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

HOBBS OCD
DEC 14 2011
RECEIVED

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

WELL API NO. 30-025-23944	
5. Indicate Type of Lease STATE ☒ FEE ☐	
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 BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)	7. Lease Name or Unit Agreement Name NORTH VACUUM ABO WEST UNIT
1. Type of Well: Oil Well ☒ Gas Well ☐ Other	8. Well Number 14
2. Name of Operator CHEVRON U.S.A. INC.	9. OGRID Number 4323
3. Address of Operator 15 SMITH ROAD, MIDLAND, TEXAS 79705	10. Pool name or Wildcat VACUUM; ABO, NORTH
4. Well Location Unit Letter B: 660 feet from the NORTH line and 1980 feet from the EAST line Section 28 Township 17-S Range 34-E NMPM County LEA	
	11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☐	
DOWNHOLE COMMINGLE ☐			
OTHER: BRADENHEAD REPAIR & ACIDIZE		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.

CHEVRON U.S.A. INC. INTENDS REPAIR BRADENHEAD & ACIDIZE THE SUBJECT WELL.

PLEASE FIND ATTACHED, THE INTENDED PROCEDURE, WELLBORE DIAGRAMS, & C-144CLEZ INFO.

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: 12-13-2011

Type or print name: DENISE PINKERTON E-mail address: leakejd@chevron.com PHONE: 432-687-7375

APPROVED BY: Maley S Brown TITLE Compliance Officer DATE 12/23/2011
Conditions of Approval (if any):

NVAWU 14

API No. 30-025-23944
Lea County, NM
Repair Bradenhead and Acidize

PREWORK:

- Ensure pad is of adequate size & build
- Ensure anchors load tested within last 24 months
- Electrical line issues – is variance required?
- Rig move checklist
- If well has slip type Larkin head, notify remedial engineer and prep to change WH equipment.

WORKOVER PROCEDURE

***Ensure elevators are callipered and visually inspected at the beginning of each work day.

1. Notify OCD of intent to perform repair with 24 hour notice of intent (575 393 6161).
2. MIRU PU.
3. Record tubing and casing pressures for Kill Weight Fluid calculations.
4. Kill well as necessary. Open bradenhead valves, bleed pressure, and monitor throughout job.
5. Inspect rod elevators, rod transfer, & other lifting equipment. Pull rods and pump.
6. Ensure well is dead. ND wellhead.
7. NU 5K hydraulic BOP w/ blind rams in bottom & 2-3/8" pipe rams in top.
8. Caliper & inspect elevators. Pull 1 joint of 2-3/8" production tubing. PU 4-1/2" packer and set packer @ 30'. Test pipe rams against packer to 250 / 750 psi for 5 minutes each. LD test joint and packer.
9. TOH scanning 2-3/8" 4.7# L-80 8RD EUE production tubing. Blue and yellow joints OK to rerun.
10. PU 4-1/2" packer & RBP & TIH on 2-3/8" 4.7# L80 workstring. Set RBP @ +/- 4000'. Test RBP with packer to 1000 psi.
11. Pull packer up hole to +/- 3092'. Pressure test casing above packer to 500 psi for 15 minutes – ensure casing above packer holds pressure (rules out possibility of suicide squeeze).
12. Pressure test casing below packer against RBP to 500 psi for 15 minutes & Monitor bradenhead for communication & notify remedial engineer (Brummert 713 409 6170) of pressure test results.
13. TOH standing back WS & LD packer.

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14. Dump 20' sand on top of RBP set @ +/-4000'. Let sand settle & prepare to squeeze cement taking returns to surface @ the bradenhead.

15. RU WL & lubricator. Test lubricator to 1000 psi. RIH w/ perf guns & CCL. Correlate to Marathon Oil Company's Micro-Seismogram (dated 12/21/71) and shoot 4 squeeze holes in production casing @ 3170' (TOC behind 4-1/2" production casing = 3450' by CBL).

