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

<u>District III</u> 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

State of New Mexico

Form C-101 Revised November 14, 2012

Energy Minerals and Natural Resources

Oil Conservation Division

☐AMENDED REPORT

HOBBS OCD

1220 South St. Francis Dr.

Santa Fe, NM 87505

DEC 0 3 2013

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4. Property Code S. Property G.W. SI							Name MS	Name					No.
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				Feet fr			Feet From		E/W Line		County		
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			TEA	AGUE GLC		Name UPPER PAI	DDOCK, SW						Pool Code 58595
				A	ldition	al Well]	Informat	ion					
RECOMPLETE 12. Well Type OIL				^{13.} Cable/Rotary				^{14.} Lease Type P		15. Ground Level Elevation 3310' GL			
16. Multiple 17. Proposed Depth 18. Form 7750' GLORIETA						ation	on 19. Contractor 20. Spud I				pud Date		
Depth to Ground water Distance from nearest fresh water					fresh water	well		Dista	Distance to nearest surface water				
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Type Hole Size		e Size	Casing Size	asing Weight/ft			Setting Depth		Sacks of Cement		t Estimated TOC		
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	Туре	Working Pressure				Test Pressure			Manufacturer				
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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.				Approved By:									
Signature:	Den		Dunk	of to	7						1/2	-	
Printed name: DENISE PINKERTON						Title: Petroleum Engineer							
Title: REGI	ULATORY	SPECIALIST					Approved Date: 12/04/13 Expiration Date: 12/04/15						
E-mail Addre	ess: <u>leakejd</u>	@chevron.co	<u>m</u>										
Date: 11/27/2013 Phone: 432-687-7375						Conditions of Approval Attached							

DURING THE PROCEDURE WE PLAN TO USE THE CLOSED LOOP SYSTEM WITH A STEEL TANK AND HAUL TO THE REQUIRED DISPOSAL, PER THE OCD RULE 19.15.17.

INTENDED PROCEDURE IS AS FOLLOWS

SET RETRIEVABLE BRIDGE PLUG @ 5200 ABOVE TUBB

PERF 5060-5086 & ACID FRAC THE GLORIETA W/18,000 GALS 15% HCL USING DIVERTER METHOD.

RUN PRODUCTION EQUIPMENT INTO THE WELL & TEST TEAGUE GLORIETA-UPPER PADDOCK

RECEIVE APPROVAL FOR DHC

PULL PRODUCTION EQUIPMENT & RBP

RE-RUN PRODUCTION EQUIPMENT PRODUCING ABO, DRINKARD, TUBB, & GLORIETA



Workover/ Completion Program

Date: 8/1/2013

Well: G W SIMS #1

Reservoir/Field: Reservoir: Glorieta / Field - North Teague

Surface Location: B-09-23S-37E 510 FNL 2230 FEL

GPS (NAD27) – (Long, Lat): N 32° 19′ 28.128″, W -103° 9′ 57.888″ (NAD27)

API No: 30-025-32223

Cost Center: UCU820900

Chevron Ref. No.: QU1962

WBS #: UWDPS-R3198

Job: Add Glorieta perforations and Acid frac.

BRIEF BACKGROUND OF THE JOB:

Currently, the well is producing from the ABO, Drinkard and Tubb formation (exiting perforations). It is proposed to add Glorieta (5,060'-5,086') perforations, followed by an acid frac using ball sealers. Thereafter, produce co-mingled existing formation (ABO, Drinkard, and Tubb) and the newly completed Glorieta together.

The well was last tested on 08/05/2013, produced 1 BOPD, 7 BWPD & 21 MCF/D. Economics are based on achieving a deterministically incremental IP of 7.6 BOPD declined exponential at 13.7%.

