Submit 1 Copy To Appropriate District Office	State of New Mexico	Form C-103
District I – (575) 393-6161 Energy, Minerals and Natural Resources  1625 N. French Dr., Hobbs, NM 88240 B3S OD  District II – (575) 748-1283 811 S. First St., Artesia, NM 88210  District III – (505) 334-6178 MAY 1000 Rio Brazos Rd., Aztec, NM 87410 6 3 2013  Energy, Minerals and Natural Resources  1220 South St. Francis Dr.		Revised August 1, 2011 WELL API NO.
		30-025-30824 5. Indicate Type of Lease
		STATE FEE 6. State Oil & Gas Lease No.
District IV – (505) 476-3460  1220 S. St. Francis Dr., Santa Fe, NM  87505  RECENSE		o. State on & Gas Lease No.
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		7. Lease Name or Unit Agreement Name WEST DOLLARHIDE DRINKARD UNIT
PROPOSALS.)  1. Type of Well: Oil Well Gas Well Other INJECTION		8. Well Number 102
2. Name of Operator CHEVRON U.S.A. INC.		9. OGRID Number 4323
3. Address of Operator		10. Pool name or Wildcat
15 SMITH ROAD, MIDLAND TEXAS 79705 DOLLARHIDE TUBB DRINKARD  4. Well Location		
Unit Letter K : 2446 feet from	the SOUTH line and 1342	feet from the WEST line
Section 32 Township		MPM County LEA
II. Elevatio	on (Show whether DR, RKB, RT, GR, et	c.)
12. Check Appropriate	Box to Indicate Nature of Notice	e, Report or Other Data
NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF:		
PERFORM REMEDIAL WORK ☐ PLUG AND TEMPORARILY ABANDON ☐ CHANGE P		RK
PULL OR ALTER CASING   MULTIPLE		
DOWNHOLE COMMINGLE		
OTHER: CLEAN OUT, ACIDIZE & SAND FRAC		
<ol> <li>Describe proposed or completed operation of starting any proposed work). SEE RU proposed completion or recompletion.</li> </ol>		and give pertinent dates, including estimated date ompletions: Attach wellbore diagram of
Chevron U.S.A. intends to clean out acidize & san	d frac stimulate subject well.	
Please find attached the intended procedure, well bore diagram and C-144 w/info.		
riease find attached the intended procedure, well bore diagram and C-144 w/into.		
•		
Spud Date:	Rig Release Date:	
Spud Date.	Rig Release Date.	
I hereby certify that the information above is true a	and complete to the heat of my knowled	les and haliaf
Thereby certify that the information above is true a	and complete to the best of my knowled	ige and benef.
SIGNATURE Scottage	TITLE Permit Specialist	DATE 04/29/2013
Type or print name Scott Haynes E-mail address: toxo@chevron.com		<u>com</u> PHONE: 432-687-7198
For State Use Only	1/2-1-	
APPROVED BY: Conditions of Approval (if any):	TITLE DIST NEW	DATES -6-2013
Conditions of Approval (II arry).		MAY 06 2013

# Workover Procedure West Dollarhide Drinkard Unit Dollarhide Field

## <u>WBS # UWDOL - R3</u> <u>WDDU 102</u>

API No: 30-025-30824

04/04/2013

CHEVNO: KZ1045

Description of Work: Cleanout, Acidize and Sand Frac stimulate the Drinkard/Abo

**Current Hole Condition:** 

Total Depth: 6948'

PBTD: 6864'

GL:

KB: +14'

Casing Record:

11-3/4" 42# csg set @ 1200' w/ 1050 sx; circ 140 sx 8-5/8" 32# S-80 & K-55 csg set @ 3900' w/ 2350 sx, circ 5-1/2" 15.5 & 17# csg, set @ 6950' w/ 1500 sx cmt in 2 stgs, circ

**Existing Perforations:** 

<u>Drinkard</u>: 6442-6614' Abo: 6650-6781'

### **CONTACT INFORMATION:**

Jamie CastagnoProduction EngineerCell: 432-530-5194Femi EsanGeologistPh: 432-687-7731Jonathan PaschelD&C EngineerCell: 432-557-1464Phillip R MinchewALCRCell: 432-208-3677Aaron DobbsProduction SpecialistCell: 505-631-9071

### **REGULATORY REQUIREMENTS:**

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

Prepared by: Jamie Castagno (04/04/13) Reviewed by: Jonathan Paschel (4/19/13)

This procedure is meant to be followed. It is up to the WSM, Remedial Engineer and Production Engineer to make the decisions necessary to do it safely and do what is best for the well. In the extent that this procedure does not reflect actual operations, please contact RE, PE and Superintendent.

