

Submit 1 Copy To Appropriate District Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised August 1, 2011

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-025-20290 ✓
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other Injection Well <input checked="" type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator ConocoPhillips Company		6. State Oil & Gas Lease No. B-2354-2
3. Address of Operator P. O. Box 51810 Midland, TX 79710		7. Lease Name or Unit Agreement Name Vacuum Glorieta East Unit Tract 37
4. Well Location Unit Letter <u>G</u> : 2310 feet from the <u>North</u> line and 1980 feet from the <u>East</u> line Section <u>31</u> Township <u>17S</u> Range <u>35E</u> NMPM County <u>Lea</u>		8. Well Number 003 ✓
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3986' RKB		9. OGRID Number 217817
		10. Pool name or Wildcat Vacuum; Glorieta

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐

OTHER: add pay ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

ConocoPhillips Company would like to add pay to the Vacuum; Glorieta per attached procedures
Attached is a current/proposed wellbore schematic

**Condition of Approval: notify
OCD Hobbs office 24 hours
prior of running MIT Test & Chart**

Spud Date:

Rig Release Date:

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

SIGNATURE Rhonda Rogers TITLE Staff Regulatory Technician DATE 05/28/2015

Type or print name Rhonda Rogers E-mail address: rogerrs@conocophillips.com PHONE: (432)688-9174

For State Use Only

APPROVED BY: Mary Brawn TITLE Dist. Supervisor DATE 6/8/2015

CONDITION OF APPROVAL: Notify OCD DISTRICT OFFICE 24 HOURS
prior to STARTING THE WORKOVER...

CONDITION OF APPROVAL: Operator shall give the OCD
District Office 24 hour notice before running the MIT test and chart.

VGEU 37-03W
API# 30-025-20290
ADD PAY

Project Scope			
Justification and Background: Determine why annulus has high pressure while on injection (on/off tool, packer, tubing, or casing leak). Drill out 73' of cement and add ~40' of new perforations & reshoot ~40' of squeezed perforations			
This well is only taking roughly 100 bwpd. All the perforations will be acidized to increase the injection rate. The pay add will target the Paddock dolomite beneath the limestone flood to provide pressure support from the bottom. The pay add will also help with the water handling issues that will occur as the new drill program begins. This well was targeted due to low injectivity. All perforations will be acidized and rock salt will be used for diversion.			
Estimated H2S (ppm)	15,000	Max anticipated MCFPD	8
100 ppm H2S ROE (ft)	27	Well Category	1
500 ppm H2S ROE (ft)	12	BOP Class	1 (Hydraulic)

Perforations			
Type	Formation	Top	Bottom
Perforations	Paddock	5,997'	6,085'
PBTD		6,100'	
TD		6,900'	

Well Service Procedure:

- 1) MIRU pulling unit. Kill well.
- 2) RU wireline services. NU 5,000 psi lubricator (note: use lubricator shop tested to 2,000 psig is acceptable). PU & RIH w/ plug to land in 1.875" profile nipple @ 5,941'. Set plug & TOOH w/ wireline. ND lubricator & release wireline services.
- 3) Load & test Tbg to 3,000 psi.
- 4) If Tbg passes, load & test the backside to 500 psi. **If a leak is discovered on the backside contact engineer for path forward**
- 5) NDWH, NUBOP. Test BOP. RU scanners. Release packer & TOOH w/ 2 3/8" 4.7# J-55 IPC production Tbg. Visually inspect all Tbg out of hole. Stand yellow and blue band Tbg back in derrick. Lay down packer.
- 6) MI lay down machine. PU & TIH w/ bit & drill collars on 2 7/8" 6.5# L-80 workstring to top of fill @ 6,100'.
- 7) RU swivel & clean out fill, cement, and CIBP from 6,100'-6,198'. RU reverse unit if circulation isn't attainable.
- 8) Cleanout to top of cement @ 6,198'. RD reverse unit & LD swivel.
- 9) TOOH w/ bit & drill collars on work string. Stand back work string in derrick. LD bit & drill collars.
- 10) PU & TIH w/ bit and scraper sized for 5 1/2" 20# N-80 casing on work string to PBTD @ 6,198'.
- 11) TOOH w/ bit and scraper. LD bit and scraper. Stand work string back in Derrick.

