

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

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

Form C-103  
Revised August 1, 2011

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (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. 30-025-30825
1. Type of Well: Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator CHEVRON U.S.A. INC.		6. State Oil & Gas Lease No.
3. Address of Operator 15 SMITH ROAD, MIDLAND, TEXAS 79705		7. Lease Name or Unit Agreement Name WEST DOLLARHIDE DRINKARD UNIT
4. Well Location Unit Letter J: 2577 feet from the SOUTH line and 2510 feet from the EAST line Section 32 Township 24-S Range 38-E NMPM County LEA		8. Well Number 103
11. Elevation (Show whether DR, RKB, RT, GR, etc.)		9. OGRID Number 4323
10. Pool name or Wildcat DOLLARHIDE DRINKARD		

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 ☐

SUBSEQUENT REPORT OF:

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

OTHER ADDRESS CASING ISSUE - CLEAN OUT, RUN LINER

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.

IN DECEMBER, 2012, ATTEMPTS WERE MADE TO SQUEEZE A CASING LEAK @ 4462-77. AFTER THE THIRD ATTEMPT, BADLY COLLAPSED CASING WAS DISCOVERED AT 4660'. CHEVRON PROPOSES TO DRILL/MILL OUT THIS BAD CASING & CLEAN OUT THE WELL TO PBTD @ 6640, THEN RUN & CEMENT A 4 1/2" FJ LINER FROM 6100' TO SURFACE BEFORE RETURNING THE WELL TO PRODUCTION.

PLEASE FIND ATTACHED, THE INTENDED PROCEDURE, WELLBORE DIAGRAM, & C-144 INFORMATION.

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 Denise Pinkerton TITLE REGULATORY SPECIALIST DATE 05-07-2013

Type or print name DENISE PINKERTON

E-mail address: leakejd@chevron.com PHONE: 432-687-7375

For State Use Only

APPROVED BY [Signature] TITLE Dist. Mgr DATE 5-14-2013  
Conditions of Approval (if any):

MAY 20 2013

chm

**Workover Procedure  
West Dollarhide Drinkard Unit 103  
Dollarhide Field**

**WBS #: UWDOL-R2349**

**Supplemental procedure**

**API No: 30-025-30825**  
**CHEVNO: KZ1043**

**02/11/13**

**Description of Work:** Address casing issue. Evaluate well to P&A or remediate well.

**Current Hole Condition:** TA. Inactive.

Total Depth: 6905'                      PBSD: 6637'                      GL: 3199'                      KB: +13'

Casing Record:                      11-3/4" 42# H-40 @ 1200' w/ 1,050 sx, circ 150 sx  
   5-1/5" 15.5 & 17# K-55 & L-80 @ 6905' w/ 4100 sx, Circ 355 sx  
   DV Tool @ 4,032

Other in the hole:

CIBP @ 6640'

RBP @ 2040'. *Wellview does not indicate sand was dumped on top of RBP.*

Existing Perforations:    Tubb: 6166-6436'  
   Drinkard: 6483-6634'  
   Abo: 6660-6813' (Below CIBP)

**CONTACT INFORMATION:**

Jamie Castagno	Production Engineer	Cell: 432-530-5194
Femi Esan	Geologist	Ph: 432-687-7731
Jonathan Paschel	D&C Engineer	Cell: 432-557-1464
Phillip R Minchew	ALCR	Cell: 432-208-3677
Aaron Dobbs	Production Specialist	Cell: 505-631-9071

Prepared by: Jonathan Paschel (4/22/13)

Reviewed by: Micah Neves

## BACKGROUND INFORMATION:

- A. Fished production tubing through tight spot @ 4465'
- B. Identified casing leak between 4455' to 4498' with influx of sour water, possibly from San Andres formation.
- C. Cement squeeze leak interval under a retainer. Water influx continued
- D. Re-squeeze with sodium silicate. Casing was damaged @ 4660'. Attempted to swage off casing and lost swage from string.
- E. Fished swage. Run camera to 4660' and identified obstruction with possible casing collapsed or split casing leaning to the side.

