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) 476-3462

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State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-101
Revised November 14, 2012

☐ AMENDED REPORT

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

1. Operator Name and Address	2. OGRID Number
ConocoPhillips Company P. O. Box 51810 Midland, TX 79710	217817
	3. API Number 025-08523

4. Property Code	5. Property Name	6. Well No.
31158	Vacuum Abo Unit Tract 6	070

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
G	26	17S	35E		2080	North	1980	East	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	Pool Code
Upper Abo perfs @ 8492'-8532'	

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
Recomplete	Oil	Rotary	State	3913'
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
Yes	9073'	Vacuum Upper Abo		06/16/1962

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#	333'	350	surf
Intermedia	11"	8 5/8"	24#	3343'	400	2500'
Production	7 7/8"	5 1/2"	14 & 15.5#	9066'	625	3150'

Casing/Cement Program: Additional Comments

attached wellbore schematic & procedures. 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: Rhonda Rogers

Printed name: Rhonda Rogers
Title: Staff Regulatory Technician
E-mail Address: rogerrs@conocophillips.com
Date: 09/24/2013 Phone: (432)688-9174

OIL CONSERVATION DIVISION

Approved By:
Title: Petroleum Engineer
Approved Date: 10/8/13 Expiration Date: 10/8/15
Conditions of Approval Attached

OCT 08 2013

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-08523		Upper Abo

[4] Property Code	[5] Property Name	[6] Well Number
31158	Vacuum Abo Unit Tract 6	070

[7] OGRID No.	[8] Operator Name	[9] Elevation
217817	ConocoPhillips Company	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
G	26	17S	35E		2080	North	1980	East	Lea

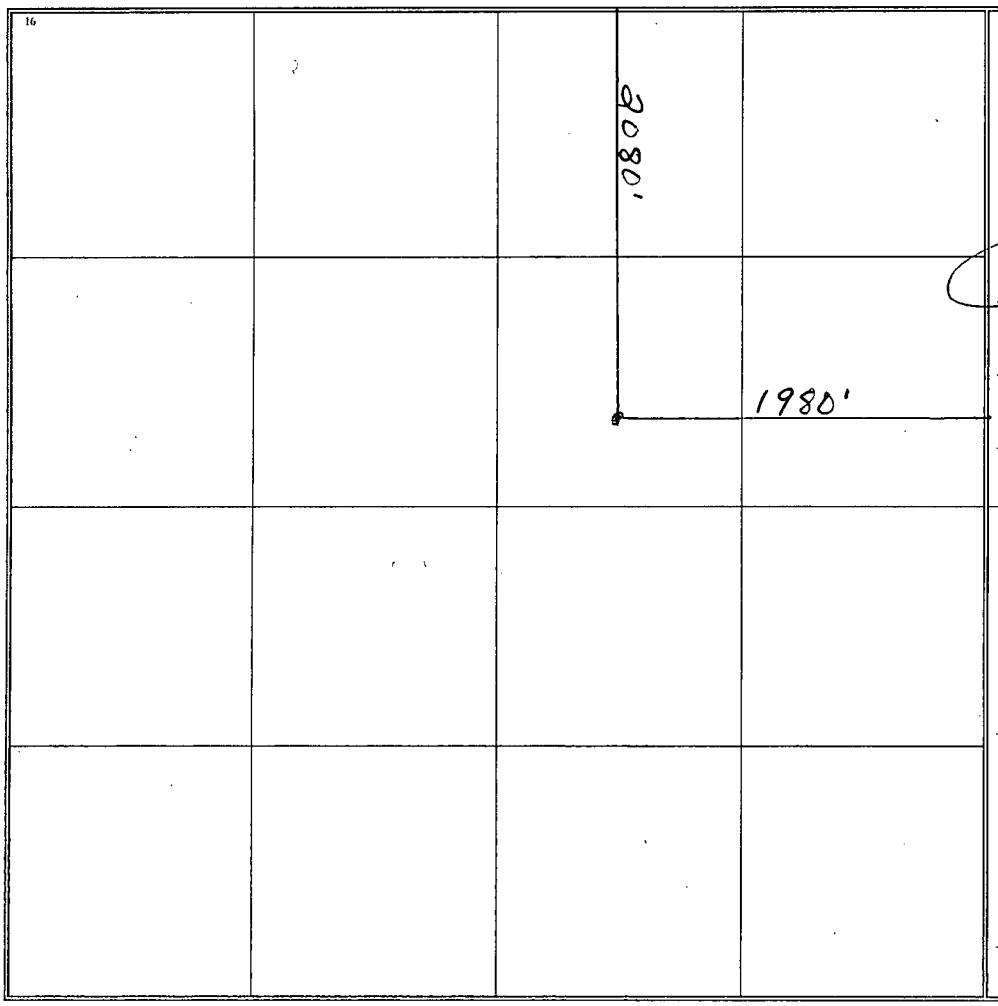
[11] Bottom Hole Location If Different From Surface

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.

