Submit 1 Copy To Appropriate District Office	Sta	ite of New Mexi	co ·	•	F	orm C-103
<u>District I</u> – (575) 393-6161	<b>lOBBS (Ener</b> gy, Mir	nerals and Natural	Resources			August 1, 2011
1625 N. French Dr., Hobbs, NM 88240				WELL API		
District II – (575) 748-1283 811 S. First St., Artesia, NM 88210	AY 03 POIL CON	SERVATION D	IVISION	30-025-3082		
<u>District III</u> = (505) 334-6178	1220	South St. Franci	s Dr.	STAT	Type of Lease TE ☑ FEE	
1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> – (505) 476-3460	Na:	nta Fe, NM 8750	05		& Gas Lease No.	
District IV – (505) 476-3460 1220 S. St. Francis Dr., Santa Fe, NM 87505	RECEIVED	·		3. S <b></b> 3		
	TICES AND REPOR				me or Unit Agreer	
(DO NOT USE THIS FORM FOR PRO DIFFERENT RESERVOIR. USE "APP PROPOSALS.)				UNIT	LARHIDE DRINI	KARD
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2. Name of Operator CHEVRON U.S.A. INC.	<del></del>			9. OGRID N	Number 4323	
3. Address of Operator 15 SMITH ROAD, MIDLAND	TEXAS 79705				ne or Wildcat DE TUBB DRINI	KARD /
4. Well Location						
	541 feet from the	SOUTH line a	nd 1380 fee	et from the	EAST line	
Section 32	Township 24S		38E NMP		County LEA	
Section 32		now whether DR, R		141	County ELA	
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12. Check	k Appropriate Box	to Indicate Nati	ure of Notice, I	Report or O	ther Data	
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Chevron U.S.A. intends to clean of	out acidize & sand fra	c stimulate subject	well ·			
Chevron C.S.71. Intends to clean C	out delaize & sand ira	e simulate subject	wen.			
Please find attached the intended	procedure, well bore of	liagram and C-144	w/info.			
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Spud Date:		Rig Release Date:	:			
·		C				
I hereby certify that the information	on above is true and c	omplete to the best	of my knowledge	and belief.		
- 111						
SIGNATURE STATE	G.D	_ TITLE Permit	Specialist		DATE 05/01/20	013
OIGHATORE VI	<i>y</i> <b>▽</b> · -	_ IIILLE FOIIIII	Брестаны		DATE 03/01/20	J1J
Type or print name Scott Hayne	s	E-mail address: t	oxo@chevron.com	<u>n</u>	PHONE: 432-68	7-7198
For State Use Only		/	,			
APPROVED BY:	1	TITLE DE	+ pros	•	DATE 5-6	2013
Conditions of Approval (if any)	The same of the sa	_IIILE	- IVRTE		_DATE <u>~</u> ~	X
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# Workover Procedure West Dollarhide Drinkard Unit Dollarhide Field

## <u>WBS # UWDOL - R3</u> <u>WDDU 104</u>

API No: 30-025-30826

04/04/2013

CHEVNO: KZ1044

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

**Current Hole Condition:** 

Total Depth: 6955'

PBTD: 6900'

GL: 3184'

KB: +18'

Casing Record:

11-3/4" 42# H-40 ST&C 8rd csg set @ 1200' w/ 1000 sx, Circ. 250 sx. 8-5/8" 32# K-55 ST&C 8rd csg set @ 4000' w/ 1450 sx cmt, Circ. 213 sx. 5-1/2" 15.5 & 17# L-80 & K-55 LT&C csg set @ 6955' w/ 1300 sx in 2 stgs, Circ.250 sx.

**Existing Perforations:** 

<u>Drinkard</u>: 6484-6634' Abo: 6679-6883'

#### **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 (4/2313)

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. POOH 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. POOH scanning and laying down 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 plan to replace bad joints (green and red).
- 5. PU/RIH with 4-3/4" MT bit on 2-7/8" L-80 6.5# WS. Tag and record fill depth. PU power swivel, C/O to PBTD (6900') and circulate well clean. Plan on making a run with a mill if necessary.

Note: 2013 workover hit tight spots @ 5898-99', 6694-95' & 6735'.

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. Set PKR @ ~ 6425'. Load backside and pressure test to 500 psi.
- 8. If recommended by chemical rep, spot scale converter/water mix 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 6000 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 6484-6883' 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 (6900'). Circulate well with fresh water to dissolve remaining GRS. POOH/LD tubing.
- 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 6375' (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.
  - \*Frac to include tracers, to be set up by ProTechnics and logged after cleanout
- 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 allwo 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 @  $\sim$  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 MT bit on 2-7/8" WS (production tubing is acceptable if casing issues were not observed during frac prep). 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" tubing and RIH. Set PKR at 6425'.
- 27. MIRU ProTechnics logging. RIH and log tracers. Correlate with Perf log dated 01/07/00.
- 28. RDMO ProTechnics.
- 29. Bullhead scale inhibitor into perfs per Chemical rep recommendation. Flush scale inhibitor per Chemical rep recommendation. SI to soak overnight.
- 30. Release PKR. POOH & LD PKR.
- 31. PU and RIH with production tubing as per ALCR recommendation.
- 32. ND BOP, set TAC per ALCR recommendation and NU WH.
- 33. RIH with rods, weight bars and pump per ALCR recommendation. RDMO pulling unit
- 34. Turn well over to production (see contacts on first page of procedure).