CURRENT HOLE CONDITION:

Total Depth: 7,750' TAG: 7,435' (expected) GL: 3,310' KB: 14'

CIBP: 7470' Capped w/35' cmt' (01/18/1984)

Casing Record:

11 3/4" 42# casing set @ 1,180' w/750 sx cmt. TOC-Surface (Circ 240 sks)

 $8^{5}/8$ " 32# casing set @ 3,750' w/1775 sx cmt. TOC-Surface (Circ 664 sks)

5 1/2" 15.5# &17# casing set @ 7,750' w/1800 sks cement. TOC - Surface, Circ 320 sks. DV tool @ 6,946'

Existing Perforations:

Tubb Perfs: 6,098'-6,244' - 2 JSPF, 148 holes Drinkard Perfs: 6,424'-6,574' - 2 JSPF, 124 holes ABO Perfs: 6,634'-6,995' - 2 JSPF, 198 holes

REGULATORY REQUIREMENTS:

Submit C-103 Notice of Intent & Subsequent Reports (to be done by engineering staff)

Prepared by: Prasanna K Chandran (08/04/13) Reviewed by: Evan Asire (10/22/13)

PREWORK:

- 1. Utilize the rig move check list, verifying route and power line heights with FMT.
- 2. Check anchors and verify that pull test has been completed in the last 24 months.
- 3. Ensure location of & distance to power lines (from wellhead) is in accordance with MCA SWP. Complete and electrical variance and electrical variance RUMS if necessary.
- 4. Ensure that location is of adequate build and construction, and will support operations.
- 5. Ensure that elevators and other lifting equipment are inspected. For wells to be worked on or drilled in an H₂S field/area, include the anticipated maximum amount of H₂S that an individual could be exposed to along with the ROE calculations for 100 ppm and 500 ppm.
- 6. Review JSA and hazards with rig crew. Visually inspect wellhead, casing and tubing valves. Decide whether tubing and casing valves can be used; replace as needed.
- 7. Scout location and mark off anything that might be hazardous to daily operations.

Reminders:

- 8. Caliper all lifting equipment at the beginning of each day or when sizes change. **Note in JSA and** record on Elevator Change-out Log when and what items are callipered.
- 9. When NU anything over an open wellhead (BOP, EPA, etc.) ensure the hole is covered to avoid dropping anything downhole.
- 10. Ensure well is secure/shut in with blind rams between job stages (nothing in well).
- 11. If pumping any cement, plugging back a well or changing producing intervals, always contact the OCD and give the details.
- 12. Hold safety meetings with all personnel on location prior to any major or abnormal operation.

Procedure:

This procedure is meant to be followed. It is up to the WSM, Workover Engineer and Production Engineer to make decisions necessary to SAFELY do what is best for the well. In the extent that this procedure does not reflect actual operations, please contact WE, PE and Superintendent for MOC/RUMS assessment.

RIG UP WO UNIT/ PULL WELL EQUIPMENT OUT OF HOLE

- 1. MIRU workover unit & associated surface equipment (i.e. tanks, reverse unit, pipe racks).
- Verify that well does not have pressure or flow. If the well has pressure, note tubing and casing
 pressures on WellView report. Bleed down well and verify no H₂S is present. If necessary, kill well
 with cut brine.
- 3. Unseat pump, POOH laying down rods and pump. Examine rods for wear/pitting/paraffin. Do not hot water unless necessary.
- 4. Caliper elevators and tubular EACH DAY prior to handling tubing/tools and anytime size changes (Use elevator change out log as well). Note in JSA when and what items are callipered within the task step that includes that work.
- 5. ND wellhead, unset TAC, NU BOP dressed with 2 $^3/_8$ " pipe rams on top and blind rams on btm. POOH and LD 1 jt. PU 5 $^1/_2$ " (15.5# or 17#) rated packer along with a joint of 2 $^3/_8$ " tubing and set ~ @ 25'. Test BOP pipe rams to 250/500 psi. Note testing pressures on WellView report (Time log and safety/inspections). Release and LD packer.
- 6. PU 1-2 joints of 2 ³/₈" tubing and tag for fill (TAC (6,030'). **Do not push TAC into perfs**. Top Perfs: 6,098', EOT 7,042, PB: 7,435' and CIBP/ PBTD: 7,470'.

7. TOOH scanning 2 ³/₈" prod tubing. Tally out with tubing and LD all non-yellow band joints. Note in WellView any drag or abnormalities while TOH. Secure well.