- 1. Complete rig move checklist. Check road, ensure anchors have been tested in the last 24 months, and verify powerline for need of variance ahead of time.
- 2. MIRU. Bleed well down or kill as necessary. Record SICP and SITP. TOOH with rods & pump laying down. Note: Inspect rods while POOH for damage and plan ahead of time to replace.
- > Caliper elevators and tubular EACH DAY prior to handling tubing/tools and anytime size changes. Note in JSA when and what items are callipered within the task step that includes that work.
- 3. Kill well and monitor. ND wellhead. Release TAC, NU dual Hydraulic BOP with blind rams on bottom and 2-7/8" pipe rams on top. LD 1 joint, PU/RIH with 5-1/2" 15-17# rated packer and set it ~ @ 25', test BOP pipe rams to 250 psi/ 1000 psi. Note testing pressures on wellview report. Release and LD packer.
- 4. TOOH scanning 2-7/8" production tubing per attached tubing detail. Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Tally out with tubing and LD bad joints (green and red).
- 5. PU/RIH with 4-3/4" MT bit on 2-7/8" on good production tubing. Tag and record fill depth. PU power swivel, C/O to PBTD (6864') and circulate well clean. Acquire additional tubing if necessary to supplement production tubint.
  - 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.
- 6. POOH/LD bit.
- 7. PU/RIH with 5-1/2" treating PKR on 2-7/8" tubing hydrotesting all tubing (including any new joints) to 6000 psi (5000# if WS is used). Set PKR @  $\sim$  6400'. Load backside and pressure test to 500 psi.
- 8. If recommended by chemical rep, spot scale converter/water mix across all CLFK perfs per chemical rep recommendation. SI to soak scale converter overnight.
  - a. Swab back load of scale converter.
- 9. MIRU acid contractor. Conduct safety meeting, set up an exclusion zone. RU choke manifold to open top flowback tank. Test lines and equipment to 5500 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 5500 psi. Maximum surface pumping pressure of 5800 psi.
- 10. Acidize Clfk perforations from 6442-6781' with 12,000 gal 15% NEFe HCl in 4 stages dropping GRS between stages to divert at 1-2 PPG per attached Petroplex procedure.

- a. Load tubing and establish injection rate. Pump 3,000 gal acid (~72 bbls).
- b. Pump 1000# GRS in Gelled Brine-Water.
- c. Pump 3,000 gal acid. Monitor pressure for salt action.
- d. Pump 1000# GRS in Gelled Brine-Water...repeat for a total of 4 acid stages and 3 GRS.
- 11. Flush tubing to bottom perforations. SI well for 1 hour allowing acid to spend. Record ISIP, 5, 10, & 15 minute SIP's.
- 12. Swab or flow back to recover 100% of treatment and load volumes or until returns indicate formation fluid and not spent acid, if possible. Kill tubing if necessary. Report acid volumes and pressures on morning wellview report.
- 13. Release treating packer, POOH and LD packer. PU/RIH with notched collar and C/O any rock salt to PBTD (6864'). Circulate well with fresh water to dissolve remaining GRS. POOH/LD tubing laying down..
- 14. Close blind rams. Change pipe rams from 2-7/8" to 3-1/2". Test BOP w/ 5-1/2" 15-17# rated tension set packer to 250/1000 psi for 5 minutes each. LD packer.
- 15. PU/RIH with 10K 5-1/2" AS-1X treating packer, on-off tool, hardened profile nipple and blast joint on 3-1/2" 9.3# L-80 workstring. Hydrotest tubing to 8000 psi while RIH. Set packer at 6330' (approx 110' above top perfs). Pressure test annulus to 500 psi. Nipple up 10K frac valve to BOP. Test frac valve to 8500 psi.
- 16. RDMO pulling unit.
- 17. Prior to job, verify compatibility with Service Company of all frac fluids to reservoir fluids at temperature of 135 ° F. Send results to Production and Remedial Engineers.
- 18. RU flowback crew if location permits. MIRU frac equipment. Conduct safety meeting and set up an exclusion zone. Install pop-off valves downstream of frac crew check valve with manually operated valve below pop-off. Test all service company pressure shutdowns on each pump truck and surface lines to 8000 psi. Set pop-off in pump to less than 8,000 psi. Install pop-off on 5-1/2" x 3-1/2" annulus and set to 500 psi. Pressure to 300 psi and monitor during frac job.
- 19. Establish pump rate into perforations with treated water. Complete sand fracture treatment as per attached frac procedure.

#### DO NOT OVERDISPLACE (EVEN TO TOP PERF) UNDER ANY CIRCUMSTANCES.

- 20. RDMO frac crew. Shut in at least 24 hours to allow sand to cure and X-linked fluids to break.
- 21. 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.
- 22. MIRU pulling unit. Test 3-1/2" pipe rams to 500 psi against packer.
- 23. ND frac valve, release packer, and circulate kill weight fluid. POOH and lay down 5-1/2" packer and 3-1/2" WS.

