

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3461

State of New Mexico

Form C-101
Revised November 14, 2012

Energy Minerals and Natural Resources

Oil Conservation Division

☐ AMENDED REPORT

1220 South St. Francis Dr.

Santa Fe, NM 87505

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

Operator Name and Address ConocoPhillips Company P. O. Box 51810 Midland, TX 79710		OGRID Number 217817
Property Code 31158		API Number 30 - 025-20200
Property Name Vacuum Abo Unit Tract 6		Well No. 076

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
F	26	17S	35E		2310	North	2270	West	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County

9. Pool Information

Pool Name Upper Abo perfs @ 8489'-8515'	Pool Code
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Additional Well Information

Work Type Recomplete	Well Type Oil	Cable/Rotary Rotary	Lease Type State	Ground Level Elevation 3913' GL
Multiple Yes	Proposed Depth 10,680'	Formation Vacuum; Upper Abo	Contractor	Spud Date 02/16/1963
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
surf	17 1/2"	13 3/8"	48#	323	350	surf
intermedia	12 1/4"	9 5/8"	32#	3285'	770	1100'
production	8 5/8"	5 1/2"	14 & 15.5#	9058'	680	1700'

Casing/Cement Program: Additional Comments

Attached wellbore schematic & procedure. During this procedure we plan to use the Closed-Loop System and haul content to the required disposal

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.

Signature:

Printed name: Rhonda Rogers

Title: Staff Regulatory Technician

E-mail Address: rogers@conocophillips.com

Date: 09/24/2013

Phone: (432)688-9174

OIL CONSERVATION DIVISION

Approved By:

Title: Petroleum Engineer

Approved Date: 10/08/13

Expiration Date: 10/08/15

Conditions of Approval Attached

OCT 08 2013

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State of New Mexico
Energy, Minerals & Natural Resources Department
HOBBS OCD OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

SEP 26 2013

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-025-20200		² Pool Code		³ Pool Name Upper Abo	
⁴ Property Code 31158		⁵ Property Name Vacuum Abo Unit Tract 6			⁶ Well Number 076
⁷ OGRID No. 217817		⁸ Operator Name ConocoPhillips Company			⁹ Elevation 3913'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	26	17S	35E		2310	North	2270	West	Lea

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

¹⁶ 	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.	
	Signature 	Date 09/25/2013
	Printed Name Rhonda Rogers	
	E-mail Address rogersr@conocophillips.com	
¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.	Date of Survey	
	Signature and Seal of Professional Surveyor:	
	Certificate Number	

**VACUUM ABO UNIT #6-76
RECOMPLETION
UPPER ABO PROCEDURE
API # 30-025-20200**

The scope of this procedure: to add pay in the upper Abo formation and sand frac new perforations, commingle with current Abo reef production and produced via ESP unit.

Field: Vacuum (ABO)

Location: 2310' FNL & 2720' FWL, Section 26, T-17S, R-35E, Lea Co., NM.
Lat - 32° 48' 36.936" N Long - 103° 25' 12.144" W

Depths: TD =9,058' PBTD =9,028'

Elevation: GL =3913' KB =15' KBM =3928'

Spud Date: 02/15/1963

WELL CLASSIFICATION

This well has an anticipated gas rate and surface pressure less than 500 MCFD and less than 3000 psi. The Upper Abo formation is tight and not expected to produce without artificial lift. The calculated 100 ppm H₂S radius of exposure is 15.0 feet with a maximum expected H₂S level of 15,000 ppm.

Category 1 Wells

- Wells incapable of flowing gas or associated gas at rates greater than 500 MCFD at a land location.

Wells incapable of developing a 100 ppm H₂S ROE greater than 50 feet as defined in Equation 6-1 or the Nomograph (Figure 6-1)

Barriers requirement for Category 1 well:

- One untested barrier,

Class 1 BOP

- Land wells with a MPSP of 1000 psi or less, not located in a designated "sensitive area".
- Manual BOP's may be used if the 100 ppm H₂S ROE is less than the closing handle length of the BOP's. **For all other conditions hydraulic BOP's are required.**

HYDROGEN SULFIDE (H₂S) POISON GAS

Wells in this area and this well in particular may produce Hydrogen Sulfide (H₂S) poison gas. H₂S in high concentration is fatal. All persons arriving on location must have H₂S certification & training that occurred within the last year. All personnel must be clean shaven to allow a good seal around ones face and rescue breathing equipment. H₂S monitoring equipment will be rigged up and tested prior to executing work. Every occurrence of H₂S at surface is to be noted on the Wellview daily reports. Reference ConocoPhillips' Hydrogen Sulfide Policy.