## Plan of Action:

1. TIH w/ 3-1/8" cone bit, 2 jts 2-3/8" CS Hydril welded together along w/ a 4" string mill.
  - a. Bit passes through
    - i. Mill w/ 4" string mill if necessary to open casing obstruction
    - ii. TOH and TIH w/ same 3-1/8" cone bit and 4-3/4" string mill to mill out to full gauge. Proceed to step 2.
  - b. Bit fails to pass
    - i. TIH w/ 1-1/2" CS hydril w/ mill shoe end and attempt to get through
      1. Pass- proceed w/ continually larger string mills in step 1a
      2. Fail- TIH w/ 4-3/4" concave mill and packed hole assembly.
        - a. Fail-RIH w/ washpipe
          - i. Fail- Being process to P&A wellbore
        - b. Successful- Open hole to full bore w/ mills and proceed to step 2
2. TIH and wireline, set a composite bridge plug above perfs, and dump cement
3. TIH w/ packer and pressure test
4. RIH w/ liner and cement w/ 100% excess
5. Run temperature survey to determine TOC
  - a. Cement circulates – proceed w/ production
  - b. Cement at 4400 or below, perf and attempt to bring up cement top
  - c. Cement above 4400 – proceed w/ production

## PROCEDURE:

1. Ensure location is in appropriate condition, anchors have been tested within the last 24 months, power line distance has been verified to determine if variance is needed.
2. Verify wellhead equipment in WellView, if applicable. Ensure the procedures address any equipment limitations and tools in the hole.
3. MIRU. Record SICP. Well is currently TA'd. Bleed well down or kill as necessary.
- **Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Note in JSA when and what items are callipered within the task step that includes that work.**
- **Rods were removed from well and set to the FMT yard for storage. Production tubing was fished, LD and left on location. Send production tubing to 1788 for inspection and credit.**
4. Monitor well. ND B-1 flange. NU 7-1/16" x 5M Hydraulic BOP w/ 2-7/8" pipe rams. Test BOP seal to 250/500 psi against RBP and blind rams.
5. PU/RIH with retrieving tool on 2-7/8" L-80 6.5# 1-1/2" CS Hydril 3.64# N-80 workstring to ~ 2000'. Circulate packer fluid out of the hole prior to retrieving RBP.

*Note: packer fluid changes wettability of perforations and damages production wells.*

6. Retrieve RBP. POOH/LD RBP and retrieving head.
- **Caliper elevators and tubular EACH DAY prior to handling tubing/tools. Note in JSA when and what items are callipered within the task step that includes that work.**
7. PU/RIH with 3-1/8" milled tooth bit, bit sub, 1 jt 1-1/2" CS Hydril 3.64# N-80, XO to string mill, 4" string mill, 2-7/8" L80 6.5# workstring. TIH to top of obstruction at 4660'.
  - a. All components below the string mill should be tack welded together.
8. Work tubing with tubing tongs and tubing swivel, attempting to go free below 4660' with the 1-1/2" tailpipe.
9. If 1-1/2" tailpipe is run successfully below 4660', attempt to mill on the bad casing and work the 4" mill through. If the 3-1/8" bit will not run past the obstruction proceed to step 9.a. If 4" mill passes, proceed to step 10.
  - a. PU and TIH w/ 2 jts 1-1/2" CS Hydril (mule shoe on bottom), XO to string mill, and 4" string mill. Attempt to work mule shoe'd 1-1/2" tubing through the bad casing. If successful, work 4" mill through bad casing and proceed to step 10.