16. PU 4-½" packer & TIH on2-3/8" L80 WS. RIH to 2790' & set packer.

SQEEZE PROCEUDRE

17. Establish communication through perf holes & out bradenhead.

18. RU cement unit & equipment.

    a. Lead slurry: 950 sks class C neat cement @ ~2 BPM
    b. Tail Slurry: 150 sks class C neat cement + 2% calcium chloride (mix on the fly) @ ~ 2 BPM
    ***Ensure pump time is sufficient.
    c. Displace with 13.1 bbls FW @ ~2 BPM to 2940' (150' below packer set depth)
    d. Close bradenhead valve.
    e. Squeeze an additional 2 bbls (maximum) using the hesitation method (this will leave ~100' of cement above the squeeze perfs). Max squeeze pressure = 750 psi.

    ***If at any time cement is locking up in the tubing, open the bradenhead valve & con't to displace cement below packer, then shut the bradenhead and hesitate.

19. Close TIW valve and WOC per cementer's recommendation. Use cement sample @ surface to indicate integrity.

20. TOH standing back WS & LD packer

21. PU 3-7/8" bear claw bit, 6 x 3-1/2" DC's & TIH. Tag TOC & note in WellView.

22. Drill out cement. *If at any time during the drill out the cement appears green, circulate hole clean, pull up hole, and shut well in overnight.*

23. Once fallen out of cement, circulate hole clean.

24. Shut pipe rams & test squeeze against the RBP set @ +/- 4000' to 350 psi. Contact remedial engineer if squeeze does not hold.

25. If squeeze holds, continue cleanout to top of CIBP @ 8918'.

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26. TOH stand back WS & LD clean out assembly.

27. PU retrieving head. Wash sand off RBP & retrieve RBP.

END SQUEEZE PROCEDURE

28. TIH with 4 1/2" treating pkr on 2-3/8" WS. Hydro-test tbg to 6000 psi while RIH below slips. Set pkr @ +/- 8700' (100' above top perf). Load & test backside to 300 psi.

29. Acidize perfs w/ 5000 gallons of 15% NEFE HCL and Rock Salt in 4 Stages of Acid and 3 Stages of Rock Salt (Use gelled BW during acid job) as follows:

    a. Have 4000# of Rock Salt on location. Pump acid at 8 BPM. Max Pressure 5900 psi. Apply 300 psi to backside and monitor pressure while pumping job. Adjust rock salt drops based on pressure response of previous drops.

    b. 1500 gals 15% NEFE HCL

    c. 1000# Rock Salt (Gelled Brine Water w/ 1.5 lb/gal concentration)

    d. 1500 gals 15% NEFE HCL

    e. 500# Rock Salt (Gelled Brine Water w/ 1.5 lb/gal concentration)

    f. 1000 gals 15% NEFE HCL

    g. 500# Rock Salt (Gelled Brine Water w/ 1.5 lb/gal concentration)

    h. 100 gals 15% NEFE HCL

    i. Switch to FW to displace to bottom of perfs .

30. Shut-in for 1 hour to allow acid to spend.

31. Flow or swab back load.

32. Release packer. TOH & lay down workstring and packer.

33. RIH w/ existing 2 3/8" L-80 4.7# production tubing & BHA as follows:

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Tubing - 2 3/8" 6.5# L-80
1 – 2 3/8" X 4' Marker Sub
2 – Joints 2 3/8" L-80 tubing
1 – 2 3/8" X 4 1/2" TAC @ 8730'
Tbg 2 3/8" J-55
1 – 2 3/8" X 30' Enduroalloy Blast Joint
1 – SS Mechanical Seat Nipple @ 8875' w/ 1" X 15' Dip Tube
1 – 2 3/8" X 4' Perf Sub
1 – 2 3/8" x 31' Joint w/Bull Plug

End of Tubing 8910'

Load Cell – (If Needed) Danny Acosta

34. Ensure well is dead ND BOP.

35. NU wellhead.

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36. RIH w/ pump and rods as follows:

1 – 1 ½" X 22' SM Polish Rod w/7/8" pin & PR coupling (Garner)
1 – Set 7/8" Norris N-90 Pony Rods W/SH Tee couplings
131ea. – 3275' Norris 7/8" N-90 Rods W/SH Tee couplings
214ea. – 5350' Norris 3/4" N-90 Rods W/FH Tee couplings
10ea. – 250' Grade K 1 ½" Sinker Bars W/3/4" pins & SHSM boxes
1 – 4' Guided Pony Sub 3-guides, 7/8" body, ¾" pins (Garner)
1 – 1.25" Insert Pump (Garner)

1 – 7/8" X 3/4" crossover coupling

COMPANY NAME - Chevron

WELL - North Vacuum Abo West Unit # 14

TRIM- 316 Stainless Steel

T/V CAGES -Monel Insert Guided S/V CAGES Monel Insert Guidec

VALVE ROD N/A PULLTUBE Steel-Brass If Needed

TRAVELING VALVES PRI- S/N Ball-Extreme Seat SEC- N/A

STANDING VALVES PRI - S/N Ball-Extreme Seat SEC- N/A

PLUNGER Spray Metal Monel Pin FEET 6' FIT 008

BARRELS 20' METAL- Brass Nickel-Carbide

EXTENSIONS N/A

HOLD DOWN ASSEMBLY - 316 Stainless Steel Mechanical

TOP PLUNGER ADAPTER Monel

API PUMP DESCRIPTION 20-125-RHBM-20-6

COMMENTS - Build up the pump prior to moving on the well
Run a 1" x 15' muleshoed dip tube below the SN

37. RDMO PU.

38. Turn well over to production.

CURRENT
WELLBORE DIAGRAM

NVAWU #14

LOCATION

State	New Mexico
County	Lea
Surface Location	660 FNL, 1980 FEL
	Sec 28, R-34E, T-17S
Unit Ltr	L

WELL ID INFORMATION

Lease Name	North Vacuum Abo West Unit
Field	Vacuum North
Reservoir	Abo
Ref #	FG9247
API #	30-025-23944

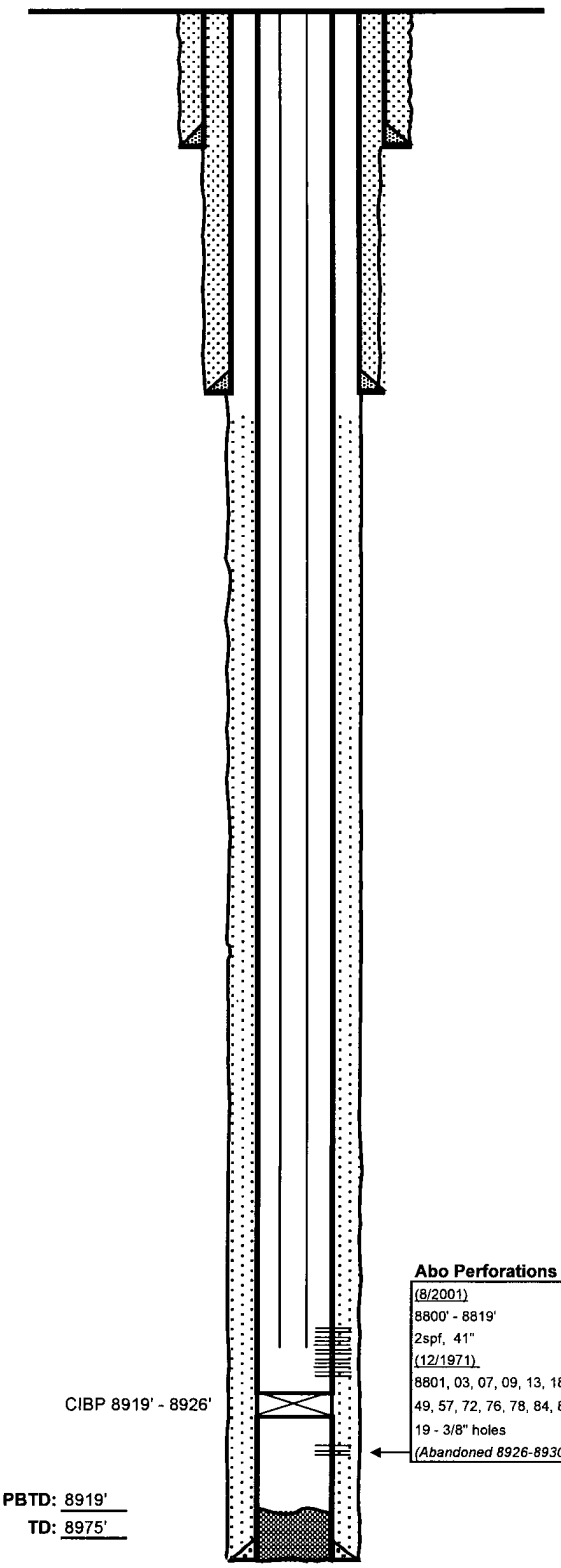
KB	4073'
DF	4072'
GL	4061'
Spud Date	11/23/1971
Compl Date	12/29/1971

