Submit 1 Copy To Appropriate District Office <u>District 1</u> – (575) 393-6161 1625 N. French Dr., Hobbs, NM 88240	State of New Mexico Energy, Minerals and Natural Resources		WELL API NO.	Form C-103 Revised August 1, 2011	
$\frac{1025 \text{ N. French Dr., Hobbs, NM 88240}}{\text{District II} - (575) 748-1283}$ $\frac{811 \text{ S. First St., Artesia, NM 88210}}{\text{District III} - (505) 334-6178}$ $\frac{1000 \text{ Rio Brazos Rd., Aztec, NM 87410}}{\text{District IV} - (505) 476-3460}$ $\frac{1220 \text{ S. St. Francis Dr., Santa Fe, NM}}{87505}$	OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505			S FEE	
	ICES AND REPORTS ON DSALS TO DRILL OR TO DEEPT ICATION FOR PERMIT" (FORM	EN OR PLUG BAC	ктоа С	Vacuum Abo Unit Tract 13	Unit Agreement Name مر
1. Type of Well: Oil Well X	Gas Well 🗌 Other			8. Well Number	011
2. Name of Operator ConocoPhill	ips Company 🖉	SEP 26	2014	9. OGRID Numbe	er 217817
3. Address of Operator P. O. Box Midland,	51810 FX 79710	RECEIV	/ed	10. Pool name or Vacuum; Abo Reef	Wildcat
4. Well Location					
	<u>1650</u> feet from the <u>N</u>		line and <u>1980</u>	feet from NMPM	the West line
Section 4	Township 18S 11. Elevation <i>(Show whe</i>	Range 35			County Lea
	3944' GR				
12. Check	Appropriate Box to Ind	icate Nature	of Notice, R	Report or Other I	Data
	NTENTION TO:		SUBS	EQUENT REF	
PERFORM REMEDIAL WORK			EDIAL WORK		ALTERING CASING
					P AND A
PULL OR ALTER CASING	MULTIPLE COMPL		NG/CEMENT	ЈОВ 🗌	
OTHER: remove BP & re-perf 13. Describe proposed or comp	nleted operations (Clearly)	X OTHE		give pertinent dates	including estimated date
	ork). SEE RULE 19.15.7.1				
ConocoPhillips Company would on to production.	like to remove BP @ 8696'	& 8779' over ex	xisting perfs a	nd then re-perf and	stimulate to bring back
Attached are procedures. Attached is a current and propose	ed wellbore schematic.				
1 1					
Spud Date:	Rig Re	elease Date:			
			********		
I hereby certify that the information	above is true and complete	to the best of m	ny knowledge	and belief.	Annananan
$\frown$	$\frown$		, .		
SIGNATURE Zhong	TITLI	E Staff Regulato	ory Techniciar		TE 09/24/2014
SIGNAL ONE PIPETOS			<u>Jiy Teennetar</u>		1120/24/2014
Type or print name <u>Rhonda Rogers</u> For State Use Only	E-mai	l address: roger	rrs@conocopł	nillips.com PHC	DNE: <u>(432)688-9174</u>
	11	Petroleu	ım Engineer	•	oct due
APPROVED BY:	TITLE			DAT	E 114/26/14
Conditions of Approval (if any):				~	
	-			SE	EP 26 2014 W

### VAU 13-11 API # 30-025-03049 Remove plugs and re-activate old perfs

Objective: his project will drill out two bridge plugs, re-perforate the previous perforations that were plugged with cement (81' of re-perfs), and acidize all perforations below the top CIBP.

#### Existing Perforations

Abo: 8,332'-8,684' (352' net)

Pressure/Well Control ROE		ROE:	MCFPD	H2S: ppm	ROE	: feet
Mall Catagony	0.50				100 ppm	500 ppm
Well Category: BOP Class:	One Two		19 <sup>1</sup> 2 - 12 <sup>1</sup> 81	15,000	47	22
DUP Class.						