Rhonda Rogers 09/24/2013
Signature Date

Rhonda Rogers
Printed Name

rogerrs@conocophillips.com
E-mail Address

[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

OCT 08 2013

VACUUM ABO UNIT #6-70
Recompletion
UPPER ABO PROCEDURE
API # 30-025-08523

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

Field: Vacuum (ABO)

Location: 2080' FNL & 1980' FEL, Section 26, T-17S, R-35E, Lea Co., NM.
Lat - 32° 48' 26.28" N Long - 103° 25' 31.476" W

Depths: TD =9,066' PBTD =8,653'

Elevation: GL =3913' KB =13' KBM =3926'

WELL CLASSIFICATION

This well has an anticipated gas rate and surface pressure less than 500 MCFD and 3000 psi. The Upper Abo formation is tight and not expected to produce without artificial lift. The calculated 100 ppm H_2S radius of exposure is 11.0 feet with a maximum expected H_2S 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 H_2S 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 (H_2S) POISON GAS

Wells in this area and this well in particular may produce Hydrogen Sulfide (H_2S) poison gas. H_2S in high concentration is fatal. All persons arriving on location must have H_2S 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. H_2S monitoring equipment will be rigged up and tested prior to executing work.

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 brine. Ensure well is dead prior to 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 the following 3k psi BOPE according to standard ConocoPhillips policy.
   Hydraulic BOPE (3 ½" pipe rams - top + blind rams - bottom)
   One hydraulic annular (accommodate capillary & ESP cable)

7. Release and POOH with production tubing, capillary string, ESP cable and equipment.

8. Visually inspect the capillary string while POOH. Notify engineer if any pitting or corrosion is noted.

9. Visually inspect production tubing while POOH, lay down any bad joints, and stand remaining good tubing back in derrick.

10. Lay down ESP equipment. Send ESP equipment and cable to shop for R&R.

11. 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.

12. PU bit and scrapper on production tubing. Hydro-test production tubing below slips while RIH.

13. Continue to RIH to 8,550'. Once finished hydro-testing tubing release hydro-test services.

14. Confirm wellbore is free of fill and record. POOH. Laydown bit and stand tubing back in derrick.

Upper Abo Completion:

15. MIRU *Apollo* e-line services with packoff (note: use of lubricator shop tested to 2,000 psig is acceptable).

16. PU-RIH with Gamma Ray - CCL tools with gauge ring scrapper to 8550'± RKB.

Note- top existing perforation is located at 8,578'.

17. PU-RIH w/CIBP along with the first perforating run. Set CIBP @ 8570'± RKB. Release from CIBP.

18. Perforate using 3⅛" 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/ *Welex* GR-Sonic Porosity Log dated **7/14/1962**

Upper Abo	*Feet*	*Shots*
8492' – 8532'	40	160
Total	40	160

19. POOH with perforating gun(s) and inspect to verify number of shots fired. Record information in WellView.

20. RD-MO ***Apollo*** e-line services.

21. MI-RU hydro-test services to test 3 ½" workstring while RIH.

22. PU-RIH w\ treating packer for 5 ½", 14.0#/ft casing on 3½" (9.3#/ft, L-80) workstring. Test 3 ½" workstring to 85% of burst pressure (8600 psi) below slips while RIH. Once on depth with workstring, release hydro-test services.

23. Set treating packer @ 8,300'±. Place a pressure gauge on tubing-casing annulus, close annular and monitor the 3½" x 5½" backside for pressure throughout job.

Note: Install a spring operated relief valve, set no higher than 1,000 psi, on the 3½" x 5½" annulus.

24. Order Frac Tanks and Frac Fluids as directed by ***Halliburton***.

25. MI-RU CoreLab ProTechnics for RA tracer service on Halliburton frac fluids.

26. 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 3½" x 5½" 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

Tubing (Surface)