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- 12) MIRU wireline services. NU 5000 psi lubricator (note: use lubricator shop tested to 2,000 psig is acceptable) and RIH w/ perf guns to perforate using 4" Titan Slick Gun w/ super deep penetrating charges (ch-40g, eh-0.52", pen-52.13") or equivalent loaded at 4 SPF to accomplish 120 degree phasing. Wireline Service Company needs to bring gamma ray and CCL tool to get on depth. Perforate as follows:

Note: Correlate w/ Schlumberger Formation Analysis Log – Movable Oil Plot dated 01/30/1964

<u>Lower Blinebry</u>	<u>Feet</u>	<u>Shots</u>
6,086' – 6,128' (Proposed)	42	168
6,158' – 6,195' (Proposed)	37	148
Total	79	316

- 13) TOOH with perforating guns and inspect to verify number of shots fired. Record perforations in Wellview. ND lubricator. **RD and release wireline services.**
- 14) RU hydro-test services. PU & RIH w/ treating packer on work string testing to 8,200 psig below slips. Set packer @ 5,781' (5 bbl capacity between packer and top perf). Load backside & test packer to 500 psi surface pressure.
- 15) RU Acid stimulation services. Set pump trips @ 7,800 psi. Set treating line pop-off to release @ 8,000 psi. Test surface lines @ 8,700 psi. Pump 12,000 gal (286 bbls) of 15% Ferchek SC Acid to perforations (5,997' – 6,040') and drop 6,000 lbs of rock salt (anticipated treating pressure: ~3,500 psi @ 4-5 BPM, assumes .9 frac gradient). Flush with 36 bbls of brine water. Ensure spring operated relief valve installed, set no higher than 500 psi, on the 2 7/8" x 5 1/2" Annulus. Record ISIP, SITP (5 min), SITP (10 min), SITP (15 min).

Acid Stimulation

- a) Pump, establish and record injection rate and pressure w/ field brine water
- b) Pump 2,000 gallons (~48 bbls) of acid
- c) Pump 24 bbls (1,000 gal.) of field brine water containing up to a .5#/gal concentration of rock salt (500 lbs) as diverting agent (concentration bases on injection rate / pressure response of existing perforations)
- d) Pump 2,000 gallons (~48 bbls) of acid
- e) If pressure increase is marginal on .5#/gal then proceed with 1#/ gal.
- f) Pump 24 bbls (1,000 gal.) of field brine water containing up to a 1#/gal concentration of rock salt (1,000 lbs) as diverting agent (concentration bases on injection rate / pressure response of existing perforations).
- g) Pump 2,000 gallons (~48 bbls) of acid
- h) Repeat step f & g until acid is put away (~2 more salt stages, ~3 more acid stages @ 2,000 gallons)
- i) Displace acid treatment w/ 36 bbls of brine water

Note 1: Pressure may not allow for all the rock salt to be pumped.

Note 2: If interval screens off, release pressure, back flush to open top frac tank, then return to acid stimulation.

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.	8,700	PSIG
MAXIMUM ALLOWABLE WORKING PRESSURE: Based on weakest component in system (COP define 1.2 SF for 2 7/8" L-80 workstring burst)	8,200	PSIG

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NITROGEN POP-OFF SETTING: <i>the valve is to be tested prior to pumping, and must pop within 500 psi of set pressure.</i>	8,000	PSIG
TRUCK KILL SETTING	7,800	PSIG
ANTICIPATED TREATING PRESSURE:	~3,500	PSIG

- 16) Obtain ISIP. Continue monitoring and recording for 15 minutes following shut-in (every 5 minutes).
- 17) RD stimulation equipment. Check pressures and bleed pressure down on casing & Tbg. MI lay down machine. Release packer and TOO. LD work string & packer.
- 18) RU wireline services. NU lubricator. RIH w/ injection packer, XN profile nipple (with plug in profile), and On/Off tool (seal nipple). Set packer @ ~5,942' (same depth as existing). ND lubricator and release wireline services. **(See proposed Tbg Design attachment)**
- 19) RU Hydro-test services. PU & RIH w/ 2 3/8" 4.7# J-55 IPC production Tbg testing to 5,000 psi below slips. Release Hydro-test services.
- 20) Circulate packer fluid to surface (5,942 x 0.0178 bbl/ft = 106 bbls). Latch onto On/Off tool.
- 21) RU pump truck and chart recorder w/ 1000 psi chart to casing and pressure test casing/packer to 500 psi for 35 mins.
Note: Notify the NMOCD of the impending test
- 22) Land Tbg in hanger. NDBOP. NUWH.
- 23) RU wireline services. NU lubricator. RIH & retrieve plug from 1.875" profile. TOO. ND lubricator & release wireline services.
- 24) Notify MSO to sign off on well and return well to injection.
- 25) RDMO and release all ancillary rental equipment.



Schematic - Current

VACUUM GLORIETA EAST UNIT 037-03

District PERMIAN CONVENTIONAL	Field Name VACUUM	API / UWI 300252029000	County LEA	State/Province NEW MEXICO
Original Spud Date 1/14/1964	Surface Legal Location Section 31, T-17S, R-35E	East/West Distance (ft) 1,980.00	East/West Reference E	North/South Distance (ft) 2,310.00
North/South Reference N				

VERTICAL - MAIN HOLE, 5/28/2015 9:42:19 AM

