLOWING N/A

DATE SAMPLED SAMPLED BY FOREMAN/ENGR. 7/11/2006 JIM PENROD

BRENT BENNETT

REMARKS

ANALYSIS					
COMPONENT	MOLE %	GPM**	B.T.U.*	SP.GR *	
NITROGEN	0.502	0.0000	0.00	0.0049	
CO2	1.437	0.0000	0.00	0.0218	
METHANE	81.809	0.0000	828.15	0.4532	
ETHANE	9.344	2.4976	165.74	0.0970	
PROPANE	3.872	1.0661	97.65	0.0590	
I-BUTANE	0.819	0.2679	26.70	0.0164	
N-BUTANE	1.080	0.3405	35.32	0.0217	
I-PENTANE	0.427	0.1563	17.12	0.0106	
N-PENTANE	0.298	0.1079	11.97	0.0074	
HEXANE PLUS	0.412	0.1812	21.18	0.0133	
TOTAL	100.000	4.6174	1,203.83	0.7053	

^{14.730} PSIA DRY & UNCORRECTED FOR COMPRESSIBILITY **• @**

.. @ 14,730 PSIA & 60 DEG. F.

COMPRESSIBLITY FACTOR (1/Z)1.0030 BTU/CU.FT (DRY) CORRECTED FOR (1/Z) 1,207.8 BTU/CU.FT (WET) CORRECTED FOR (1/Z) 1,187.7 **REAL SPECIFIC GRAVITY** 0.7080

> **ANALYSIS RUN AT** 14,730 PSIA & 60 DEGREES F

DRY BTU @ 14.650 1,201.2 DRY BTU @ 14.696 1,205.0 DRY BTU @ 14.730 1,207.8 DRY BTU @ 15.025 1,232.0

CYLINDER# CYLINDER PRESSURE DATE RUN

1209 **PSIG** 242 7/14/2006

ANALYSIS RUN BY **ROSEANN MUNIZ**