Submit 3 Copies To Appropriate District Office	State of New Me			Form C-103
District I 1625 N. French Dr., Hobbs, NM 88240	Energy, Minerals and Natur	ral Resources	WELL API NO.	Revised March 25, 1999
District II	OIL CONSERVATION	DIVISION	30-	045-20063
811 South First, Artesia, NM 88210 District III	1220 South St. Fran		5. Indicate Type of STATE	of Lease FEE
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Santa Fe, NM 87	1	6. State Oil & G	
1220 S. St. Francis Dr., Santa Fe, NM 87505		123.44.25.26.25.33		
(DO NOT USE THIS FORM FOR PROP DIFFERENT RESERVOIR. USE "APPL PROPOSALS.) 1. Type of Well: Oil Well Gas Well	FICES AND REPORTS ON WELLS OSALS TO DRILL OR TO DEEPER OR PLL LICATION FOR PERMIT" (FORM) 101) FO X Other	PRINCENS ON M	Wa (Also filed on BLM F SF - 077123)	Unit Agreement Name: arren Com Form 3160-5 Federal Lease
2. Name of Operator BP America Production Company	Attn: Cherry Hlava	10001930	8. Well No.	2
3. Address of Operator		. W. D.	9. Pool name or V	Wildcat
P.O. Box 3092 Houston, TX 7725	3		Basin Dakota	
Unit Letter 6		ne and 1585 fee	et from the Eas i	tline
Section 14			MPM San Juan	County
	10. Elevation (Show whether DI 6106)			
11. Check	Appropriate Box to Indicate Na	ature of Notice, R	Report or Other	Data
	NTENTION TO:		SEQUENT REI	
PERFORM REMEDIAL WORK	☐ PLUG AND ABANDON ☐	REMEDIAL WORK		ALTERING CASING
TEMPORARILY ABANDON	☐ CHANGE PLANS ☐	COMMENCE DRIL	LING OPNS.	PLUG AND ABANDONMENT
PULL OR ALTER CASING [MULTIPLE COMPLETION	CASING TEST AN CEMENT JOB	D 🗆	
OTHER: Casing Repair	X	OTHER:		
	eted operations. (Clearly state all per k). SEE RULE 1103. For Multiple C			
Re: RBDMS EHV0617249100				
Regarding Bradenhead failure on	the above mentioned well. Attached	please find the follo	owing requested doo	cuments:
Last 2 bradenhead tests Current wellbore schematic with Gas analysis from both the produ				
BP requests permission to repa	ir casing leak per the attached proc	edure.		
	by Tenneco. We have checked througops. Should you have any technical c			
I hereby certify that the informati	on above is true and complete to the b	best of my knowledg	ge and belief.	
SIGNATURE ()	Ann TITLE R	egulatory Analyst	DATE 07 /	19/2006
Type or print name Cherry H		Squidtory Analyst	Telephone No. 2	
(This space for State use)	()			
t onditions of approval it and:	C. Part TITLE			D JUL 2 4 2006 date
Run CBL To Ide	entify cont Tols Before	ore sozuol	lk Begins	
CONNET OCO BOX	oke CMT WORK Begins		·	8
*				

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: Horizon:

San Juan 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

Warren Com #2-DK Page 2 of 5

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.

