

Case 12320

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? Yes No

II. OPERATOR: Chevron U.S.A. Production Co.

ADDRESS: P. O. Box 1150 Midland, TX 79702

CONTACT PARTY: Tracy Love - Petroleum Engineer

PHONE: (915) 687-7645

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? Yes No
If yes, give the Division order number authorizing the project: R - 7766

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Tracy G. Love

TITLE: Petroleum Engineer

SIGNATURE: *Tracy Love*

DATE: 11/10/99

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted.

Please show the BEFORE THE OIL CONSERVATION DIVISION

11/07/84 Case No. 8398 (Order No. 7766 - Effective 12/27/84)

Santa Fe, New Mexico

Case No. 12320 Exhibit No. 7

Submitted by:

the appropriate District Office

DISTRIBUTION: Orig

Chevron U.S.A. Production Co.

Hearing Date: March 2, 2000

Chevron USA

0001

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

**EMSU Nos. 210, 212, 222, 252, and 258
Conversion to Injection
Eunice Monument South Unit
Lea County, NM**

INFORMATION FOR NMOCD FORM C-108

ITEM I

(See OCD Form C-108)

ITEM II

(See OCD Form C-108)

ITEM III

See attached wellbore schematics.

ITEM IV

(See OCD Form C-108)

ITEM V

This was originally submitted as Exhibit No. 28 Case No. 8398 heard at a Commissioner's hearing on 11-07-84 (Order No. 7766 - effective 12-27-84). Smaller area maps relating to the EMSU Nos. 210, 212, 222, 252, and 258 conversions are attached.

ITEM VI

This was originally submitted as Exhibit No. 31 of Case 8398 heard at a Commissioner's hearing on 11-07-84 (Order No. 7766 - effective 12-27-84). Please note attached schematic diagrams of new drilled wells within the area of review since the effective date of the Order. No existing wells at the time of the original Order are known to have been plugged and abandoned.

ITEM VII

See attached table showing items VII (1), (2), and (3) for the subject wells of this C-108 application. Items VII (4) and (5) are consistent with the original C-108 application and its Exhibit No. 33a.

ITEM VIII

This was originally submitted as Exhibit No. 34a and 36 of Case No. 8398 heard at a Commissioner's hearing on 11-07-84 (Order No. 7766 - effective 12-27-84). Copies of these Exhibits are enclosed.

ITEM IX

Proposed stimulation program for each well to convert is attached with Item III.

ITEM X

Logging and test data will be filed with the OCD once obtained.

ITEM XI

This was originally submitted as Exhibit No. 37 of Case 8398 heard at a Commissioner's hearing on 11-07-84 (Order No. 7766 - effective 12-27-84). A copy of this Exhibit is enclosed.

ITEM XII

This was originally submitted as Exhibit No. 38 of Case 8398 heard at a Commissioner's hearing on 11-07-84 (Order No. 7766 - effective 12-27-84). A copy of this Exhibit is enclosed.

**EMSU Nos. 210, 212, 222, 252, and 258
Conversion to Injection
Eunice Monument South Unit
Lea County, NM**

ITEM XIII

All surface land owners and offset operators are being notified by Certified Mail with a copy of the C-108 Form. A request for publication in the Hobbs News-Sun is attached.

EMSU #210 WBS#
API: 30-025-04469
Eunice Monument Grayburg / San Andres
Lea County, New Mexico
October 21, 1999