CLEANING OUT

- 8. MIUL & strap 2 7/8" 6.5# L80 tubing as workstring.
- 9. If cleanout is necessary, PU and RIH with 4 ³/₄" MT bit on 2 ⁷/₈" WS. Tag and record fill depth. RU power swivel and clean out to 7435' with foam/air unit (continue to supplemental procedure and in accordance with attached SOG).

Recover and send samples in a timely manner to Baker Chemical rep and ALCR for analysis (if possible at location). Discuss treatment recommendation with Chemical rep and ALCR. If there is evidence of sulfate scale treat well accordingly; otherwise, continue per procedure.

10. POOH with 2 ⁷/₈" WS and bit. LD bit.

SET RBP AND ADDING PERFORATIONS: - 5,060'-5,086'- (New perfs)

- 11. PU 5 ½" RBP and 5 ½" packer. GIH on 2 7/8" L80 tubing to 5,200' (approx 898' above top of existing perfs of 6,098'). Set RBP at 5,200'. Release from RBP, pull up and set packer above RBP. Test down tubing to RBP to 250/1000 psi. Test backside to 250/500 psi. (Record pressure tests in WellView under Time Log and safety/inspections). Notify WE if pressure doesn't hold.
- 12. If casing leaks, release packer and move uphole to isolate casing leak. Once leak is isolated, establish an injection rate and pressure into the leak (If it can be safely done). Notify WE and casing repair procedure will follow. TOH and LD packer. Dump 10' of sand down casing to settle onto RBP.
- 13. If casing tested good, TOH standing back 2 7/8" workstring and packer. Dump 10' of sand down casing to settle onto RBP.
- 14. MIRU Apollo wireline unit. Install 5M lubricator and test to 250/1000 psi. Bleed off pressure.
- 15. Establish radio silence and set up exclusion zone around WL unit. GIH w/ 3 ¹/₈" High Performance expendable Gun (EXP 3321-421T), 4 spf, 21 g charge, 90 deg phasing and perforate 5,060'-5,086'– (New perfs), per Apollo Perforators Inc. recommendation. Correlate to GR on "Spectral Density Dual Spaced Neutron Spectral Gamma Log" 01/04/1994.
 - Note: Hole Diameter/penetration length: 0.43" entry and 47.576" normalized penetration.
- 16. POOH w/ perforating guns and verify that all shots were fired. ND Lubricator. RD and release wireline unit
- 17. PU/RIH with ball catcher and 10K 5 ½" AS-1X treating packer, on-off tool w/ 2.25 'F' hardened profile nipple and blast joint on 2 7/8" 6.5# L80 workstring. Hydrotest tubing to 7,000 psi while RIH. Set packer at 4,900' (~ 160' above top proposed perfs at 5,060'-5,086'). Test connection on frac stack/tubing to 7,000 psi. Pressure test annulus/pkr to 250/500 psi. Nipple up 10K frac stack to BOP. Land FS on BOP and test flanged connection to 250/500 psi.
- 18. RDMO pulling unit if necessary.

FRAC OPERATION:

- 19. MIRU Petroplex. Conduct safety meeting and set up an exclusion zone around treating lines. RU choke manifold to open top flowback tank. Test lines and equipment to 7000 psi. Pressure up backside to 500 psi. Monitor tubing/casing annulus pressure throughout acid job. Bleed off if casing pressure exceeds 500 psi or flush and shut down if communication occurs. Set pop-off valve to 5,800 psi. Maximum surface pumping pressure of 5800 psi.
- 20. Acid-Frac Paddock from 5,060'-5,086'- (New perfs) with 20,000 gals 20% HCl acid using ball sealers as per the attached procedure at a maximum rate of 20 BPM and a maximum surface pressure of 5800 psi. Pump job as follows (refer to attached Petroplex procedure).

21. Flush acid to bottom perforations. SI well for 1 hour allowing acid to spend. Record ISIP, 5, 10, & 15 minute SIP's. RD & release Petroplex Services.