Trt-Stage	Stage Desc.	Flow Path	Fluid Desc.	Rate-Liq+Prop	Clean Vol.	Proppant	Proppant Conc.	Prop. Mass
1-1	*Pre-Pad	IN	Water Frac G - R (8)	30	1000		0	0
1-2	Pad	IN	Hybor G - R (17)	30	19000		0	0
1-3	Proppant Laden Fluid	IN	Hybor G - R (17)	30	8000	Premium White-20/40	0.5	4000
1-4	Proppant Laden Fluid	IN	Hybor G - R (17)	30	10000	Premium White-20/40	1	10000
1-5	Proppant Laden Fluid	IN	Hybor G - R (17)	30	12000	Premium White-20/40	1.5	18000
1-6	Proppant Laden Fluid	IN	Hybor G - R (17)	30	12000	Premium White-20/40	2	24000
1-7	Proppant Laden Fluid	IN	Hybor G - R (17)	30	12000	Premium White-20/40	2.5	30000
1-8	Proppant Laden Fluid	IN	Hybor G - R (17)	30	14000	Premium White-20/40	3	42000
1-9	Proppant Laden Fluid	IN	Hybor G - R (17)	30	7500	**CRC-20/40	3	22500
1-10	Flush	IN	Water Frac G - R (8)	30	± 3200		0	0
Totals					98700			150500

***Run 55 gallons of Scalechek LP-65 in first 1,000 gals of Pre-Pad Stage.**
****Run 10 gal/Mgal Superset-W in CRC Sand Stage.**
Flush volume to be determined on location.

27. Obtain ISIP. Continue monitoring and recording for 20 minutes following shut-in (every 5 minutes).

28. RD-MO ***Halliburton*** stimulation equipment. RD Protechnics.

29. Shut-in well overnight to allow Resin time to cure

30. Flow well back @ rate of 3-5 bbl/minute until well loads up and dies.

31. Relieve any remaining pressure on 3 ½" workstring – casing annulus.

32. Unseat treating packer Tag for Fill (TFF) and record. POOH. Laydown treating packer and 3½" workstring.

33. PU a bit and RIH w\ production tubing. Tag up on sand and cleanout wellbore to 8,570'± (CIBP).

34. Drill up CIBP and proceed to cleanout out wellbore to PBTD – 8,653'±.

35. POOH once convinced wellbore is clean. Laydown bit and stand production tubing back in derrick.

36. RU Apollo EL. Run Digital Spectral Gamma Ray RA Tracer survey. RD EL.

37. PU-RIH with R&R ESP equipment, production tubing, ESP cable, and capillary string (if used). Space out and land ESP motor and/or sensor @ 8,485'± (per pre-pull in Wellview).

38. ND BOPE and NU existing ESP **GT-6** wellhead.

39. Test ESP rotation, direction, and lift rate prior to RDMO WSU

40. RD-MO WSU.

41. Drain, flush, and dispose of any remaining treating fluids.

42. Release all ancillary equipment.

43. Clean-up location removing trash and debris. Any sand/fluid that washed out must be handled by COP standards for handling radioactive contaminated fluids.

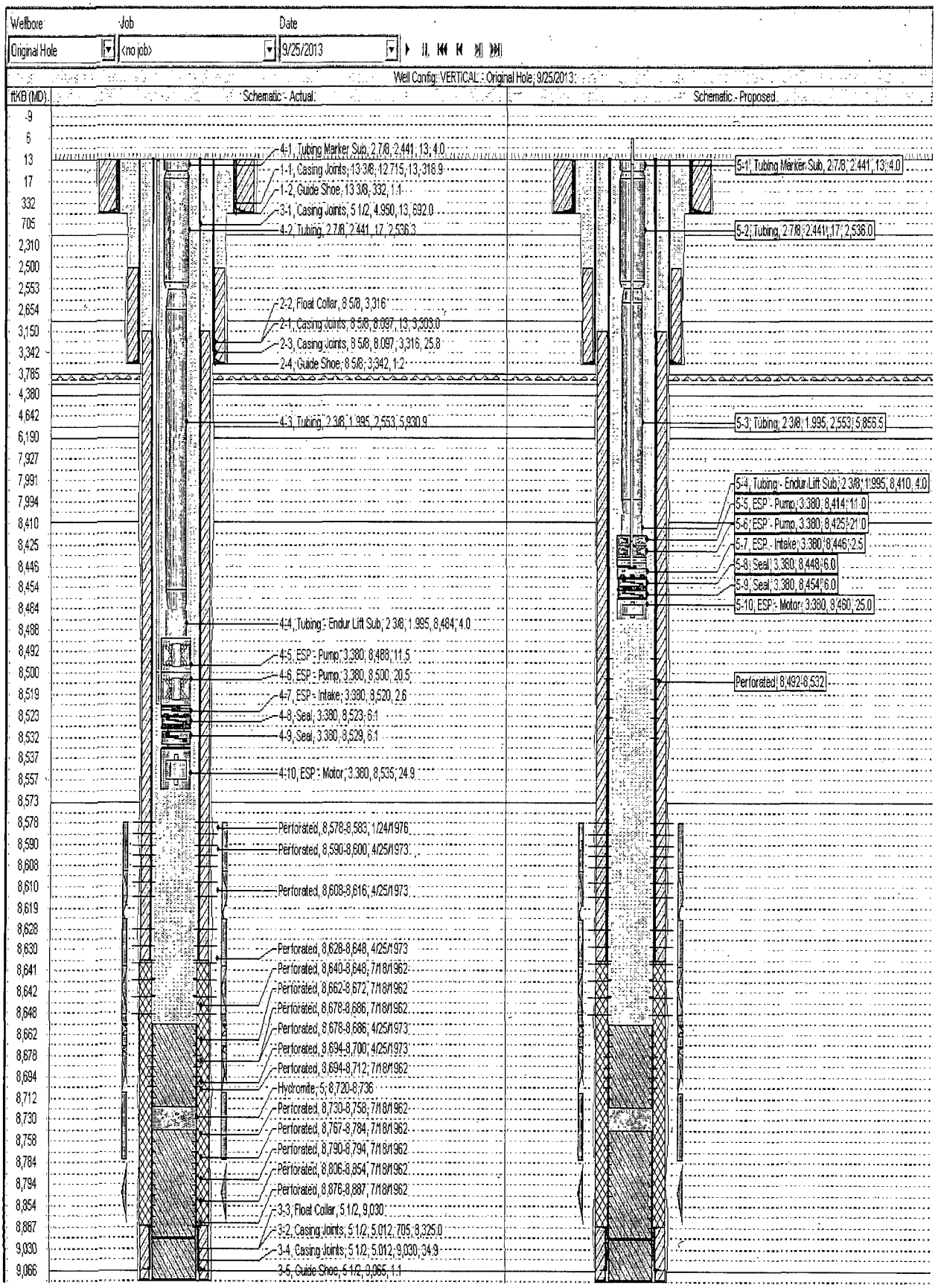
44. Report all work performed in Wellview.