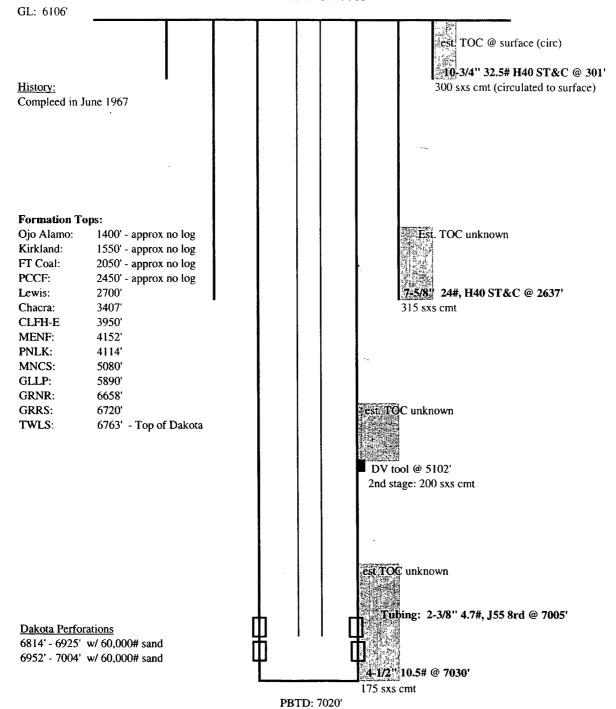
Warren Com #2-DK Page 4 of 5

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 Production Company				300	4520063	
Property Name	· W	ARREN (COM 002-DK		Locatio	n: Unit G	Section 14	owns	ship 28	Range	9
		(Well Name	and Number)			-					
Pressure (Shu	t-in or Prod	lucing)	Tubing	2	50 Interme	diate <u>70</u>	O Casing	255	Bradenh	ead	10
OPEN	BRADENHI	EAD AND	INTERMEDIA	TE	TO ATMOSE	PHERE IND	IVIDUALLY FOR	15 M	INUTES E	ACH	
	E	Bradenhe	ad		Interme	diate		D.	adenhead	intormo	diata
Time	BH Blowdown	Casing Monitor	Intermediate Monitor		Intermediate Blowdown	Casing Monitor			Flowed	Flow	
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	·	Χ		
20 minutes				$\ \ $			No Flov	<i></i>			
25 minutes							Gas	·	X	Х	
30 minutes							Gas and Wate	r 			
5 minute SI	0			$\ \ $	122		Wate	r			
Clear	F	resh _	Sang in 25 secondead.	lty		Sulfur		ack	es, 122 afte	- r 5	
Ву		Ray Lede	sma		Wi	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 	Α	Amoco Production Company			API	# 300	04520063
Property Name	e	WARREN	I COM 002		Locatio	n: Unit G	Section 14	Tow	nship 28	Range 9
	- 101-	(Well Name	and Number)	-	_					
Pressure (She	ut-in or Prod	lucing)	Tubing	390	_ Interme	diate <u>50</u>	Casing _	360	_ Bradenh	ead 0
OPEN	I BRADENHI	EAD AND	INTERMEDIA	TE TO	O ATMOSF	PHERE IND	IVIDUALLY FOR	R 15	MINUTES E	ACH
	E	Bradenhe	ad		Interme	diate		В	radenhead	Intermediate
<u>Time</u>	BH Blowdown	Casing Monitor	Intermediate Monitor		ntermediate Blowdown	Casing Monitor		_	Flowed	Flowed
5 minutes				-			Steady Flo	w		
10 minutes				-			Surge	es		
15 minutes				-		_	Down to Nothin	ıg		Х
20 minutes				-			No Flo	w	X	
25 minutes				-			Ga	as		X
30 minutes				-			Gas and Wate	er 		
5 minute SI	0				0		Wate	er —		
<u>If bradenho</u> Clear		vater, cho	eck all of the d		iptions tha	i t apply bel Sulfur		lack		
REMARKS:										
Intermediate d	lown to nothing	ng in 10 m	ninutes.				•			
Ву		Harry Whi	tson		w	itness				



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

ANALYSIS NO.

BP260004

CUST. NO.

12305 - 10010

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

WELL FLOWING DATE SAMPLED

SAMPLED BY FOREMAN/ENGR. 70 N/A

CASING

530 PSIG

7/11/2006 JIM PENROD

DEG.F

BRENT BENNETT

REMARKS

ANALYSIS

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	FOR (1/Z)	1,184.3
BTU/CU.FT (WET) CORRECTED	, ,	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 # CYLINDER PRESSURE	1217
DRY BTU @ 14.696	1,181.6		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

NM

SAN JUAN

EPCO

DAKOTA 75709 **RTU 425** SOURCE

PRESSURE SAMPLE TEMP

WELL FLOWING DATE SAMPLED

SAMPLED BY FOREMAN/ENGR. INTER.CASING

475. PSIG DEG.F 70

N/A

7/11/2006 JIM PENROD

BRENT BENNETT

REMARKS

ANALYSIS

		ANACIOIO							
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 F	OR (1/Z)	1,190.9
BTU/CU.FT (WET) CORRECTED F	OR (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		CYLINDER #	1230
DRY BTU @ 14.696	1,188.2		CYLINDER PRESSURE	424 PSIG
DRY BTU @ 14.730	1,190.9	,	DATE RUN	7/14/2006
DRY BTU @ 15.025	1,214.8		ANALYSIS RUN BY	ROSEANN MUNIZ



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

FIELD

FORMATION CUST.STN.NO.

BP AMERICA/FARMINGTON

WARREN COM 2

SAN JUAN EPCO

DAKOTA

RTU 425

75709

NM

SOURCE

PRESSURE SAMPLE TEMP

WELL FLOWING DATE SAMPLED

SAMPLED BY FOREMAN/ENGR.

CYLINDER#

DATE RUN

CYLINDER PRESSURE

ANALYSIS RUN BY

TUBING 290 PSIG

70 DEG.F

N/A

7/11/2006 JIM PENROD BRENT BENNETT

1209

242

7/14/2006

PSIG

ROSEANN MUNIZ

REMARKS

	<u> </u>	NA	LY:	<u> 315</u>
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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 FO	OR (1/Z)	1,207.8
BTU/CU.FT (WET) CORRECTED F	OR (1/Z)	1,187.7
REAL SPECIFIC GRAVITY		0.7080

ANALYSIS RUN AT

14,730 PSIA & 60 DEGREES F

1,201.2
1,205.0
1,207.8
1,232.0