## PROCEDURE

2

- 1. MIRU pulling unit and ancillary equipment. Kill well.
- 2. NDWH. TOOH w/ rods & pump. Fish rod string. Send pump to shop for inspection. NUBOP. Test BOP.
- 3. RU Tbg scanners. Release TAC & TOOH with 2 7/8" 6.5# J-55 EUE production Tbg. LD Green & Red band Tbg for removal. Stand back Yellow & Blue band Tbg in derrick. RD Tbg scanners. **Report Tbg scan results in WV.** Notify Production Specialist when failure has been identified. Notify Champion Tech. SAVE FAILED EQUIPMENT FOR PRODUCTION SPECIALIST.
- 4. MI lay down machine. PU 2 7/8" J-55 work string & RIH w/ bit sized for 5 ½" 17# N-80 Casing (PU drill collars for weight as needed). RU Swivel & drill out cement from ~8,696' to 8,740'. Drill out CIBP @ 8,740'. Drill out CIBP @ 8,740'. Drill out CIBP @ 8,870'. Drill out CIBP @ 8,950'. Monitor pressure while drilling. RU foam machine if circulation is not established. Tag PBTD @ 9,053'. Report tag in WV. Proceed to clean out wellbore to PBTD & circulate well clean.
- 5. TOOH w/ bit and stand back work string once convinced well bore is clean. LD bit.
- 6. RU wireline. NU 5000 psi lubricator (note: using lubricator shop tested to 2,000 psi is acceptable). RIH w/ perf guns to perforate using 4" titan gun super deep penetrating EXP-4539-324T (eh: .52" & pen: 52.13") loaded at 2 SPF to accomplish 60 degree phasing. Perforate as follows:

<b>Note: Correlate</b>	v/ log dated 6/19/1961 McCullough Sc	cintillometer Nuclear Gamma Ray Log.

Abo Reef	Feet	Shots
8,690'-8,700'	10	20
8,706'-8,730'	24	48
8,799'-8,814'	15	30
8,819'-8,833'	14	28
8,839'-8,857'	18	36
Total	81	162

7. TOOH w/ perforating gun(s) and inspect to verify number of shots fired. Record information in WellView. RD wireline services.

- 8. RU Hydrotesters. TIH w/ packer and work string to 8,870'. Hydrotest work string to 6,000 psi. RD Hydrotesters. Spot 5 bbls of 15% Ferchek SC Acid @ 8,870'. Set packer @ 8,630' (between collars 8,620' & 8,653').
- 9. RU Acid pump truck or stimulation services. Set pump trips @ 5,800 psi. Set treating line pop-off to release @ 5,900 psi. Test surface lines @ 6,500 psi. Pump 6,800 gal (162 bbls) of 15% Ferchek SC Acid to perforations and drop 322 bio ball sealers (anticipated treating pressure: 3,500 psi @ 4-5 BPM). Flush with 56 bbls of brine water. A remote ball launcher and N<sub>2</sub> operated relief valve are required. Ensure spring operated relief valve installed, set no higher than 500 psi, on the 2 7/8" x 5 <sup>1</sup>/<sub>2</sub>" Annulus. Record ISIP, SITP (5 min), SITP (10 min), SITP (15 min).

# Acid BreakDown (322 total perforations including 81 new) w/ 162 bbl (6,800 gal) 15% Ferchek SC Acid w/ 322 bio balls:

- 1. Pump 27 bbls 15% Ferchek SC Acid.
- 2. Start dropping 322 balls evenly spaced (~2 balls/bbl)
- 3. Pump 27 bbls 15% Ferchek SC Acid.
- 4. Pump 36 bbls (1500 gal) of brine.
- 5. Pump 54 bbls 15% Ferchek SC Acid.
- 6. Pump 36 bbls (1500 gal) of brine.
- 7. Pump 54 bbl 15% Ferchek SC Acid. All bio balls dropped 8 bbls into stage.
- 8. Flush 56 bbls of brine

Note: If ball out occurs (>5,500 psi treating pressure), SD & surge perfs 3 times