PROCEDURE

Wellbore Preparation:

1. MI-RU WSU and ancillary equipment.
2. MI-RU spool unit for ESP cable w/ ESP technician.
3. MI-RU spooler for 3/8" capillary string and operator.
4. Control well with inhibited 9#/gal brine. Ensure well is static before proceeding to next step.
5. ND wellhead and NU BOP. Ensure BOP is stump tested to 2,000 psi prior to MI-RU.
6. NU 3k psi BOPE according to standard ConocoPhillips policy.
Hydraulic BOP unit (3 1/2" pipe rams - top + blind rams - bottom)
One hydraulic annular – to accommodate capillary & ESP cable
7. Release and POOH with production tubing, capillary string, ESP cable and equipment.
8. Visually inspect production tubing while POOH, lay down any bad joints, and stand remaining good tubing back in derrick.

Note: It may be necessary to hydro-test tubing back in wellbore based on visually inspection

9. Lay down ESP equipment. Send ESP equipment and cable to shop for R&R.
10. MI-RU hydro-test unit. Prepare to test production tubing to 6000 psi.

Note: all tubing tests will take place below slips/grade in the wellbore only.

11. PU bit and scrapper on production tubing. Hydro-test tubing while RIH. Release hydro-test services once all tubing has been tested.
12. RIH to 8,550' to confirm wellbore is free of fill and record. POOH. Laydown bit and stand tubing back in derrick.

Upper Abo Completion:

13. MIRU *Apollo* e-line services with packoff (note: use of lubricator shop tested to 2,000 psig is an acceptable alternative).
14. PU-RIH with Gamma Ray - CCL tools with casing gauge ring to 8520'± RKB.

Note- top existing perforation is located at 8,556'

PU-RIH w/CIBP along with the first perforating run. Set CIBP @ 8545'± RKB. Release from CIBP.

15. Perforate using 3/8" Titan Slick Gun w/deep penetrating charges (eh-0.43", pen – 42") or equivalent loaded at 4 SPF to accomplish 60 degree phasing. Perforate as follows:

Note: Correlate w/ ***Schlumberger*** GR-Sonic Porosity Log dated 3/27/1963

<u>Upper Abo</u>	<u>Feet</u>	<u>Shots</u>
8489' – 8515'	16	64
Total	16	64

16. POOH with perforating gun(s) and inspect to verify number of shots fired. Record information in WellView.
17. RD-MO *Apollo* e-line services.
18. MI-RU hydro-test services to test 3 ½" workstring while RIH.
19. PU-RIH w/ treating packer for 5 ½", 15.5#/ft casing on 3 ½" (9.3#/ft, L-80) workstring. Test 3 ½" workstring to 85% of burst pressure (8600 psi) below slips while RIH. Once on depth @ 8300'± with workstring, release hydro-test services.
20. Set treating packer @ 8,300'±. Place a pressure gauge on tubing-casing annulus, close pipe rams and monitor the 3 ½" x 5 ½" backside pressure throughout job.

Note: Install a spring operated relief valve, set no higher than 1,000 psi, on the 3 ½" x 5 ½" annulus.

21. Order Frac Tanks and Frac Fluids as directed by *Halliburton*.
22. MI-RU *Halliburton* stimulation services. RU frac valve directly onto 3 ½" workstring to frac the Upper Abo up to 30 bpm (see proposal). Bring adequate horsepower to accomplish up to 30 bpm @ 7,000 psi treating pressure. An acid ball-out will be part of the procedure, so a remote ball launcher and N2 operated relief valve are required. Install a spring operated relief valve, set no higher than 1000 psi, on the 3 ½" x 5 ½" annulus.

