Submit 1 Copy To Appropriate District State of New Mexic	co Form C-103		
District I – (575) 393-6161 Energy, Minerals and Natural	Resources Revised July 18, 2013		
District II – (575) 748-1283	30-025-42103		
811 S. First St., Artesia, NM 88210 District III - (505) 334-6178	5. Indicate Type of Lease		
1220 South St. Franci 1000 Rio Brazos Rd., Azicc, NM 87410	S Dr. STATE FEE		
District IV – (505) 476-3460 Santa 1.C, 10101 8750 1220 S. St. Francis Dr., Santa Fe, NM 87505	6. State Oil & Gas Lease No.		
SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR S	7. Lease Name or Unit Agreement Name BACK TO A VACUUM GLORIETA EAST UNIT SUCH		
PROPOSALS.)	8. Well Number 123H		
2. Name of Operator	9. OGRID Number		
CONOCOPHILLIPS COMPANY	217817		
3. Address of Operator P.O. BOX 51810, MIDLAND, TX 79710	10. Pool name or Wildcat VACUUM; GLORIETA		
4. Well Location			
Unit Letter <u>M</u> : <u>766</u> feet from the <u>SOUTH</u>	line andset from theline		
Section 27 Township 17S Range	35E NMPM County LEA		
11. Elevation (Show whether DR, RI 3940' GL	(B, RT, GR, etc.)		
12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data			
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:			
OTHER: PLUG BACK FOR WATER SHUT OFF	THER:		
of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.			
PLUG BACK FOR WATER SHUT OFF PER ATTACHED PROCEDURE.			
ATTACHED IS A CURRENT/PROPOSED WELLBORE SCHEMATIC.			
Spud Date: Rig Release Date:			
	function and half of		
I hereby certify that the information above is true and complete to the best of my knowledge and bellel.			
SIGNATURE DATE DATE 07/19/2017			
Type or print name <u>Rhonda Rogers</u> E-mail address: <u>rogerrs@conocophillips.com</u> PHONE: <u>432-688-9174</u>			
For State Use Only			
APPROVED BY: TITLE Petroleum Engineer DATE 07/20/17			
Conditions of Approval (If any):			
V			

## VGEU 12-03H API #30-025-42103

# Project Scope

### Justification and Background:

This project is part of an ongoing effort to identify and isolate a high water zone that is making the VGEU 12-03H uneconomical to produce. A coil tubing injectivity and flowback test was performed in December of 2016 to determine the water source. Analysis showed two void space conformities, one at 7800' and a second at 8400', that accounted for 83% of water inflow. This portion of the project covers landing an inflatable packer in the open hole lateral, and pumping foam cement further downhole to isolate the conformities. This job will also cover rerunning the previous ESP equipment and putting the well back on production.

Perforations			
Туре	Formation	Тор	Bottom
Perforations	Paddock	~6,050'	~6,050'
PBTD (MD)	New PBTD 7623' (pkr & cmt)		
TD (MD)	9,000'		

#### **ISOLATION PROCEDURE:**

- 1. MIRU Pulling Unit, Kill well and Pull existing tubing and anchor.
  - a. ND wellhead. NU and function test BOPE.
  - b. Unset anchor.
  - c. TOOH and laydown all 2-3/8" production tubing.
- 2. PU and RIH with 10' 4-1/2" casing with 5-1/2" centralizers and crossover on 2-7/8" workstring.
  - a. Make cleanout run to 7,630'.
  - b. Note any tight spots during cleanout.
  - c. Pump 50 Bbls fresh water @ 4 BPM to establish injectivity.
  - d. TOOH standing back tubing. Laydown casing.
- 3. PU and RIH with the following completion equipment on a 2-7/8" 6.5# workstring:
  - a. Weatherford ACP P/A Packer Assembly.
  - b. 2-7/8 ON/OFF tool with right hand and hydraulic release option (2-7/8" EUE box up).
  - c. See attachments for detailed packer assembly procedure.
  - d. Ensure Ethelyn Glycol has been flushed out of packer elements prior to job.
  - e. Contact Halliburton and GSI to begin mobilizing cementing equipment.
- 4. TIH and set bottom of open hole retainer @ ~ 7,620' MD.
  - a. Hydrotest tubing while TIH to 8400 PSI.
  - b. Use pup joint to set appropriate height for surface connections.
  - c. Establish injectivity (~4 BPM) down tubing.
- 5. MIRU Halliburton foam cement mixing and pumping equipment.
  - a. RU squeeze manifold, choke manifold, and washup lines to tanks (See Fig. 1 Below).

