

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
N.M. Div-Dist. 2  
1301 W. Grand Avenue  
Alamogordo, NM 88210

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 reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT --" for such proposals

5. Lease Designation and Serial No.  
NM-86710  
6. If Indian, Alottee or Tribe Name  
7. If Unit or CA, Agreement Designation

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 K : 1980 Feet From The SOUTH Line and 2310 Feet From The

WEST Line Section 33 Township 21S Range 32E LEA, NEW MEXICO

8. Well Name and Number  
BILBREY 33 FEDERAL

2

9. API Well No.  
30-025-32383

10. Field and Pool, Exploaratory Area  
BILBREY MORROW (GAS)

11. County or Parish, State  
LEA, NEW MEXICO

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

TYPE OF SUBMISSION

TYPE OF ACTION

☐ Notice of Intent  
☒ Subsequent Report  
☐ Final Abandonment Notice

☐ Abandonment  
☐ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☒ OTHER: FRAC STIMULATE MORROW

☐ 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.)

11-18-02: MIRU. 11-20-02: TIH WWS TO 2910'. 11-25-02: BREAK CIRC W/FOAM. 11-26-02: TAG CIBP @ 14,453'. DO CIBP @ 14,453'. FELL FREE. WSH TO 14,472. DRILL ON BTM PIECE CIBP & CMT BASKET. PUH TO 14,410'. 11-27-02: DRILL & C/O WELL FR 11473-11476. PUH TO 14,410'.  
12-02-02: DRILL ON CMT BASKET 14476-78'. FELL FREE. WSH TO 14,568. 12-04-02: TIH & SET CIBP @ 14,535. 12-05-02: DUMP BAIL 20' CMT ON CIBP. PERF 14,387-14,400. 14373-83. TIH W/2 7/8" TBG. 12-07-02: TIH W/PKR TO 10,875'. 12-09-02: SET PKR @ 14,350. 12-10-02: REL PKR. RU SWAB. 12-11-02: TAG UP @ 11,273. SHOOT 4 HLS IN TBG @ 11,245. FOUND BRIDGE INSIDE TBG FR 11,273-11,278. 12-12-02: TIH & SET TOP OF PKR @ 14,320. TIH W/ON/OFF TOOL. 12-14-02: NU FRAC HEAD. 12-16-02: PICKLE W/100 GALS 15% HCL. TIH W/WSH TOOL & JET TBG DRY TO 14,399. PUMP 500 TO 700 SCFM N2. PICKLE TBG @ 14,300 W/300 GALS 15% HCL. SPOT 350 GALS 15% NEFE HCL. 12-17-02: ACIDIZE W/3000 GALS 7 1/2% GASWELL ACID & FRAC W/19,250 GALS WF240. LEFT FLOWING. 12-18-02: TIH W/SINKER BARS. TAG SAND @ 14,387. TIH W/BLANKING PLUG. TAG @ 14,317. UNABLE TO SET PLUG. CAME FREE. 12-19-02: C.O SAND TO PBTD @ 14,515. 12-20-02: TIH W/BLANKING PLUG. TAG PROFILE NIPPLE @ 14,320. JAR'S NOT WORKING. PLUG PACKED W/SAND. FLUSH TBG. 12-21-02: PERF TBG @ 14291. ND FRAC HEAD. REL PKR. LD 160 JTS 3 1/2" TBG. 12-22-02: LD PKR. 12-26-02: TIH W/GUAGE RING TO 14,320. TIH W/R' NIP, TBG SUB, MODEL 'M' PKR & ON/OFF TOOL. SET PKR @ 14,320. 12-27-02: RUN TBG TO 14,377. PULL ABOVE PERFS. 12-31-02: PU TBG TO 14,419. ENGAGE PKR. WRK UP HOLE. RU SWAB. 01-02-03: PU SN. TIH W/443 JTS 2 3/8" TBG TO 14,414. 01-03-03: TURN OVER TO PRODUCTION.

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

SIGNATURE Denise Leake TITLE Regulatory Specialist DATE 1/14/2003

TYPE OR PRINT NAME Denise Leake

(This space for Field Office Use)  
(ORIG. SGD.) DAVID R. GLASS

APPROVED

CONDITIONS OF APPROVAL JAN 15 2003 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.

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DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

NMCOO

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

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CHEVRON U.S.A. INC. INTENDS TO FRACTURE STIMULATE THE SUBJECT WELL AND THUS RESTORE THE WELL TO ECONOMIC PRODUCTION.  
THE INTENDED PROCEDURE & 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 11/1/2002

TYPE OR PRINT NAME Denise Leake

(This space for Federal or State office use)

APPROVED *DAVID E. GLASS*  
CONDITIONS OF APPROVAL, IF ANY: TITLE

DATE

Title 18 U.S.C. Section 1001, making 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.

