

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reenter to a different reservoir.

Use "APPLICATION FOR PERMIT --" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well: ☒ OIL WELL ☐ GAS WELL ☐ OTHER

2. Name of Operator  
CHEVRON USA INC

3. Address and Telephone No. 15 SMITH ROAD, MIDLAND, TX 79705 915-687-737

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Unit Letter H : 1980 Feet From The NORTH Line and 660 Feet From The  
EAST Line Section 13 Township 22S Range 31E

5. Lease Designation and Serial No.  
540397

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and Number  
NEFF 13 FEDERAL  
2

9. API Well No.  
30-015-26165

10. Field and Pool, Exploatory Area  
LIVINGSTON RIDGE DELAWARE

11. County or Parish, State  
EDDY , NEW MEXICO

12. Check Appropriate Box(s) To Indicate Nature of Notice, Report, or Other Data

TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ OTHER: ADD PAY & FRAC STIM  
☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log Form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

CHEVRON U.S.A. INTENDS TO ADD DELAWARE PAY & FRAC STIMULATE THE SUBJECT WELL.

THE INTENDED PROCEDURE AND WELLBORE DIAGRAM IS ATTACHED FOR YOUR APPROVAL.

14. I hereby certify that the foregoing is true and correct.

SIGNATURE Denise Leake TITLE Regulatory Specialist DATE 9/16/2003

TYPE OR PRINT NAME Denise Leake

(This space for Federal or State office use)

APPROVED

CONDITIONS OF APPROVAL, IF ANY:

TITLE

DATE

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

**Neff 13 Federal #2**  
Add Delaware Pay & Fracture Stimulate

1980' FNL & 660' FEL  
Section 13, T22S, R31E  
Eddy County, New Mexico

Date: May 15, 2003

WBS No:

Cost Center: BCPH71600

Elevation: 3612' GL 14' KB

TD: 8450' PBTD: 7880' (CIBP at 7900' w/ 20' cement)

Surface: 11-3/4", 42# H-40 at 838' w/ 675 sx, circ.

Intermediate: 8-5/8", 32# & 24# K-55 at 4520' w/ 1283 sx, circ.

Production: 5-1/2", 17# & 15.5# J-55 at 8450' w/ DV at 5979'  
w/ 1635 sx. 1<sup>st</sup> stage circ 157 sx, 2<sup>nd</sup> stage no circ.

Open Perforations: Delaware 7126'-28', 7133'-35', 7154'-56', 7160' (2 SPF),  
7726'-34' (6SPF)

Perforations Below CIBP: 7948'-68' (4 SPF)

Tubing: 2-7/8" w/ TAC at 7617', SN at 7812', SMA w/ purge valve at 7836'. Ran 10/00.

Rods/Pump: 1-1/2" Insert Pump on 86 rod string.

Comments: 1. Use 2% KCL for workover fluid.  
2. Junk in hole (bit cones and bottom of CIBP) at 8126'.

PROCEDURE

1. MIRUPU. Unseat pump and TOO H w/ rods and pump.
2. ND Tree. NU 3M BOP's. Release TAC. Tag PBTD at 7880' w/ 2-7/8" production tubing.
3. TOO H w/ 2-7/8" tubing, standing back. Inspect tubulars for scale. If scale is present, have chemical rep. collect samples for analysis and recommendation. If remedial action is required, it will be performed in Step 13 of procedure.
4. Clean out fill if necessary to complete perforating job in Step 5.
5. RU Baker. Perforate Delaware w/ 4 JSPF, 120<sup>0</sup> phasing from 7844'-60' (64 holes), 7050'-59' (36 holes), 7032' - 7037' (20 holes) and 7022' - 7026' (16 holes) using 3-1/8" Slick Guns. RD Baker.
6. TIH treating packer on 2-7/8" production string. Set packer at approximately 7800'. NOTE: Open perms above packer. Do not attempt to load backside.