10. TOOH w/ 4" string mill. TIH w/ 3-1/8" milled tooth bit, 1 jt 2-3/8" tubing, 4-3/4" string mill, and 2-7/8" workstring to 4660'. Ensure all components below the string mill are tack welded together.
11. Tag damaged casing and attempt to work 4-3/4" string mill through collapsed interval. Consult w/ RE if string mill will not pass through the damaged area.
12. TIH and tag CIBP at 6640' milling bad casing if necessary.
13. TOH laying down string mill and bit.
14. MIRU wireline. N/U lubricator and test to 1000 psi. TIH w/ 4.5" gauge ring to 6155'. TIH w/ composite wireline set bridge plug and set at 6150'. Dump 10' of cement on top of the composite plug. RDMO wireline.
15. TIH w/ 5-1/2" 15-17# rated packer and set at 6100'. Pressure test to 2500psi for 10 minutes. Notify RE if test fails. TOH to 4400' and set packer.
16. Pressure test 2-7/8" x 5-1/2" annulus to 500 psi for 10 minutes.
17. Conduct FIT on casing leaks at 4465' and 4660' against the CIBP at 6150 and the packer.
  - a. Use a pump truck to pressure up to 1200psi w/ 10# brine in the hole (hydrostatic of a column of cement). If brine weight is different, consult w/ RE about max pressure.
    - A. Pump to 100 psi.
    - B. Hold for 1 minute
    - C. Without bleeding off, pressure up to 200 psi.
    - D. Hold for 1 minute
    - E. Continue repeating bleed off and hold up to 1200 psi. Consult w/ RE about final leak off pressure to determine if remedial cementing is necessary. If not, proceed to step 18.
18. TIH w/ RBP and set at 1000'. Dump 300 lbs of sand (~11') on top of the RBP. Pressure test to 500 psi for 10 minutes.
19. N/D BOP and old 3M tubing head. N/U new 11" 3M x 11" 3M compatible slip type adapter short spool for landing 4-1/2" liner and 7-1/16" 3M tubing head. Have Vetco Gray on location prior and during the wellhead operation to verify specification.
20. NU 7-1/16" Hydraulic dual BOP with 2-7/8" pipe rams on top and blind rams on bottom. Test BOP blind rams and wellhead seal to 250 psi/ 5000 psi for 5 minutes each against the RBP. Note testing pressures on wellview report. Release, POOH/LD packer.
21. PU/RIH with retrieving tool on 2-7/8" L80 6.5# workstring to 1000'. Wash sand off top RBP. Latch on RBP @ 1000'. Release, POOH/LD top RBP.
22. SI blind rams. Swab 2-7/8" pipe rams to 4-1/2" pipe rams. Prepare location to run liner.

Prep work:

1. Contact casing inspection crew to tally, drift, and clean 4-1/2" 11.6# J55 Ultra FJ casing on location. (120klbs yield, 3.875" drift)
  2. Contact casing crew to run casing and ensure they have slip type elevators
  3. Have an approved metal stabbing board lined up, no wood.
  4. Contact Ultra thread rep (Clint Cave 432-813-6805) to have a representative on location w/ lift nubs, pump in plug, and adapters for cement head
  5. Contact Doug w/ Ultra (432-367-3213 or 432-661-9779) to buck on float collar.
23. Open blind rams. PU and RIH w/ 4-1/2" liner as follows:
- 2 jts 4-1/2" Ultra FJ
  - 4-1/2" Ultra FJ Float Collar (ordered bucked onto 4-1/2" csg jt)
  - 4-1/2" 11.6# Ultra FJ casing w/ sufficient pups. (Land liner w/ end of liner below 6100')
24. Once casing is below 6100', pump 1.5 times casing capacity to ensure casing is clear of obstruction.
25. ND BOP.
26. Land casing in slips and cut off as appropriate in order to N/U Tubing head to secure casing.
27. Pump 1.5 times casing capacity.
28. MIRU cement contractor. Pressure test lines to 4,000 psi.
29. Pump cement job per design attached.
30. Wash up lines on top of plug. Drop wiper plug in 4-1/2" casing string. Record lift pressure on wellview report. Once cement reaches the end of the liner, do not pump more than 1.5 bpm. This is to reduce friction pressure that is exerted on the leaks.
31. Witness displacement and use displacement tubs to track displacement – request that cementer does NOT fill tubs high and suck low. Do not over-displace more than 1/2 of the shoe track volume. Bump plug to 500 psi over final circulating pressure. Release pressure and check floats. If the floats do not hold, hold bump pressure over night.
32. Document number of sacks of cement circulated to surface on wellview report. Collect both a WET and DRY sample of cement.
33. RDMO cementers and shut down for the day. Plan on making a temperature survey first thing in the morning. (more than 6 hours after bumping, but no more than 24)
34. RU slick line. Run a temperature survey on memory tools from 6000' to surface. Consult w/ RE for results of temperature survey to determine if secondary cementing is necessary.
35. Close blind rams. Change out 4-1/2" pipe rams to 2-3/8". PU 4-1/2" packer and TIH to ~25'. Pressure test pipe rams to 250/1000psi for 5 minutes each.
36. POOH w/ packer and lay down. Pressure test casing to 2500 psi for 30 minutes against the blind rams.