Procedure to Perforate, Acidize, & Convert to Injection

1. Verify dead man anchors have been set and tested.
2. MIRU PU. NU BOP. TIH w/ 4-3/4" bit, DC's, & WS. DO cmt & CIBP @ 3450. CO to TOL @ 3741'. TOH. TIH w/ 3-1/8" bit, DC's, & WS. DO CICR @ 3766' & cmt to 3820. Circ clean & TOH.
3. RU WL. Tie into Dresser Atlas GR-CNL dated 10/29/87 & perforate the interval 3770-3805' w/ 3 JSPF @ 120° phasing.
4. RDWL. RIH w/ RBP & trt pkr. Set RBP @ 3810. Set pkr @ 3765.
5. RU BJ. Break down perfs w/ 1000 gal 15% NE HCl*. Over flush w/ 20 bbls. RD BJ. TOH.
6. Plug back w/ 20/40 sand to 3680'.
7. TIH w/ CICR & set @ 3550+/-.
8. EPIR. RU BJ. EPIR. Cmt sqz w/ 100 sx Class "C" w/ 2% CaCl + .5 BA-10 + .2 CD-32 or as per BJ's recommendation. Sting out of CICR & TOH. RD BJ. WOC.
9. TIH w/ 4-3/4" bit, DC's, & WS. DO CICR & cmt to 3670'. Pressure test cmt sqz to 300 PSI. DO cmt & CO to 3815+/- TOH.
10. TIH w/ 5-1/2" nickel-plated/plastic-coated Baker Loc-Set pkr w/ 1.81" profile, XL On-Off Tool, & 2-3/8" IPC tbg. Use stabbing guide to run IPC tbg.
11. Set inj pkr @ 3635+/-.
12. ND BOP. NU inj WH. Perform OCD MIT. RD PU
13. Clean and clear location.

- * Breakdown Acid (1000 gal 15% NEHCl) to contain the following:
- 10 gpt Acetic Anhydride Blend (Organic Acid)
 - 10 gpt Ferrotrol - 300L (Iron Control)
 - 1 gpt CI - 25 (Corrosion Inhibitor)
 - 1 gpt Inflo 150 (Surface Tension Reducer)
 - 1 gpt NE - 13 (Non-Emulsifier)

T. Love 687 - 7645



CURRENT WELL DATA SHEET

LEASE: EMSU WELL: 210
 LOC: 3261' F N L & 1980' F WL SEC: 4
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: _____ ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3557 STATUS: TA'd
 KB: 3567 API NO: 30-025-04469
 DF: _____ CHEVNO: FA5611:01

Date Completed: 6/1/1938
 Initial Production: 2400 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3749' to 3870'

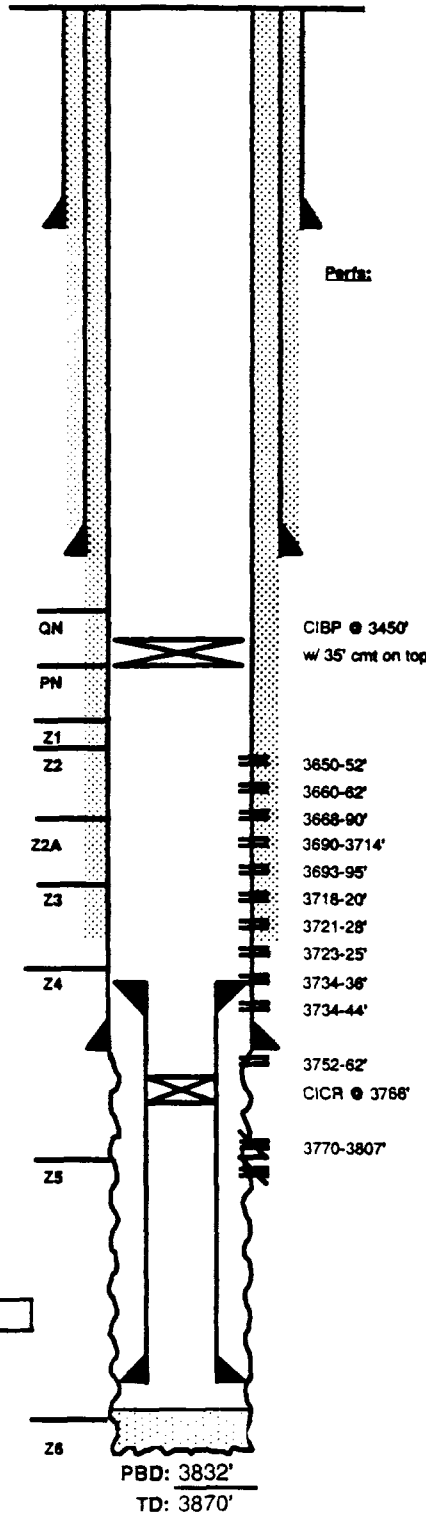
10-3/4" OD # CSG
 Set @ 319' W/ 200 SX
 Cmt circ.? yes
 TOC @ surf by calc