<b>TREATING LINE TEST PRESSURE: A minimum 500 psig</b> <b>over MAWP.</b> Acceptable test will be no more than 300 psi leak off in 5 minutes, with no more than 1% leak off in last minute, AND NO VISIBLE LEAKS.	6,500	PSIG
MAXIMUM ALLOWABLE WORKING PRESSURE: Based on weakest component in system (COP define 1.2 SF for 3 1/2" L-80: workstring burst)	6,000	PSIG
<b>NITROGEN POP-OFF SETTING:</b> the valve is to be tested prior to pumping, and must pop within 500 psi of set pressure.	5,900	PSIG
TRUCK KILL SETTING	5,800	PSIG
<b>ANTICIPATED TREATING PRESSURE:</b> TP=(FP+Ph-Tf-Pf) Calculated from mid-perf and assumes 8.35# treating fluid w/ 0.9 FG.	3,500	PSIG

- 10. RDMO Acid Stim Services.
- 41. SIW for 2 hours. Flow back if well has surface pressure. Relieve any remaining pressure on 2 7/8" x 5  $\frac{1}{2}$ " workstring-casing annulus.
- 12. Release packer. TOOH & LD work string and packer.
- 13. RU Hydrotesters. PU & RIH w/ OESN, new TK 99 bottom JT, TAC, and 2 7/8" 6.5# EUE Production Tbg. Hydrotest production string to 6,000 psi. Add new or yellow band Tbg replacement Jts to the bottom of the string. RD Hydrotesters.
- 14. Land the SN (a) 9,000' and TAC (a) ~8,283'. Land Tbg in hanger.

- 15. NDBOP, NUWH. PU & RIH w/ 1 <sup>3</sup>/<sub>4</sub>" pump & rod string, space pump, hang well on, notify MSO to sign off on well.
- 16. RDMO Clean site.
- 17. Place well on Production.