TREATING LINE TEST PRESSURE: A minimum 500 psig over MAWP. 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).	8500	PSIG
MAXIMUM ALLOWABLE WORKING PRESSURE: Based on weakest component in system (85% of 3 ½" L-80 workstring burst)	8,600	PSIG
NITROGEN POP-OFF SETTING: the valve is to be tested prior to pumping, and must pop within 500 psi of set pressure.	7800	PSIG
TRUCK KILL SETTING	7500	PSIG
MAXIMUM ALLOWABLE TREATING PRESSURE: If reached, human action required.	7100	PSIG
MAXIMUM ANTICIPATED TREATING PRESSURE: Based on frac design	7000	PSIG

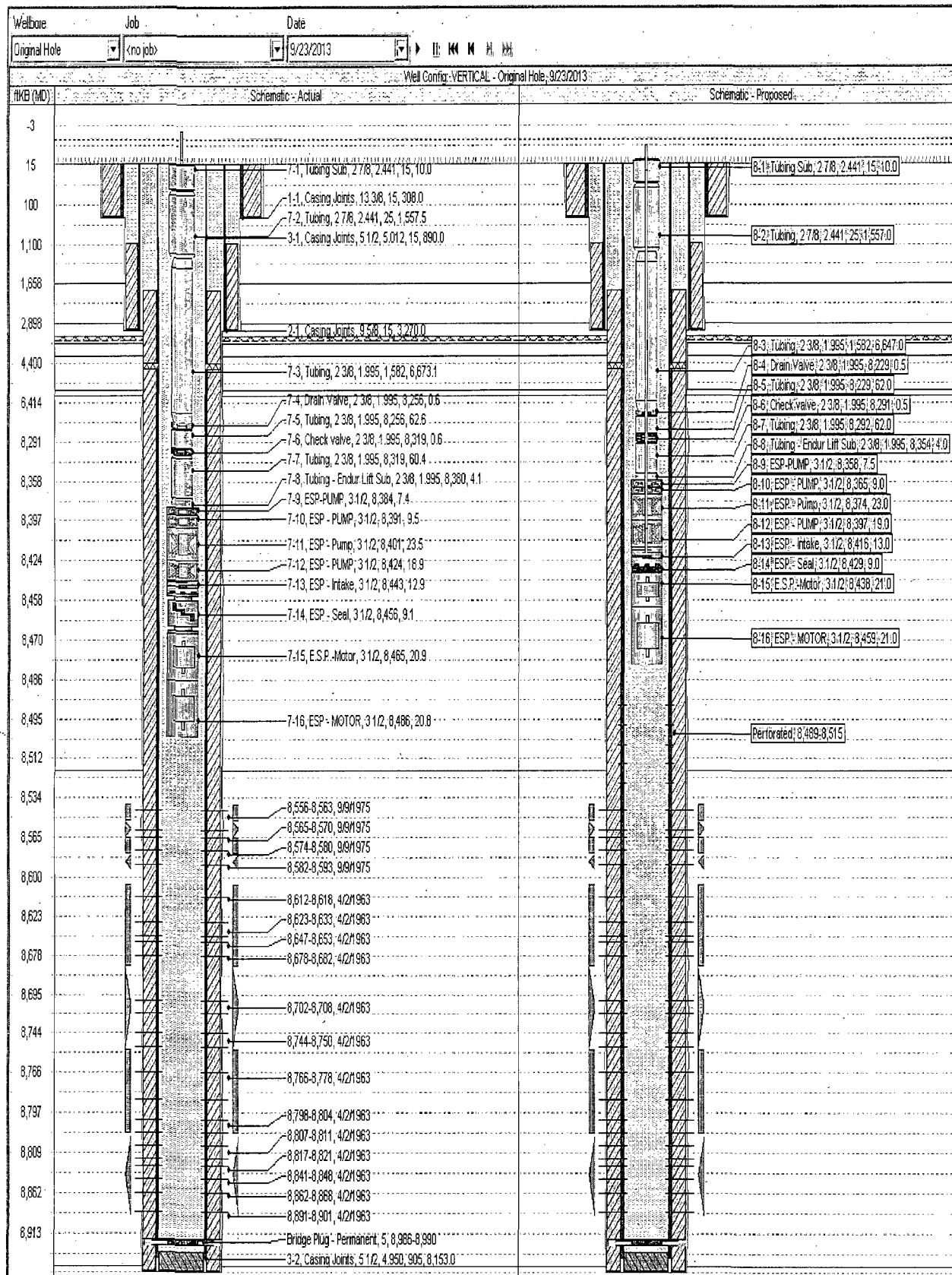
23. Obtain ISIP. Continue monitoring and recording for 20 minutes following shut-in (every 5 minutes).
24. RD-MO *Halliburton* stimulation equipment.
25. If Resin coated sand is used:
 - Shut-in well overnight to allow Resin time to cure
 - Otherwise proceed to next step.