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7. RU Schlumberger. Acidize perfs 7844'-60' w/ 1600 gals 7-1/2% HCL w/ ball sealers for divert at 6-7 BPM as per attached design dated 5/16/03. Flush to top perf w/ 2% KCL. Surge balls off perfs.
8. Swab/flow back load. Monitor for hydrocarbon presence and pH level. Notify contacts w/swab results. Determine if fracture stimulation is necessary based on swab results. NOTE: If fracture stimulation is required, proceed to Step 9. If fracture stimulation is not required, proceed to Step 10.
9. Fracture stimulate Delaware perfs 7844' - 60' down 2-7/8" tubing w/ 9,540 gals 30# gel (6600 gal x-linked) and 20,200# 16/30 CR400 at 15 BPM as per attached design dated 8/21/03. Anticipated max surface treating pressure is 4000 psi. Flush to top perf w/ 1940 gals 30# linear gel. RD Schlumberger. Shut-in well overnight to allow resin coated sand to cure.
10. Kill well w/ 2% KCL if necessary. Release packer & TOO H w/ tubing.
11. TIH treating packer and RBP on 2-7/8" tubing. Set RBP at 7100' and packer at 7020'. Load backside w/ 2% KCL and test packer.
12. RU Schlumberger. Acidize perfs 7022' - 26', 7032' - 37' & 7050'-59' w/ 2000 gals 7-1/2% HCL at 6-7 BPM as per attached design dated 5/16/03. Flush to top perf w/ 2% KCL. Surge balls off perfs.
13. Swab/flow back load. Monitor for hydrocarbon presence and pH level. Notify contacts w/swab results. Determine if fracture stimulation is necessary based on swab results. If fracture stimulation is determined to be necessary proceed to step 14. If fracture stimulation is not required, proceed to step 15.
14. Fracture stimulate Delaware perfs 7022' - 26', 7032' - 37' & 7050' - 59' down 2-7/8" tubing w/ 12,462 gals 30# gel (9700 gal x-linked) and 30,400# 16/30 CR400 at 15 BPM as per attached design dated 8/21/03. Anticipated max surface treating pressure is 4000 psi. Flush to top perf w/1762 gals 30# linear gel. RD Schlumberger. Shut-in well overnight to allow resin coated sand to cure.
15. If scale was found in Step 2, re-set RBP and packer to isolate perfs 7726'-34'. Treat perfs to remove scale as per chemical rep. recommendation. Re-set RBP and packer to isolate perfs 7126'-7160'. Treat perfs to remove scale as per chemical rep. recommendation.
16. Release packer, retrieve RBP and TOO H.
17. MIRU power swivel, reverse unit and foam air unit. TIH w/ 4-3/4" bit and drill collars on 2-7/8" tubing. Clean out sand to PBTD at 7880'. Circulate wellbore clean w/ foam. TOO H & lay down bit and drillstring.

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18. TIH w/2-7/8" production tubing. Scanilog tubing while TIH. Replace joints as necessary. Set SN at 7812'.
19. ND BOP's. NU tree.
20. TIH w/rods and pump as per Felix Trevino recommendation. Hang well on. RDMOPU.
21. Return well to production and place on test.

### **List of ChevronTexaco Contacts**

OS.	Danny Lovell	Office: 505.887.5676 Cell: 505.390.0866
Lease Operator	Mike Parker	Cell: 505.631.9017
Lease Operator	Larry Rice	Cell: 505.631.9018
Engineer.	Chad Stallard	Office: 432.687.7356 Home 432.699.1636
Artificial Lift Rep.	Felix Trevino	Office: 505.394.1245 Cell: 505.390.7180

### **EQUIPMENT AND FLUID REQUIREMENTS**

#### **WIRELINE SERVICES**

Baker Atlas. Hobbs 505.392.7593  
Perf charges are HSC-4000-311T w/ 0.38" diameter, 21" penetration.

#### **DELAWARE ACID JOB 1:(7844'-7860')**

Schlumberger to Provide Hobbs 505.393.6186

- 1600 gals. 7-1/2% HCL w/ additives as per attached specifications dated 8/21/03
- 64 biodegradable ball sealers (1.15 SG, 7/8" OD)

ChevronTexaco to Provide

- 46 bbls. 2% KCL for flush

#### **DELAWARE FRACTURE STIMULATION: (7844'-7860')**

Schlumberger to Provide Hobbs 505.393.6186

- Additives for 6,600 gal YF130 fluid system for frac as per attached specs 8/21/03
- Additives for 2,940 gal WF130 fluid system for pre-pad & flush as per attached specs 8/21/03
- 20,200 lbs 16/30 CR4000 (100% Curable Resin Coated Sand)

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ChevronTexaco to Provide

- One frac tank loaded w/ 267 bbls. fresh water for frac, flush and bottoms

**DELAWARE ACID JOB 2: (7022'-7059')**

Schlumberger to Provide

Hobbs 505.393.6186

- 2000 gals. 7-1/2% HCL w/ additives as per attached specifications dated 8/21/03

ChevronTexaco to Provide

- 41 bbls.. 2% KCL for flush

**DELAWARE FRACTURE STIMULATION: (7022'-7059')**

Schlumberger to Provide

Hobbs 505.393.6186

- Additives for 9,700 gal YF130 fluid system for frac as per attached specs 8/21/03
- Additives for 2,762 gal WF130 fluid system for pre-pad & flush as per attached specs 8/21/03
- 30,400 lbs 16/30 CR4000 (100% Curable Resin Coated Sand)

Well: Neff 13 Federal #2

Field: Livingston Ridge

Reservoir: Brushy Canyon

**Location:**

1980' FNL & 660' FEL  
 Section: 13 (SE/4 NE/4)  
 Township: 22S  
 Range: 31E Unit: H  
 County: Eddy State: NM

**Elevations:**

GL: 3612'  
 KB: 3626'  
 DF: 3625'

**Log Formation Tops**

Lamar	4508'
Bell Canyon	4536'
Cherry Canyon	5393'
Brushy Canyon	7076'