## Proposed Rod and Tubing Configuration VACUUM ABO UNIT 013-011

VERTICAL Original Hole	9/22/2014 1 33 35 PM	Tubing Description	Set Depth (ftKB)
D (ff) K		Proposed Tubing - Production           OD         Nominal (D)           Nominal (D)         Nominal (D)	9,000.0
B). Vertical schematic (actual).	Vertical schematic (proposed)	Uts         Item Des         (in)         (in)           265         Tubing         2.7/8         2.441	Wt (lb/ft)         Grade         Len (ft)         Btm (ftKB)           6.50         J-55         8,200.95         8,213.0
1-1; Casing Joints; 13 3/8; 12.715; 12.0; 14 14 14 14 14 14 14 14 14 14 14 14 14 1	uprating and an	1 Tubing Marker Sub 2.7/8 2.441	6·50 J-55 8·10 8·221 1
2-1; Casing Joints; 8 - <i>r</i> 5/8; 8.097; 12.0;	1/2; -1.0; 26.00	2 Tubing 2 7/8 2.441	6.50 J-55 62.00 8,283.1
	4-2; Fiberglass Sucker Rod; 1.23; 25.0; 4,429.00	1 Anchor 5 1/2 X 2 7/8 4 995 2 441	2:85 8,285.9
1/2; 4.950; 12.0; 4,143.00	4-1; Tubing; 2 7/8;	22 Tubing 2 7/8 2.441	6.50 J-55 682.00 8,967.9 6.50 J-55 682.00 8,998.9
5/8; 7.921; 2,150.0;	4-3; Sucker Rod; 1;	1 Pump Seating Nipple 2 7/8	1.10 9,000.0
3-2; Casing Joints; 5 -	4-4; Sucker Rod; 7/8; 6,879.0; 1,550.00 4-2; Tubing - Marker		I
4,945.00	Sub; 2 7/8; 2.441; 8,212.9; 8.10		
8,336.0; 2/18/1987 Perforated; 8,344.0- 8,349.0; 2/18/1987	4-3; Tubing; 2 7/8; 2.441; 8,221.0; 62.00		
**** C, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0,	4-4; Anchor 5 1/2 X 2 7/8; 5.00; 2.441; 8,283.0; 2.85		
Perforated; 8,403.0- 8,413.0; 2/18/1987	4-5; Guided Sub; 7/8; 8,429.0; 2.00		
Perforated; 8,413.0- 8,429.0; 2/14/1987	4-6; Sinker Bar; 1 1/2; 8,431.0; 100.00		
Perforated; 8,433.0- 8,436.0; 2/14/1987	8,531.0; 2.00 4-8; Sinker Bar; 1 1/2;		
Rent Action Control (1997) Perforated; 8,446.0- 8,452.0; 2/14/1987 Perforated; 8,456.0-	8,533.0; 100.00 4-5; Tubing; 2 7/8; 2,441; 8,285.9; 682.00		
tait			
8,542.0; 1/10/1976 . Perforated; 8,560.0-		Rod Description Proposed Rod	Set Depth (ftKB) 9,000.0
8,564.0; 1/10/1976 Perforated; 8,581.0- 8,589.0; 8/21/1975	Re-Perforated; 8,690.0-8,700.0;	Alts - Des CD (in) as	API Grade Len (ft) 🎆 👘 🗄 Btm (ftKB) 🔬
Perforated; 8,597.0- 8,606.0; 8/21/1975	7/18/2014	1 Polished Rod 1 1/2 118 Fiberglass Sucker Rod 1 1/2	26.00 25.0 4,429.00 4,454.0
Perforated; 8,642.0- 8,648.0; 9/8/1973	4-11; Guided Sub; 7/8; 8,710.0; 2.00 Re-Perforated;	97 Sucker Rod 1 D	Spec 2,425.00 6,879.0
Perforated; 8,657.0- 8,662.0; 9/8/1973	8,706.0-8,730.0; 7/18/2014 4-12; Sinker Bar; 1		D Spec 3,429.0
Perforated; 8,666.0- 8,674.0; 9/8/1973 Perforated; 8,678.0-	1/2; 8,712.0; 75.00 4-13; Guided Sub;		Spec 1,550.00 8,429.0 D
8,684.0; 9/8/1973	7/8; 8,787.0; 2.00 Re-Perforated; 8,799.0-8,814.0;		Spec 2.00 8,431.0 D
••••• 8,700.0; 9/8/1973 •••• Perforated; 8,706.0-	7/18/2014 Re-Perforated;	14 Sinker Bar	8,531.0
Bridge Plug - Permanent; 4.89; ····	8,819.0-8,833.0; 7/18/2014 4-14; Sinker Bar; 1	1 Guided Sub	Spec 2.00 8,533.0 D
8,740.0-8,742.0	1/2; 8,789,0; 75.00 Re-Perforated;	4 Sinker Bar	
8,756.0; 4/22/1970		1 Guided Sub 7/8 D	Spec 2.00 8,635.0
8,770.0; 4/22/1970	7/18/2014 7/18/2014 4-15; Guided Sub; 78: 8864.0; 2.00 4-16; Sinker Bar; 1 1/2; 8.866.0; 50.00 4-17; Guided Sub;		D 75 <sup>°</sup> 00 8710.0
8,814.0; 6/22/1961 Perforated; 8,819.0- ** 8,833.0; 6/22/1961			Spec 2.00 8,712.0
B,653.0, 6/22/1961	7/8; 8,916,0; 2.00 4-18; Sheer Tool XH Body 33K; 2; 8,918.0;		
Bridge Plug -	1.00 4-19; Sinker Bar; 1		75.00
B,870.0-8,872.0 Perforated; 8,879.0-	1/2; 8,919.0; 50.00 4-6; TUBING TK-99; 2 7/8; 2.441; 8,967.9;	K	
8,894.0; 6/22/1961	2 //8; 2.441; 8,967.9; 31.00 4-20; Rod Insert	3 Sinker Bar	and a second
Bridge Plug -	Pump; 1 3/4; 8,969.0;		D Spec 2.00 8,866.0
8,950.0-8,952.0	4-7; Pump Seating Nipple; 2 7/8; 8,998.9; 1.10	2 Sinker Bar	CORE NO. RECEIPTING COLD. CONSIDERING CONTRACTOR C
8,996.0; 6/22/1961 Bridge Plug -	4-21; Gas Anchor/Dip . Tube; 1 1/4; 8,999.0;		) Spec 2.00 8,918.0 (D
Permanent; 4.89; 9,064.0-9,066.0	1.00		