26. Flow well back @ rate of 3-5 bbl/minute until well loads up and dies.
27. Unseat treating packer Tag for Fill (TFF) and record. POOH. Laydown treating packer and 3½" workstring.
28. PU a bit and RIH w\ production tubing. Tag up on sand and cleanout wellbore to 8545' (CIBP).
29. Drill up CIBP and proceed to cleanout out wellbore to PBTD.
30. POOH once convinced wellbore is clean. Laydown bit and stand production tubing back in derrick.
31. RIH with R&R ESP equipment, production tubing, ESP cable, and capillary string (if used). Space out and land ESP motor/sensor @ 8480' (per pre-pull in WellView).
32. ND BOPE and NU existing ESP GT-6 wellhead.
33. Test ESP rotation, direction, and lift rate prior to RDMO WSU
34. RD-MO WSU.
35. Drain, flush, and dispose of any remaining treating fluids.
36. Release all ancillary equipment.
37. Clean-up location removing trash and debris.
38. Report all work performed in Wellview.
39. Turn well over to Operations. Place well in operation, and report production rates and fluid levels.

End of Procedure

Attachments:

Actual & Proposed Schematics:



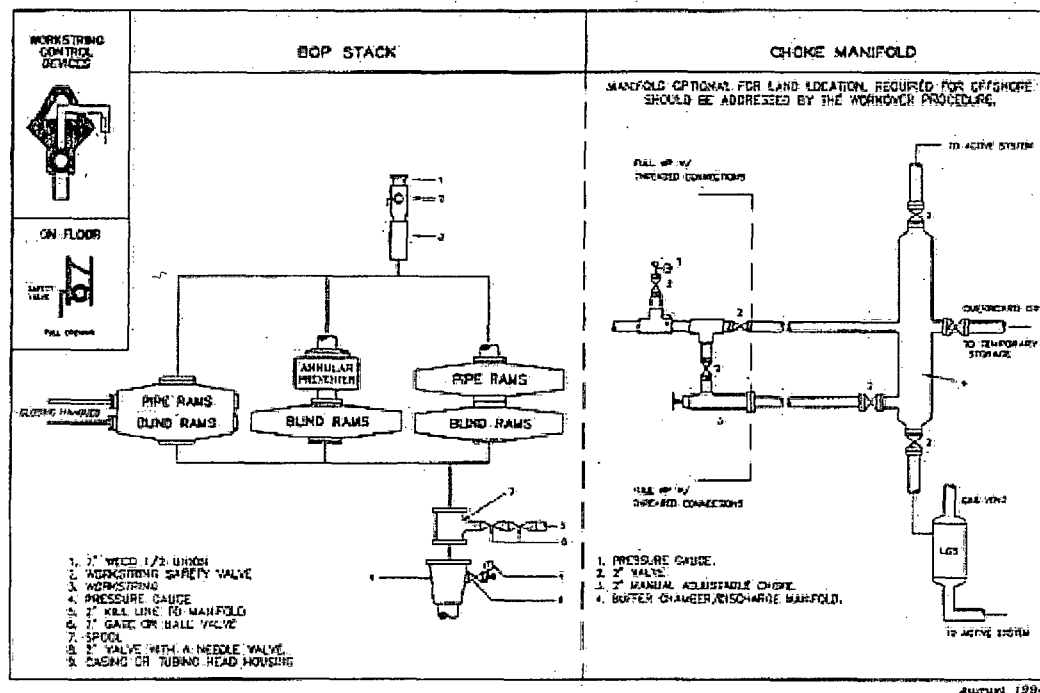


Figure 6-3 Class 2 BOP and Choke Manifold