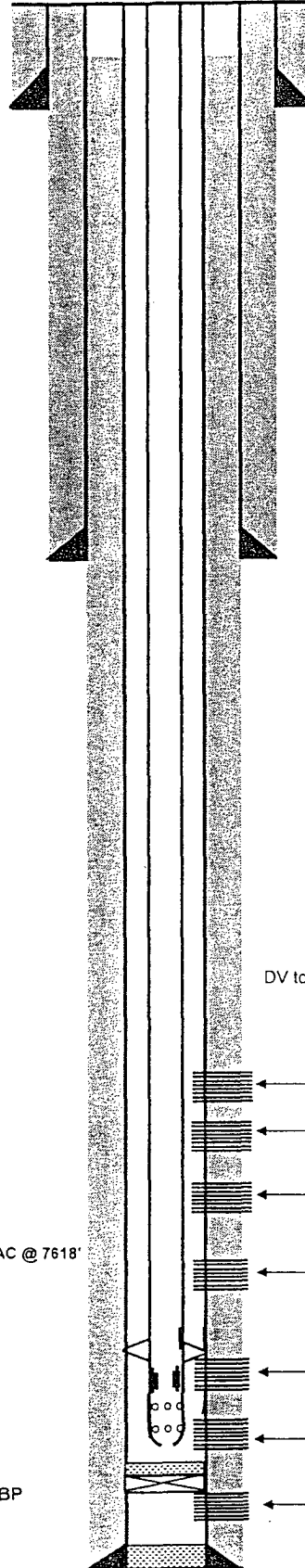
**TUBING DETAIL - 10/17/2000**

246 jts - 2-7/8" J-55 tbg (7617')  
 1 2-7/8" x 5 1/2" tbg anchor (2.70')  
 6 jts - 2-7/8" J-55 tbg (195.74')  
 1 2-7/8" SN @ 7812' (1.10')  
 1 3 1/2" SMA w/purge valve (23.75')

EOT landed @ 7836'

**Rod Detail:**

1-1/2" Polish Rod (26')  
 Pony Rods (1-8', 1-6', 1-4' & 1-2')  
 133 1" x 25' D-87 Rods  
 1 7/8" EL Rod  
 175 3/4" EL Rods  
 7/8" Pony Rods (4')  
 2-1/2" x 1-1/2" Insert pump (25')  
 w/3/4 right hand release  
 1-1/2" gas anchor (10')

**Proposed  
Wellbore Diagram****Well ID Info:**

Chevno:  
 API No: 30-015-26165  
 L5/L6:  
 Spud Date: 9/7/89  
 Rig Released: 9/29/89  
 Compl. Date: 10/15/89

**Surface Csg: 11 3/4", 42#, H-40 STC**

Set: @ 838' w/ 675 sx Class H cmt  
 Hole Size: 14 3/4" to 838'  
 Circ: Yes TOC: surface  
 TOC By: Circulation (5 sx cmt)

**Initial Completion:**

Perf 7126-7128', 7133-7135', 7154-7156' &amp; 7159-7161'.

Acidz 7126-7161' w/1,500 gal 15% NEFE HCL

Frac 7126-7161' w/25,000 gal XLG &amp;

37,500 # 20/40 SD &amp; 12,500 # 12/20 RC SD.

**Subsequent Workovers/Reconditionings/Repairs:**

6/25/93 Perf 7948-7968' (80 holes, 4spf).

Frac 7948-7968' w/56,000 gal 30# XLG &amp;

251,400 # 20/40 SD &amp; 19,000 # 20/40 RC SD.

10/17/2000 Set CIBP @ 7900' w/20' cmt on top.

Perf 7726-7734' (48 holes).

Acidz 7726-7734' w/1,000 gal 15% NEFE HCL

8/20/2003 Proposed Perf 7844-60', 7050-59', 7032-37'  
 & 7022-26' and stimulate.

**Intermediate Csg: 8 5/8", 32# & 24#, K-55 STC**

Set: @ 4520' w/ 1283 sx Class H cmt  
 Hole Size: 10 5/8" to 4520'  
 Circ: Yes TOC: surface  
 TOC By: Circulation (10 sx cmt)

**Prod. Csg: 5 1/2", 17# & 15.5 #, J-55 LTC**

Set: @ 8450' w/ 1635 sx cmt (DV tool @ 5979')  
 Hole Size: 7 7/8" to 8450'

Circ: Yes (1st stage) TOC:  
 TOC By: (157 sx cmt 1st stage) (2nd stage no cir)

DV tool @ 5979'

**Status**

Cherry Canyon - proposed

**Status**

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**Status**

Cherry Canyon - proposed

**Status**

Brushy Canyon - open

Brushy Canyon - open

**Status**

Brushy Canyon - open

**Status**

Brushy Canyon - proposed

**Status**

Brushy Canyon - open

COTD: 8126'  
 PBTD: 7880'  
 TD: 8450'

By: W.P. Johnson

Updated: 8-26-03 by WAYN