Appropriate District Office

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Box Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

Energy, Minerals and Natural Resources Department

# O. CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Form C-103
Revised 1-1-89

WELL API NO. 42-475-10163

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 DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMI (FORM C-101) FOR SUCH PROPOSALS.

7. Lease Name or Unit Agreement Name: EAVES

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

2. Name of Operator: CHEVRON USA INC

8. Well No. 1

3. Address of Operator: 15 SMITH ROAD, MIDLAND, TX 79705

9. Pool Name or Wildcat: EUNICE SAN ANDRES, SOUTH

4. Well Location

Unit Letter A : 660' Feet From The NORTH Line and 660' Feet From The EAST Line

Section 10 Township 22-S Range 37-E NMPM LEA COUNTY

10. Elevation (Show whether DF, RKB, RT,GR, etc.) 3381'

11. 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 OPERATION | ☐ | PLUG AND ABANDONMENT | ☐ |
| PULL OR ALTER CASING | ☐ | | | CASING TEST AND CEMENT JOB | ☐ | | |
| OTHER: | | FRACTURE STIMULATE | ☑ | OTHER: | | | ☐ |

12. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work) SEE RULE 1103.

CHEVRON U.S.A. INTENDS TO FRACTURE STIMULATE THE SAN ANDRES FORMATION IN THE SUBJECT WELL.

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

I hereby certify that the information above is true and complete to the best of my knowledge and belief

SIGNATURE D. Denise Leake TITLE Regulatory Specialist DATE 2/27/02

TYPE OR PRINT NAME Denise Leake Telephone No. 915-687-7375

(This space for State Use)

APPROVED BY CONDITIONS OF APPROVAL, IF ANY: TITLE PETROLEUM ENGINEER DATE APR 02 2002

DeSoto/Nichols 12-93 ver 1.0

**Eaves # 1**
**Eunice; San Andres, South Field**
**T22S, R37E, Section 10**
**Job: Frac Stimulate San Andres Formation**

**Procedure:**

1. MI & RU pulling unit. Bleed pressure from well, if any. Pump down csg with 2% KCl water **containing 2 GPT BJ Inflo 150 fluorosurfactant**, if necessary to kill well. POH with rods and pump. Remove WH. Install BOP's and test to 1000 psi. **Note: All 2% KCl water used is to contain 2 GPT BJ Inflo 150 fluorosurfactant.**

2. POH with 2 3/8" tbg string. PU and GIH with 3 7/8" MT bit on 2 3/8" work string to TD at 4100'. Reverse circulate well clean from 4100' using 2% KCl water **containing 2 GPT BJ Inflo 150 fluorosurfactant.** POH with work string and 3 7/8" bit. LD bit.

3. Install frac valve and csg saver. Fill 4 ½"x 5 ½" annulus and pressure to 300 psi, if possible. Observe for communication during frac job.

4. MI & RU BJ Services. Frac well down 4 ½" casing at **40 BPM** with 56,500 gals of SpectraFrac G4000, 6,000 lbs. 100 mesh White Sand, 91,500 lbs. 16/30 mesh White Sand, and 66,500 lbs **resin-coated** 16/30 mesh proppant. Observe a maximum surface treating pressure of **4500 psi**. Pump job as follows:

   Pump 630 gals 2% KCl water containing 110 gals Baker Petrolite CW-358 scale inhibitor
   Pump 6,000 gals SpectraFrac G4000 pad
   Pump 6,000 gals SpectraFrac G4000 pad containing 1 PPG 100 mesh White Sand
   Pump 6,000 gals SpectraFrac G4000 pad
   Pump 3,500 gals SpectraFrac G4000 containing 1 PPG 16/30 mesh White Sand
   Pump 5,500 gals SpectraFrac G4000 containing 2 PPG 16/30 mesh White Sand
   Pump 6,000 gals SpectraFrac G4000 containing 3 PPG 16/30 mesh White Sand
   Pump 6,000 gals SpectraFrac G4000 containing 4 PPG 16/30 mesh White Sand
   Pump 7,000 gals SpectraFrac G4000 containing 5 PPG 16/30 mesh White Sand
   Pump 7,000 gals SpectraFrac G4000 containing 6 PPG **resin-coated** 16/30 mesh proppant
   Pump 3,500 gals SpectraFrac G4000 containing 7 PPG **resin-coated** 16/30 mesh proppant