CASING DETAIL

Surface Csg.	
Size	13 3/8"
Wt.	48#
Set @	255'
Sxs cmt	275sx
TOC	Surface
Hole Size	17 1/2"
Intermediate Casing	
Size.	8 5/8"
Wt.	32#
Set @	3160'
Sxs Cmt	1100sx
TOC	Surface
Hole Size	11"
Production Csg.	
Size	4 1/2"
Wt	11 6#
Set @	8975'
Sxs Cmt.	1000sx
TOC	3450'
Hole Size	7 7/8"

FORMATION TOPS

Queen	3840'
San Andres	4610'
Lovington Sand	4750'
Glorieta	6110'
Paddock	6220'
Tubb	7590'
Abo	8275'
Abo Pay	8735'

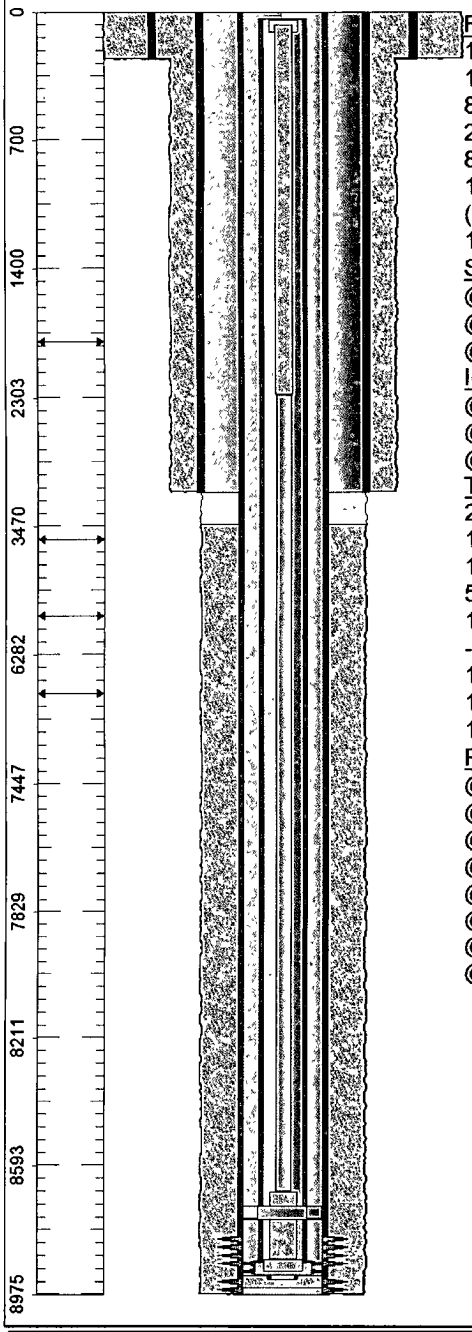


Abo Perforations

(8/2001)
8800' - 8819'
2spf, 41"
(12/1971)
8801, 03, 07, 09, 13, 18, 36, 39, 41, 47, 49, 57, 72, 76, 78, 84, 86, 94, 96
19 - 3/8" holes
(Abandoned 8926-8930')