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GWW

APPROVED  
DAVID E. GLASS  
SPECIAL AGENT IN CHARGE

## **Bilbrey 33 Fed #2**

### **Morrow Workover Procedure**

1980' FSL & 2310' FWL  
Section 33, T21S, R32E  
Lea County, New Mexico

Date: June 18, 2002  
WBS No: UWPNM-R2064  
Cost Center: BCPH11300

Elevation: 3746' GL 3771' KB

TD: 14,950'

PBTD: 14,446'

Surface: 13 3/8", 54.5# K-55 casing at 825' w/ 760 sx, circ.

Intermediate: 9 5/8", 40#, L-80, K-55 & S-80 at 4,640' w/ 1800 sx, circ.

Intermediate: 7", 26# P-110 at 12,300', DV @ at 8518' w/ 1900 sx. TOC 2500' by TS.

Production: 5", 18#, S-95 Liner 11,808'-14,950' w/ 425 sx. CIBP at 14,446'

Open Perfs: Morrow (4 SPF) 14,418'-428', 14,430'-438'

Tubing: 2-3/8", 4.7#, N-80 w/ 1.78" SN at 14,419'.

Perfs Below CIBP: Morrow (4 JSPF) 14,456'-486', 14,546'-554', 14,564'-569'

Junk in Hole: 1) Remains of failed cement basket & cement plug below perfs 14,486'.

2) TCP gun (3-3/8" x 74') dropped to bottom from original completion.

Comments: 1. Use 4% KCL for kill fluid.

### PROCEDURE

1. Remove plunger lift equipment. Wait minimum 72 hours to run pressure survey.
2. RU slickline. Obtain static gradient at 5000', 10,000', 11,000', 12000', 13,000', 14,000' and 14,400'. POOH w/ bomb. Set plug in SN at 14,419'. RD slickline.
3. MIRUPU. ND Tree. NU 7-1/16" 10M BOP's. Use minimal volume to kill well.
4. TOOH w/ 2-3/8" tubing, standing back.
5. TIH w/ 4-1/8" bit and collars on 2-7/8" workstring. RU power swivel and air drilling equipment.
6. Tag CIBP at 14,486'. Drill out CIBP using air mist. Drill out remnants of cement basket & cement plug at 14,486'. Clean out hole to 14,540'. TOOH w/ bit.
7. RU Baker Atlas. RIH w/ CIBP for 5", 18# casing and set at 14,535'. RIH w/ dump bailer. Dump 35' cement plug on top of CIBP at 14,535'. RD Baker Atlas.  
NOTE: Correlate to the Halliburton CBL dated 3/24/94.

Bilbrey 33 Fed #2  
Morrow Workover Procedure  
June 18, 2002

8. TIH with Baker Reliant Model M packer for 5", 18# casing with on-off tool containing a 1.875" F Nipple on 85 joints 2-7/8" P105 workstring w/ 4-1/2" Hydrill CS workstring to surface. Assembly below packer to consist of one joint 2-3/8" N-80 tubing, a 1.81" R no-go nipple (Baker) and a wireline re-entry guide. Test tubing to 10,000 psi while running in.
9. Set packer in 5" liner (TOL 11,808') at approximately 14,350'. Pressure test annulus to 2500 psi.
10. Pump 2500 gals 7-1/2% Gas Well Acid w/ additives as per attached specifications at 3-5 BPM. Flush to top perf at 14,418' w/N2. Anticipated STP is 8500 psi.
11. Flow/Swab to recover acid load (60 bbls).
12. Install tree saver. RU Schlumberger. RU flowback manifold and line to blowdown tank. Anchor lines and test to 11,000 psi.
13. Pressure annulus to 2500 psi. Fracture stimulate Morrow perms 14,418'-14,486' down 4-1/2" x 2-7/8" workstring w/ 63,000 gals 65Q CO2 foam and 69,000 lbs bauxite at 25 BPM as per attached design. Flush to top perf w/ 8220 gals 65Q CO2 foam.
14. Record 5, 10 & 15 minute shut-in pressures. Open well to flowback manifold and blowdown tank at 0.25-0.50 BPM rate to achieve forced closure. Continue to flow well back to recover load and until CO2 content is below 3%.
15. RU slickline. Set 1.87" F plug in profile nipple in on/off tool. RD slickline.
16. Release on/off tool and TOOH w/ workstring, laying down.
17. TIH w/ 2-3/8" N-80 tubing w/ overshot for on/off tool. Load annulus w/ packer fluid. Latch on to packer w/ on/off tool. ND BOP's. NU tree.
18. Swab fluid level down to balance pressure above plug w/ formation pressure recorded in Step 2.
19. RU slickline. Pull F plug from profile nipple in on/off tool. RIH w/ sinker bar and check for fill. RD slickline.
20. Clean out fill w/ coiled tubing, if necessary.
21. Flow/swab to kick well off.
22. RDMOPU. Turn over to production.