   Flush to 3750' with 2,450 gals SpectraFrac G4000. **Do not overflush.** Shut well in. Record ISIP, 5, 10, and 15 minute SI tbg pressures. Open well and flowback through choke manifold at **1 BPM maximum rate** until square root of time plot indicates that closure has been obtained. SWI. RD & Release BJ Services.

5. Open well and backflow until well cleans up with no frac sand in returns and a stabilized flow rate is obtained. Report recovered fluid volumes, choke sizes and flowing pressures. SWI.

6. MI & RU electric line unit. Install lubricator and test to 3000 psi. GIH with sinker bar and tag bottom to check for fill. POH. GIH with gauge ring and junk basket to 3725'. POH. GIH with 4 ½" Baker Model "WL" wireline-set retrievable packer and L-10 On-Off Tool (with blanking plug installed) to 3725'. Set pkr at 3725'. POH. RD & release electric line unit.

7. PU and GIH w/ top half of on-off tool on 2 3/8" tbg, testing to 5000 psi. Displace annulus with inhibited packer fluid. Re-engage on-off tool. Remove BOP's and install flanged WH rated at 3000 psi WP. Pressure test tbg and WH to 3000 psi. Pressure test casing to 500 psi. GIH and swab fluid level in tubing down until differential across blanking plug is balanced. GIH and retrieve blanking plug from L-10 seal nipple. Swab well if necessary to initiate flow. RD & release pulling unit.

8. If well does not flow, PU and GIH with 3 7/8" MT bit on 2 3/8" work string to TD at 4100'. Reverse circulate well clean from 4100' using 2% KCl water **containing 2 GPT BJ Inflo 150 fluorosurfactant.** POH with work string and 3 7/8" bit. LD bit.

9. PU and GIH w/ 4 ½" Lok-Set pkr & On-Off tool w/ 1.78" "F" profile on 2 3/8" work string to 3725'. Set pkr at approximately 3725'.

10. Open well and backflow or swab as necessary until well cleans up with no frac sand in returns and a stabilized flow rate is obtained. Report recovered fluid volumes, pressures, and/or swabbing fluid levels.

11. If well flows, GIH and set tbg plug in "F" profile. Release on-off tool and POH with 2 3/8" work string and top half of on-off tool. Lay down work string. PU and GIH w/ top half of on-off tool on 2 3/8" tbg, testing to 5000 psi. Displace annulus with inhibited packer fluid. Re-engage on-off tool. Remove BOP's and install flanged WH rated at 3000 psi WP. Pressure test tbg and WH to 3000 psi. Pressure test casing to 500 psi. GIH and swab fluid level in tubing down until differential across tbg plug is balanced. GIH and retrieve tbg plug from "F" nipple. Swab well if necessary to initiate flow. RD & release pulling unit.

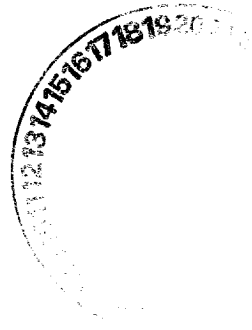
12. If well does not flow, release pkr and POH with 2 3/8" work string. Lay down pkr. PU and GIH with 3 7/8" MT bit on 2 3/8" work string to TD at 4100'. Reverse circulate well clean from 4100' using 2% KCl water **containing 2 GPT BJ Inflo 150 fluorosurfactant.** POH with work string and 3 7/8" bit. LD 2 3/8" work string and bit.

13. PU and GIH w/ BP mud anchor jt of 2 3/8" tbg, 2 3/8" x 4' perforated sub, SN, 10 jts 2 3/8" EUE 8R J-55 tbg, TAC, and 119 jts 2 3/8" EUE 8R J-55 tbg, testing to 5000 psi. Set TAC at 3700' with EOT at 4035' and SN at 4000'.