## West Dollarhide Drinkard Unit #104

Location: 2541' FSL & 1380' FEL, Sec 32, Township 24S, Range 38E Lea, NM

LEASE/UNIT: West Dollarhide Drinkard COUNTY: Lea

API: 30-025-30826 ChevNo: KZ1044

DATE CHKD: Feb. 04. 2013

J. Castagno #104

WELL: STATE:

New Mexico

SPUD DATE: COMP. DATE: **CURRENT STATUS:**  1/31/1991

3/12/1991

Producing Well (Rod Pump)

11-3/4" 42# H-40 ST&C 8rd csg. set @ 1200' w/ 1000 sx., Circ. 250 sx.

KB = 18'

Elevation = 3184' GL

TD = 6955' ETD = 6920'

**Initial Completion** 

Perf & Acdz DRKD 6484-6634' & Abo 6679-6883' w/ 16,200 gals 15% & 1750# GRS in 2 stgs

PT: 230 bo/ 217 bw/ 117 mcf

**Subsequent Work** 

09/1995 Sand Frac: Set CIBP @ 6660' w/ 10' cmt. (New PBTD 6650') . Sand frac DRKD zone w/ 43,500 gal YF-40 w/ 123,500# 20/40 sand (3-8 ppg) & 36,000#

07/1998 Acdz: CO heavy scale f/ 5501-6620'. Very hard drlg f/ 6620-31'; recovered sulfate scale & small amt of frac sand. Wash DRKD perfs thru perf clean tool

01/2000 Re-Perf, Acdz: RIH w/ bit & scraper to 6646'. Perf DRKD 6484-6564'. Acdz 6484-6634' w/ 6000 gal 15% & 1000# GRS.

**06/2000 DO CIBP**: Drill sand, cmt to 6658'. DO CIBP, chase to 6675'. Push to 6677'. Getting perf debris, plug, sand & scale in returns. Drill to 6727'; getting sand, scale &junnk (brass). Mill on junk & CIBP, push to 6920' (New PBTD), recover frac sand & scale.

02/2013: Hit tight spot @ 5793' while POOH. Cut tbg @ 5828'. Swedge csg 5898-99' multiple times. Recover fish. Tag fill @ 6694'. Make no hole w/ bailer, switch to taper mill. Mill 6694-95'; tight spot @ 6735'. Stop making hole @  $\!\!\!$ 6900. RTP.

8-5/8" 32# K-55 ST&C 8rd csg. set @ 4000' w/ 1450 sx. cmt., Circ. 213 sx.

KELLY BUSHING

TUBING DETAIL (Run in Hole)

Equipment	Siza	EUE Plain	Throade	No. Jointr	Foot Tonthe
2 7/8" J-55 6.5# Tbg	27/8	EUE	8 RD	182	5,896.82
2 7/8" X 5 1/2"	27/8	EUE	8RD		2.75
2 7/8" J-55 6.5# Tbg	27/8	EUE	8 RD	30	943.30
2 7/8" J-55 6.5# Tbg TK99	27/8	EUE	8 RD	1	32.34
2 7/9" SN	27/8	EUE	8 RD		0.85
3 1/2" Slotted BPMAJ	31/2	EUE	8 RD	1	25.56
		I		i .	i

ROD DETAIL(Run in Hole)

		1	
1"	1" Rod Subs 2- 6	2	8
1"	1" Rods	78	1950
7/8"	7/8" Rods	80	2000
3/4"	3/4" Rods	110	2750
1 3/4"	1 3/4" Sinker Bars	8	200
1"	1" Guided Sub		4
	2 1/2" X 1 1/4" X 24' Insert		24
	w/gas anchor		
	1" 1" 7/8" 3/4" 1 3/4"	1" 1" Rod Subs 2- 6  1" 1" Rods  7/8" 7/8" Rods  3/4" 3/4" Rods  1 3/4" 1 3/4" Sinker Bars  1" 1" Guided Sub  2 1/2" X 1 1/4" X 24' Insert	1" 1" Rod Subs 2- 6 2 1" 1" Rods 78 7/8" 7/8" Rods 80 3/4" 3/4" Rods 110 1 3/4" 1 3/4" Sinker Bars 8 1" 1" Guided Sub 2 1/2" X 1 1/4" X 24' Insert

Manufacturer

DRKD: 6484-88', 91-6509', 12-20', 29-32', 48-53', 58', 61-64', 67-72', 77-94', 6608-10', 21', 31-34' 01/00 DRKD: 6484-88', 91-6509', 12-20', 28-33', 46-53', 65-64 w/ 2 JSPF (90 - .42" holes) ABO: 6679-81', 86-88', 96-99', 6709-14', 16-22', 31-34', 65-67', 71', 80-94', 97-6802', 05-08', 30-34', 42-46', 58-68', 73-77', 79-83

5-1/2" 15.5 & 17# L-80 & K-55 LT&C csg. set @ 6955' w/ 1300 sx. in 2 stgs, Circ.250 sx.

PBTD 6900'

Apr. 29, 2013