37. PU 3-3/4" skirted milled tooth bit, bit sub, 3" drill collars, and 2-3/8" workstring. TIH and tag cement/float collar.
38. Drill out float collar, shoe track, and CBP using reverse circulation. Continue in the hole to PBTD at 6637.
39. POOH/LD bit.
40. PU/RIH with 4-1/2" treating PKR on 2-3/8" workstring hydrotesting all tubing to 5800 psi. Set packer 50' above the bottom of the liner. Load backside and pressure test to 500 psi.
41. 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.
42. 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.**
43. Acidize perforations from 6166-6634' 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.
44. Flush acid to bottom perforations. SI well for 1 hour allowing acid to spend. Record ISIP, 5, 10, & 15 minute SIP's.
45. 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.
46. Release treating packer, TOH and LD packer. PU/RIH with 2-3/8" notched collar and C/O any rock salt to PBTD. Circulate well with fresh water to dissolve remaining GRS. TOH w/ WS.
47. PU 4-1/2" treating PKR w/ SN on 2-3/8" production tubing and RIH. Set PKR 50' above the bottom of the liner.
48. Bullhead scale inhibitor into perfs per Chemical rep recommendation. Flush scale inhibitor per Chemical rep recommendation. SI to soak overnight.
49. Release PKR. POOH & LD PKR and WS.
50. PU and RIH with new production tubing as per ALCR recommendation.

51. ND BOP, set TAC per ALCR recommendation and NU WH.
52. RIH with rods, weight bars and pump per ALCR recommendation. RDMO pulling unit
53. Turn well over to production (see contacts on first page of procedure).

#### Contingency 1

- 1B Prepare to mill out casing. Consult with Midland. POOH and LD workstring and string mill.
- 2B PU/RIH with packed assembly consisting of 4-3/4" concave mill (smooth OD), (2) 4-3/4" stabilizers, short 3-1/2" DC, 4-3/4" stabilizer, (6) 3-1/2" DC's and rest of 2-7/8" 6.5# L80 8RD EUE workstring. **Consult Smith for a running assembly proposal.**
  - **Note: Where the pipe is collapsed greatly, the lower portion of the collapsed interval may act as a whipstock. The mill may cut through the upper portion of the collapsed interval and be deflected into the formation by the lower section of the damaged casing.**
- 3B Mill at a surface speed of about 50 RPM. The torque encountered determines the weight. Minimize weight maintaining no more than 2 points on mill. Continuously supervise rig operator. **Consult Fisherman and Midland for best practices.**
- 4B Continue milling until the length of the concave mill is milled or a breakthrough occurs. Discuss with Midland. Once casing has been dressed off, follow procedure to run 4-1/2" liner starting at step 12. If milling is not successful, consult w/ RE about P&A the well or using washpipe.



# WEST DOLLARHIDE DRINKARD UNIT #103

FIELD: West Dollarhide Drinkard Unit

LOC: 2577' FSL & 2510' FEL

TOWNSHIP: 24S

RANGE: 38E

Sec: 32

Cnty: Lea

State: NM

Well No: 103

GR: 3199'

KB: +13'

DF: '

FORMATION: TUBB/DRKD

CURRENT STATUS: Producer

API NO: 30-025-30825

Chevno: KZ1043

11-3/4" 42# H-40 @ 1200' w/ 1,050 sx, circ  
150 sx  
Hole Size: 14-3/4"