14. Remove BOP's and install WH. GIH with rods, weight bars, and pump per ALS recommended design. RD & release pulling unit.

15. Turn well over to production. Report producing rates, choke sizes, flowing pressures and/or fluid levels.

AMH
2/21/02



Well: **Eaves # 1** Field: **Eunice - SA, South** Res' 'r: **San Andres**

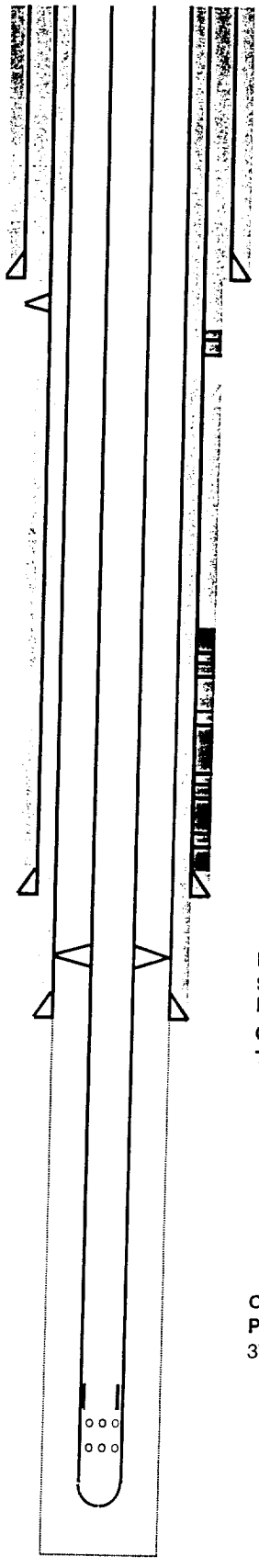
**Location:**
660' FNL & 660' FEL
Section: 10
Township: 22S
Range: 37E
County: Lea State: NM

24170

# Current
## Wellbore Diagram

**Well ID Info:**
Refno: FB1165
API No: 42-475-10163
L5/L6: LC60100
Spud Date: 1/10/40
Compl. Date: 2/8/40

**Elevations:**
GL: 3381'
KB to GL: 8'
DF to GL:



**Surf. Csg:** 9 5/8", 3 gauge, SW
**Set:** @ 250' w/ 225 sks
**Hole Size:** 13 3/4"
**Circ:** Yes **TOC:** Surface
**TOC By:** Circulated

**Sqzd Csg Leak fr/ 215-500'**

**Block Sqz Perfs @ 975'**
(Circulated cmt to surface 7/55)

| Perfs: | Status |
|---|---|
| 3420-22' | Grayburg - Cemented |
| 3452-54' | Grayburg - Cemented |
| 3492-94' | Grayburg - Cemented |
| 3522-24' | Grayburg - Cemented |

**Prod. Csg:** 5 1/2", 14#, H-40
**Set:** @ 3550' w/ 200 sks
**Hole Size:** 6 3/4"
**Circ:** No **TOC:** 980'
**TOC By:** Calculated assuming 20% washout

**Tbg Detail:**
EOT @ 4038'
2 3/8" OD EUE 8R J-55 mud jt.
2 3/8" x 4' perf tbg sub
SN @ 4002'
10 jts. 2 3/8" EUE 8R J-55 tbg
TAC @ 3694'
119 jts. 2 3/8" EUE 8R J-55 tbg

**Liner:** 4 1/2" OD 11.6# FL4S K-55
**Set:** @ 3750' w/ top @ surface
**Hole Size:** 4 3/4"
**Circ:** No **TOC:** Surface
**TOC By:** Cmtd down 4 1/2"x 5 1/2" annulus w/ 150 sks on 1/28/2000.

**Open-Hole Production Interval**
3750-4102' (San Andres)

**COTD:** 4102'
**PBTD:** 4102'
**TD:** 4102'

**Updated:** 2/20/2002 **By:** A. M. Howell