RIG UP WORKOVER UNIT AND TEMPORARY FLOWBACK

- 22. MIRU workover unit if not already on location.
- 23. Open well and Flow back well through choke manifold until well dies. Bring well on at 20 bbls/hr and bring up to 50 bbls/hr over the first 12 hours. Continue flowing until well is dead or returns can be put into the flowline.

PREP FOR RIG DOWN AND TURNOVER TO PRODUCTION

- 24. Bullhead scale inhibitor into perfs per Chemical rep recommendation. Flush scale inhibitor per Chemical rep recommendation. SI to soak overnight.
- 25. ND frac valve, release treating packer, POOH and lay down 5 ½" packer and 2 $^{7}/_{8}$ " WS.

Note: RBP will remain in the well

- 26. PU and RIH with production tubing as per ALCR recommendation.
- 27. ND BOP, set TAC per ALCR recommendation and NU WH.
- 28. RIH with rods, weight bars and pump per ALCR recommendation. RDMO pulling unit and other surface equipment.
- 29. Turn well over to production (see contacts on first page of procedure).

FOAM / AIR CLEANOUT PROCEDURE

- This procedure is an addition to the original procedure.
 - 1. Install flowback manifold with two chokes. All components on flowback manifold must be rated to at least 5,000 psi. If possible, flowback manifold components should be hydrotested before delivery. Hardline pipes from 2" casing valve to manifold to half pit with gas buster. Set up an exclusion zone around flowback line.
 - 2. Install flowback tank downwind from rig.
 - 3. Position Air unit upwind from Rig next to water tanks. Have vacuum truck on standby to empty halfpit. (if needed)
 - 4. RIH with 4 $^{3}/_{4}$ " MT bit, four (3 $\frac{1}{2}$ ") drill collars on 2 $^{7}/_{8}$ " 6.5# L-80 WS.
 - NU stripper head with <u>NO Outlets</u> (Check stripper cap for thread type course threads preferred). Stripper head to be stump tested to 1,000 psi before being delivered to rig. Check chart or test at rig.
 - RU foam air unit. Make quality foam on surface before going down hole with foam/air. Install flapper float at surface before beginning to pump. Break circulation with foam/air. Evacuate fluid from well.

Pump high quality foam at all times. Do not pump dry air at any time. Fluid injection rates will generally be above 12 gallons per minute

Whenever there is pressure on the stripper head, have a dedicated person continuously monitor pressure at choke manifold and have a dedicated person at accumulator ready to close annular BOP in case stripper leaks. Do not allow pressure on stripper head to exceed 500 psi. If pressure cannot be controlled below 500 psi, stop pumping, close BOP and bleed off pressure.

- 7. Clean out fill to 7435' with low RPM's rotation and circulation, always keep pipe moving. Short trips can be beneficial to hole cleaning. Circulate well clean for at least 1 hour at the end of the day and pull up above the perforations before shut down for night. If the foam/air unit goes down, pull above the perforations.
- 8. When tripping out of hole, have special float bleed off tool available to relieve trapped pressure below float.

Ensure that high quality, stiff foam is pumped while circulating the fill. Stiff foam is required to prevent segregation while circulating. Monitor flow and pressures carefully when cleaning out.

Before rigging up power swivel to rotate, carefully inspect Kelly hose to ensure that it is in good condition. Ensure that swivel packing is in good condition.

Continue on with original procedure for completion.

Well: G.W. Sims #1

Field: N Teague

Reservoir: Tubb, Drk-Abo

Location:

510' FNL & 2230' FEL

Section: 9 Township: 23S

Range: 37E Unit:B County: Lea State: NM

Elevations:

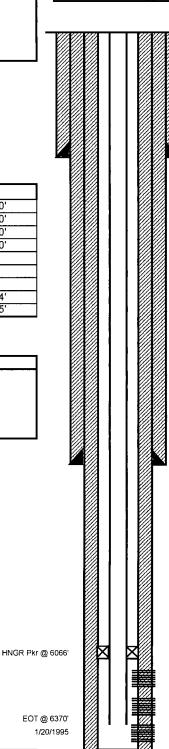
GL: 3310' KB: 3324' DF:

Log Formation	Горѕ
Anhydrite	1130'
Yates	2670'
Queen	3400'
Glorieta	5040'
Blinebry	
Tubb	
Drinkard	
Abo	6634'
Devonian	7515'

TUBING DETAIL

2 3/8" Tubing

<u>Current</u> Wellbore Diagram



Well ID Info:

Chevno:

OU1962

API No:

30-025-32223

Spud Date:

12/19/1993

Rig Released: Compl. Date: 1/4/1994 11/25/1994

Surface Csg: 11-3/4" 42# Csg

Set: @ 1180 w/750 sx cmt

Hole Size: 14-3/4" to 1180'

Circ: Yes TOC: Surface

TOC By: Circulation (240 sxs)

Initial Completion:

Devonian Perfs: 7515'-7691', 2 JSPF, 112 holes. Set CIBP @

7470'. Capped w/35' cmt. Devonian formation P&A'd.

Abo Perfs: 6634'-6995', 2 JSPF, 120 holes. Acdz w/ 3500 gals.

15% NEFE & 15000 gals foamed 20% HCL. (shut-in).

Drk Perfs: 6424'-6574', 2 JSPF, 124 holes. Acdz w/5250 gals

15% NEFE & 20,500 gals foamed 20% HCL.

ubsequent Work

7-22-97 Cut over Pkr @ 6370'. Recov all fish, acdz Tubb perfs, & Drk/Abo perfs w/ Sonic hammer. Too much fluid f/Plunger lift sys. Install Pmp'ng ut. Producing Tubb-Drk/Abo zones, DHC # 1580

Intermediate Csg: 8-5/8" 32# Csg Set: @ 3750' w/1775 sx cmt Hole Size: 11" to 3750' Circ: Yes TOC: Surface TOC By: Circulation (664 sxs)

Prod. Csg: 5-1/2" 15.5# & 17# Csg

Set: @ 7750' cmt w/1800 sxs

Hole Size: 7-7/8"

Circ: Yes TOC: Surface DV Tool @ 6946' TOC By: Circ 320 sxs

Perfs

Status:

6098'-6244' - 2 JSPF, 148 holes

Tubb DHC

6424'-6574' - 2 JSPF, 124 holes

Drinkard DHC

6634'-6995' - 2 JSPF, 198 holes

Aho DHC

CIBP @ 7470' Capped w/35' cmt

1/18/1994

7515'-7691' - 2 JSPF, 112 holes

Devonian Plugged

Updated: 08-29-13 by Prasanna Chandran

PBTD: 7435"

Well: G.W. Sims # 1

Field: N Teague

Reservoir: Tubb, Drk-Abo, & LOTZIETA

Location:

510' FNL & 2230' FEL

Section: 9 Township: 23S

Range: 37E Unit:B County: Lea State: NM

Elevations:

GL: 3310' KB: 3324' DF:

Log Formation	Tops
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Yates	2670'
Queen	3400'
Glorieta	5040'
Blinebry	
Tubb	
Drinkard	
Abo	6634'
Devonian	7515'

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Prod. Csg: 5-1/2" 15.5# & 17# Csg

Set: @ 7750' cmt w/1800 sxs

Hole Size: 7-7/8"

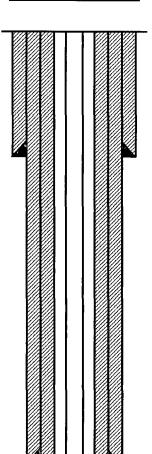
Circ: Yes TOC: Surface

DV Tool @ 6946' TOC By: Circ 320 sxs

> PBTD: 7435" TD: 7750'

Updated: 08-29-13 by Prasanna Chandran

<u>Proposed</u> <u>Wellbore Diagram</u>



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Chevno:

OU1962

API No:

30-025-32223

Spud Date:

12/19/1993

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Circ: Yes TOC: Surface TOC By: Circulation (664 sxs)

Glorieta

5060'-5086'

Glorieta

(Proposed -4 spf Perf and Acid Frac)

RBP @ 5200'

Perfs

Status:

6098'-6244' - 2 JSPF, 148 holes

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