45. Turn well over to Operations. Place well in operation, and report production rates and fluid levels.

End of Procedure

Attachments:

Actual & Proposed Schematics:



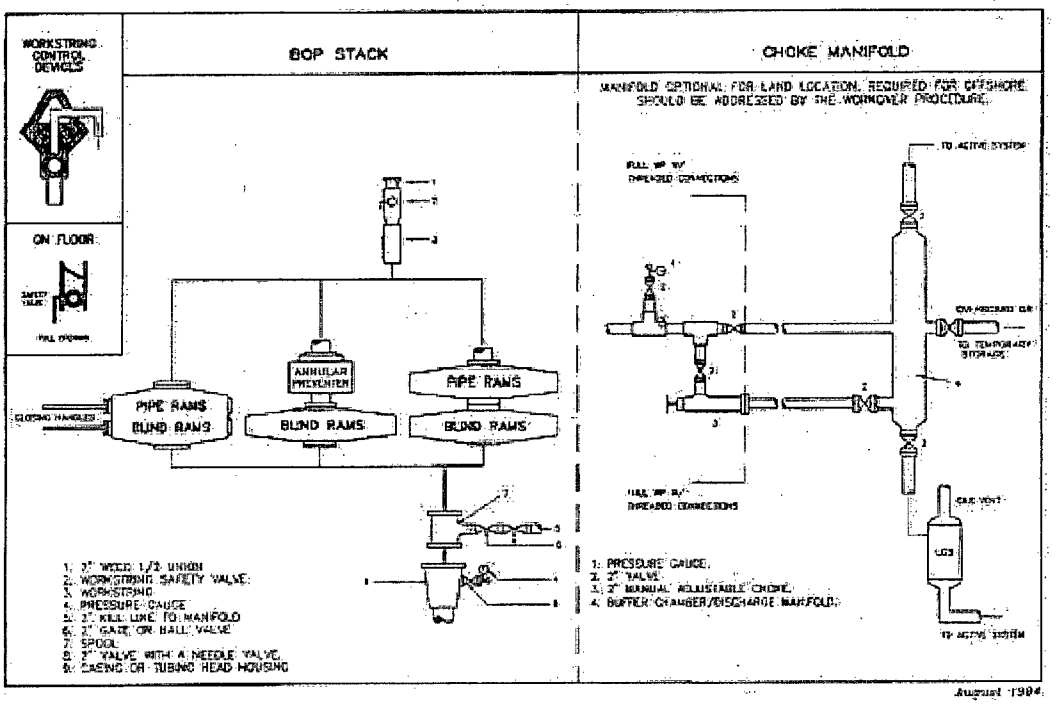


Figure 6–3 Class 2 BOP and Choke Manifold