July, 2017

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- b. RU GSI cementing head/plug launcher. Ensure both darts were loaded @ shop prior to rigging up cementing head.
- c. Hydro test surface lines to 7,000 PSI.
- 6. Mix, Test and Pump 320 sks Premium Plus Cement with. Foam (or Nitrify) the cement using 200-250 scf/bbl Nitrogen. NOTE: Do not exceed 250 scf/bbl. We want to maintain an overbalanced column of cement. The slurry will be injected with 2% ZoneSealant 2000 as a stabilizer and foamer. Perform onsite QC test of cement to ensure proper function. Lab set time of 3h 20min.
- 7. Start pumping foamed cement. Prior to pumping cement Pump 5 Bbls flush of water with ZoneSeal.
  - a. Pump small volume (0.25 Bbls) of neat cement with Zoneseal prior to starting N2.
  - b. Zero cement counter when foam cement reaches plug launcher.
  - c. Then pump ½ Bbl of foamed cement into the workstring.
- 8. Drop first latch down dart (no-go plug).
  - a. Continue pumping foam cement @ 3 BPM.
  - b. Dart should land after ~33 Bbls of foam cement (44.1 Bbls actual tubing volume) have been pumped.
- 9. Once dart lands, increase surface pressure to 300 PSI and hold for 5 minutes.
  - a. Check for and repair all surface leaks.
- 10. Increase surface pressure to rated differential shear pin pressure of 1100 PSIG Surface.
  - a. Stop pumps and note pressure decrease indicating valve action.
  - b. If no pressure decline, increase by 200 PSI or as needed to open valve.
- 11. Inflate packer by sequentially increasing surface pressure and monitoring pressure decline as packer takes cement.
  - a. When packer is fully inflated surface pressure will stabilize and not decline.
  - b. Hold pressure 3-5 minutes.
  - c. Perform Push/Pull test to confirm packer is set before shearing close valve.
- 12. Apply surface pressure of 1900 PSIG Surface to activate tubing dump valve.
- 13. Once dump valve has been activated continue pumping cement at a rate of 3 BPM.
  - a. Pressure must be monitored during squeeze to ensure that the hydraulic release pressure is not exceeded on the ON/OFF tool (3800/5500 PSIG Surface cement/water).
  - b. Anticipated Pressures during squeeze: 150 PSIG Surface, 3250 PSIG @ Packer
  - c. Switch to neat cement for remaining 5 Bbls before dropping second latch down dart.
  - d. If squeeze zone appears to be pressuring up during cement pumping, cut cement short and skip to dropping second dart.
- 14. Drop second latch down dart with last Bbl of neat cement.
  - a. Displace cement with fresh water.

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- b. Should take 44.1 bbl of fresh water to displace dart to packer.
- c. Slow displacement to ½ BPM prior to landing dart and record surface (balance) pressure.
- d. If pumping pressure increases drastically on surface indicating all zones of injection are squeezed off prior to landing the latch dart, then estimate a BHP based on the fluid density of the foamed cement, etc. and attempt to keep the BHP below 8150 PSI BHP. Reduce pump rate as needed, but attempt to pump away as much foamed cement as possible without fracturing the formation.
- e. If remaining cement cannot be displaced, discuss with PE before exceeding frac pressure.
- 15. Once tubing latch dart is set down in seating nipple, bleed all pressure off tubing to see if plug and check valves are holding.
  - a. First pump up to 200 PSIG surface to ensure latch is seated and holding.
  - b. Slowly bleed off pressure. Shut in if packer does not appear to be isolated to prevent cement contamination.

Apply a surface pressure of 5500 PSIG Surface to hydraulically release from packer.

- c. If needed to release continue pressuring up, but DO NOT EXCEED 5750 PSI Surface.
- d. If hydraulic release fails, RD cementing head and RU circulating swage. Then mechanically release by rotating tubing ½ turn to left (may need more turns at surface) and setting weight down on packer.
- e. Note: Do not allow tubing to set down on packer once released.
- 16. Once pressure has been bled off, RD GSI cementing head and RU circulating swage.
- 17. Pull workstring above packer and circulate down tubing to clean.

Circulate surface equipment with fresh water to washup tanks.

- 18. TOOH and laydown workstring.
- 19. Shut in for 24 hrs. and prepare for ESP install.

#### Well Service Procedure:

- RU cable spooler. PU & RIH w/ Baker Hughes ESP assembly, cable, 2 7/8" production Tbg. Position the bottom of the ESP sensor w/centralizer @ ~6,421' MD.
  - a. Install RE-LI MLE Cable Protectors at each coupling of the ESP equipment.
  - b. Install Winterhawk Cable Protectors from 4530' to 6300'.
- 2. Measure cable, cut cable, and splice lower pigtail. Land tubing in hanger. NDBOP, NUWH. Attach upper pigtail.
- 3. Energize motor and observe pump action. Ensure well pumps up before RD. Have MSO, ESP technician, and COPC ESP specialist witness/sign-off. RDMO and release all ancillary rental equipment.
- 4. Place well on Production. Startup @ 50 Hz unless otherwise instructed. Contact PE for future operational changes. Adjust pump speed as per downhole conditions.