Chevron U.S.A. Inc. Wellbore Diagram : NVAWU 14

Lease: OVC VACUUM	**Well No.:** NVAWU 14 VAN 14 14	**Field:** FLD-VACUUM NORTH	
Location: 660FNL1980FEL	**Sec.:** N/A	**Blk:**	**Survey:** N/A
County: Lea **St.:** New Mexico	**Refno:** FG9247	**API:** 3002523944	**Cost Center:** UCDY70600
Section: 28	**Township:** 017 S		**Range:** 034 E
Current Status: ACTIVE		**Dead Man Anchors Test Date:** NONE	
Directions:			



Rod String Quantity (Top-Bottom Depth) Desc
1 @(40-66) 1.500 (1 1/2 in.) Spray Metal x 26
1 @(66-68) 0.875 (7/8 in.) N-90 (D) x 2 Rod Sub - N/A
88 @(68-2268) 0.875 (7/8 in.) N-90 (D) x 25 Rod - N/A
256 @(2268-8668) 0.750 (3/4 in.) N-90 (D) x 25 Rod - N/A
8 @(8668-8868) 1.375 (1 3/8 in.) K x 25 Sinker Bar
1 @(8868-8892) Rod Pump (Insert) (NON-SERIALIZED) - 20-125-RHBC-24-6 (Bore = 1.25)
1 @(8892-8904) Gas Anchor (Rod) 1.500 OD x 12'

Surface Casing (Top-Bottom Depth) Desc
@(0-255) Cement
@(0-255) Armco-95 13.375 OD/ 48.00# Round Short 12.715 ID 12.559 Drift
@(0-255) Wellbore Hole OD-17.5000

Intermediate Casing (Top-Bottom Depth) Desc
@(0-3160) Armco-95 8.625 OD/ 32.00# Round Short 7.921 ID 7.796 Drift
@(0-3160) Cement
@(255-3160) Wellbore Hole OD-11.0000 - N/A

Tubing String Quantity (Top-Bottom Depth) Desc
274 @(40-8714) L-80 2.375 OD/ 4.70#
1 @(8714-8716) Tubing Anchor/Catcher
1 @(8714-8716) Tubing Anchor/Catcher
5 @(8716-8876) L-80 2.375 OD/ 4.70#
1 @(8876-8908) L-80 2.375 OD/ 4.70# T&C Non-Upset 1.995 ID 1.901 Drift - Internal Plastic Ctg
1 @(8872-8874) Seat Nipple - STD
1 @(8874-8878) Perforated Tubing Sub 2.375"
1 @(8878-8910) Bull Plug Mud Anchor 2.875"

Production Casing (Top-Bottom Depth) Desc
@(0-8975) 4.500 OD/ 11.60#
@(3160-8975) Wellbore Hole OD- 7.8750
@(3450-8975) Cement
@(0-8975) K-40 4.500 OD/ 11.60# Round Short 4.000 ID 3.875 Drift
@(8919-8926) Bridge Plug (Drillable)
@(8800-8819) Perforations
@(8801-8896) Perforations
@(8926-8930) Perforations

Ground Elevation (MSL):: 4033.00	**Spud Date:** 11/23/1971	**Compl. Date:** 12/29/1971
Well Depth Datum:: CSI0000N	**Elevation (MSL)::** 0.00	**Correction Factor:** 40.00
Last Updated by: hillbj	**Date:** 11/25/2008	