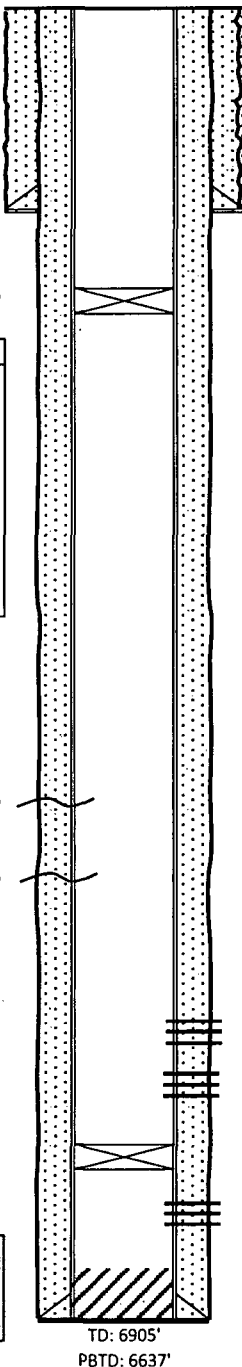
12/10/12: Set RBP @ 2040'

Tubing in Hole		
Footage	Joints	Type
0.0		Total Tubing String
18.00		KB
18.0		Final HD

Casing split/ collapsed @ 4462-77'

Casing collapsed 4660'-????

5-1/5" 15.5 & 17# K-55 & L-80 @ 6905' w/ 4100  
sx, Circ 355 sx  
DV Tool @ 4,032  
Hole Size: 7"



SPUD: 12/27/1990

Date Completed: 02/13/1991	Initial Production:
Initial Formation: Drkd, Abo	132 BO, 75 Mcf, 185 BW
FROM: 6483-6813'	568 GOR, 37.6 Sp Grv

**Initial completion:**  
Perf DRKD 6483-6634'. Acdz w/ 6.2k gal 15% in 5 stgs w/ 1,000# GRS. Perf Lower Abo 6660-6813'. Acdz w/ 5.2k gal 15% in 4 stgs w/ 750# GRS

**Subsequent workovers:**  
02/16/95 Reperf & Acidize: Tag btm, tbq stuck on way up at collar @ 6620'. Mill over fish 6595-6617', fell through to 6623'. Recovered all fish. Ran bit to 6630', unable to make headway. Set CIBP @ 6460'. Perf csg 6166-6434'. Acdz w/ 7k gal 15%. Clean out GRS. Drill CIBP & push junk to tight spot @ 6630'. Unable to get through tight spot. RTP.

10/28/96: Set RBP @ 6630. Acdz DRKD perfs 6483-6630' w/ 4k gal 15% & 75 BS. PU RBP & set @ 6460'. Acdz TUBB perfs 6166-6436' w. 6k gal 15% w/ 4000# GRS. Release RBP. Set 5-1/2" CIBP @ 6630'.

11/09/98: Acdz Tubb & DRKD perfs w/ 2k gal 15% w/ sonic hammer tool.

08/27/99: Acdz Tubb & DRKD perfs w/ 4k gal 15% w/ sonic hammer tool.

05/02/01: Acdz Tubb & DRKD w/ 3.5k gal 15% & 4000# GRS.

03/15/06: Tub failure. 7' of mud jt got stuck in well. Tag up @ 6600'- bad csg. TIH w/ new tbq to FHD @ 6454'.

11/30/09 Sand Frac: Tag @ 6614'. Mill through 6617-6632'. Push CIBP to 6640', stop making hole. Acdz w/ 5k gal 15% w/ 5000# GRS. Frac w/ 260,000# 20/40 sd coated w/ expedite lite. Work bit through tight spot @ 6617'. C/O to PBTD @ 6,637, no fill. RIH w/ ESP. RTP.

03/30/10: ESP failure. RIH w/ rods/ RTP.

08/31/12 Rod Part: Jar pump through tight spot @ 4485'. Jar on TAC w/ no results. Tbg stretch calc estimates tbq stuck @ 5000'. LD all rods, RDMO.

12/2012 Repair Casing:

Tubb (02/95): 6166', 79-90', 6201-24', 31-34', 36-45', 68-78', 82-6308', 44', 66-71', 76-79', 83-86', 91-93', 6410-14', 34-36', w/ 2 JSPF (230 holes)  
DRKD: 6483-85', 89-95', 6501-13', 19-23', 33-40', 48-53', 99-6604', 19-21', 31-34' (153', 39 holes)

Collapsed csg: 6600-6603'

CIBP @ 6640'

Csg collapsed w/ junk in well @ 6630'

ABO: 6660-62', 93-99', 670-08', 18-21', 24-27', 33-35', 69-72', 74-76', 90-95', 98-6803', 08-13'