# WELL DATA SHEET

LEASE: Bilbrey 33 Federal  
 LOC: 1980' FSL & 2310' FWL  
 SEC/TS/R: Section 33, T21S, R32E

WELL: 2  
 CNTY: Lea  
 ST: N.M.

DATE: 4-Jun-02  
 GL: 3746'  
 KB: 25'  
 DF: \_\_\_\_\_

STATUS: Producing  
 API NO: 30-025-32383  
 CHEVNO: QU2020

## Completion & Workover Data

3/30-4/18/94. TIH w/ TCP guns & BHA, packer & on/off tool on 2-3/8" tubing. Set packer 14,332'. Perf 14,418'-486' w/ 3-3/8" TCP guns 4 JSPF. Drop guns (74'). Perf 14,546'-569' w/ 1-9/16" HCG 4 JSPF via wireline. Acid w/ 5000 gal 7.5% MSR HCL 30Q CO2 w/ 244 ball sealers. CAOF 3.0 MMCFPD.  
 8/94. Ran production log. Showed perfs 14,546'-569' wet.  
 4/97. Well loaded up and died. SI.  
 9/98. SIBHP survey to 14,500'. BHP = 3731 psi.  
 1/99. Set plug in profile nipple to test tubing. Would not test. Suspected tubing leak.  
 5/99. TOOH/lay down tubing/packer/BHA. TIH w/ 2-3/8" tubing w/ SN to 14,380'. Swab 2 days recover 250 BW. Acid w/ 3000 gal GWA, flush w/ N2. RU CTU. Jet w/ N2 down to 14,600'. Install plunger lift. Swabbed and pumped soap down BS. Could not get well to kick off. SI. Suspected casing leak.  
 9/99. TOOH w/ tubing. TIH w/ bit & scraper on 2-7/8" workstring. Tag at 14,487'. TOOH w/ ws. TIH w/ RBP to 14,350'. Set pkr at 11,654'. Test csg above pkr. Test liner top & csg below pkr. No leaks. TOOH w/ RBP & pkr. TIH w/ 1-11/16" GR-CCL on wireline. Tag 14,816'. TIH w/ CIBP. Tag at 14,474'. Tight spot in casing. Set CIBP at 14,446' (Cement retainer w/ bull plug). TIH w/ 1.78" SN on 2-3/8" N-80 tubing to 14,419'. Fluid level 3500'. Swab 10/2-10/20. SI 10/21-10/31. CP built from 200-420 psi, TP 25-100 psi. Swab from 11/1-11/9. Put on production via plunger lift.

NOTE: Comments in work files refer to possible cement plug (mesh basket set thru tubing w/ cement dumped on top) set in 1994 between perfs 14,486" & 14,546' to isolate lower 2 perf intervals. No record of work in well file. Well loaded up and died in 1997, indicating that plug may have failed. BHP survey went to 14,500' in 1998. CT went to 14,600' in 1999. GR-CCL log tagged at 14,816' in 1999. Bit & scraper tagged at 14,487' in 1999. CIBP tagged at 14,474' in 1999. Tight spot now under CIBP at 14,446' may be remains of failed basket & plug.

13-3/8", 54.5#, K-55 at 825'  
 w/ 760 sacks, circulated.

9-5/8", 40#, mixed at 4640'  
 w/ 1800 sacks, circulated.  
 L-80, K-55 & S-80 casing

7", 26# P-110 at 12,300'  
 w/ DV at 8518'  
 w/ 1900 sx. TOC 2500' by TS.

2-3/8", 4.7# N80 Tubing w/ 1.78" SN to 14,419'

Morrow Perfs (4 JSPF)  
 14,418'-428', 14,430'-438'

CIBP at 14,446' (Cement retainer w/ bull plug)

Morrow Perfs (4 JSPF) 14,456'-486'

Remains of Failed Basket & Cement Plug

Morrow Perfs (4 JSPF)  
 14,546'-554', 14,564'-569'

TCP Gun (3-3/8" x 74') dropped to bottom

PBD: 14,446'  
 TD: 14,950'