- Caliper elevators and tubular EACH DAY prior to handling tubing/tools and anytime size changes. Note in JSA when and what items are callipered within the task step that includes that work.
- 24. Close Blind rams. Change 3-1/2" to 2-7/8" pipe rams. Open blind rams. PU/RIH and set 5-1/2" 15-17# rated packer @ ~ 25' to test 2-7/8" pipe rams to 250 psi / 1000 psi. Release and LD packer.
- 25. PU/ RIH with 4-3/4" skirted mill tooth bit (bear claw if no bad casing was found) on good 2-7/8" production tubing. Tag top of sand and drill out any sand that has set up in wellbore to PBTD. Circulate well clean. POOH and LD bit and BHA.
- 26. PU 5-1/2" treating PKR on 2-7/8" production tubing. RIH and set PKR @ ~6400'. Bullhead scale inhibitor into perfs per Chemical rep recommendation. Flush scale inhibitor per Chemical rep recommendation. SI to soak overnight.
- 27. Release PKR. POOH & LD PKR.
- 28. PU and RIH with production tubing as per ALCR recommendation.
- 29. ND BOP, set TAC per ALCR recommendation and NU WH.
- 30. RIH with rods, weight bars and pump per ALCR recommendation. RDMO pulling unit
- 31. Turn well over to production (see contacts on first page of procedure).

#### West Dollarhide Drinkard Unit #102 Location: 2446' FSL & 1342' FWL, Sec 32, Township 24S, Range 38E Lea, NM DATE CHKD: Apr. 04, 2013 API: 30-025-30824 LEASE/UNIT: West Dollarhide Drinkard ChevNo: KZ1045 BY: J. Castagno COUNTY: Lea WELL: #102 STATE: New Mexico SPUD DATE: 12/7/1990 KB = 14' COMP. DATE: 1/21/1991 Elevation = **CURRENT STATUS:** Producing Well (Rod Pump) TD = 6948' ETD = 68641 **Initial Completion** Perf & acdz 6659-6781' w/ 4200 gal 15%. Perf & acdz 6442-6614' w/ 6200 gal 15% Subsequent Work 09/1996: Acdz w/ 5000 gal 15%. Acdz Drinkard perfs w/ 24,000 gal 20% acid & 42,000 gal foam. 02/1998: CO fill 6830-6864'. Re-perf DRKD 6450-6759'. Acdz w/ sonic 12/1999: Acdz perfs w/ sonic hammer w/ 5000 gal 15%. Scale sqz. 11-3/4" 42# csg set @ 1200' w/ 1050 sx; 12/2004: Sonic Hammer acid & scale sqz 11/2011: HIT; last pull TUBING DETAIL (Run in Hole) Sure Plan TBG 2 7/8" 6.5# J-55 6,270.12 2 7/8 EUE 8 RD 8-5/8" 32# S-80 & K-55 csg set @ 3900' w/ TBG SUB 6.5# J-55 2 7/8 EUE 8 RD 4,10 TBG 6.5# J-55 2350 sx. circ 61.48 2 7/8 EUE 8RD 2 7/8" X 5 1/2" TAC 2 7/8 EUE 8 RD 2.92 TBG 2 7/8" 6.5# J-55 376.80 TBG 2 7/8" 6.5# J-55 PICD TK-99 2 7/8 EUE 6 RD 62.00 2 7/8" SS MECH SN 2 7/8 EUE 8RD 0.85 TBG SUB 6.5# J-55 2 7/8" EUE 8RD 20.00 KELLY BUSHING 14,00 FINAL HANGING DEPTH: 6,812.27 DEPTH SUMMARY ROD DETAIL(Run in Hole) 6792.27 6,352.62 6812.27 WCN ROD SUB 1" WCN-78 52 1300 D 1" WCN-78 W GUIDES 3 PER 8 200 D 7/8 WCN-78 78 1950 D WCN-78 124 3100 D 3/4" 200 `1 3/4' 8 С SINKER BARS GUIDED ROD SUB Drinkard: 6442-44', 50-61', 64-75', 79-84', 96-6509', 14-16', 26-34', 43-44', 58-64', 88-90', 6612-14' w/ 1 JSPF (63 holes) Re-Perf (02/98): 6450-61', 64-75', 92-6509', 26-34' w/ 2 JSPF (94 holes) Upper Abo: 6659-65', 75-78', 87-89', 6732-34', 37-40', 49-50', 56-59', 64-67', 71-73', 79-81' w/ 1 JSPF (27 holes) Re-Perf (02/98): 6650-68', 75-79', 6732-59' w/ 2 JSPF (98 holes) 5-1/2" 15.5 & 17# csg, set @ 6950' w/ 1500 sx cmt in 2 stgs, circ PBTD 6864 Apr. 12, 2013