7-5/8" OD 26.4# ST&C # CSG Gr.
 Set @ 1271' W/ 400 SX
 Cmt circ.? yes
 TOC @ _____ by _____

Tubing Detail:

5-1/2" OD 17# # CSG Gr.
 Set @ 3749' W/ 400 SX
 Cmt circ.? Yes
 TOC @ _____ by _____

Liner Detail: TOL @ 3741' to 3832' WLTD.



Completion Data

6/38 Natural - no stimulation.

Subsequent Workover or Reconditioning:

1/47 Acdz w/ 1000 gals 20%.
 10/49 Installed gas lift.
 9/54 Rod pump installed. B- 5/120. A- 27/161.
 4/86 Ran GR/CCL/CNL and perf OH // 3800-02, 3788-90, 3782-84 & 3769-71 (4 JHPF). ACDZ OH w/ 4500 gals 20% NeFe HCl fr 3749-3867'.
 5/86 Dump sand to 3818'. Dump 149 gals Hydromite to 3780'. DO to 3815' Perf 3650-52, 3660-62, 3668-70, 3688-90, 3693-95, 3718-20, 3723-25 & 3734-36 (4 JNPF). ACDZ w/ 4000 gals 15% NeFe HCl. Push pieces RBP to 3815'. Set WL CIBP @ 3730'. B: 0/140
 10/28/87 DO CIBP and push to 3822'. Run 4" Liner (6 jts. 4"-13.4# L80 RFC spiral-lined and 6 jts. 4" 12.93# L80 RFC liner, set @ 3822' w/ 50 SX CI C). SQZD TOL w/ 45 SX. WLTD = 3832'. TOL 3741' to 3832' WL. Perf 3650-74, 3690-3714, 3721-28, 3734-44, 3752-62 & 3770-3807'. ACDZ w/ 5600 gal 15% NeFe HCl. Swb; SFL=1400', EFL=1700'. B: 1/24 A: 0/60.
 12/88 Set CICR @ 3766'. Cmt squeeze 3770-3807' w/ 1200 SX. Comm. around CR. Reperf 3650-3762'.
 11/11/98 TA'd - Set CIBP @ 3450' w/35' cmt on top

Additional Data:

T/Queen Formation @ 3327'
 T/Penrose Formation @ 3455'
 T/Grayburg Zone 1 @ 3613'
 T/Grayburg Zone 2 @ 3650'
 T/Grayburg Zone 2A @ 3678'
 T/Grayburg Zone 3 @ 3704'
 T/Grayburg Zone 4 @ 3736'
 T/Grayburg Zone 5 @ 3786'
 T/Grayburg Zone 6 @ 3830'
 T/San Andres Formation @ 3832'
 KB @ 3567'

Current
 Inj. _____ bwpd @ _____ psi Date: _____
 Prod. _____ bopd _____ bwpd Date: _____
 Gas _____ mcfpd



PROPOSED WELL DATA SHEET

LEASE: EMSU WELL: 210
 LOC: 3261' F N L & 1980' F WL SEC: 4
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: _____ ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3557' STATUS: TA'd
 KB: 3567' API NO: 30-025-04469
 DP: _____ CHEVNO: FA5611:01

Date Completed: 6/1/1936
 Initial Production: 2400 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3749' to 3870'

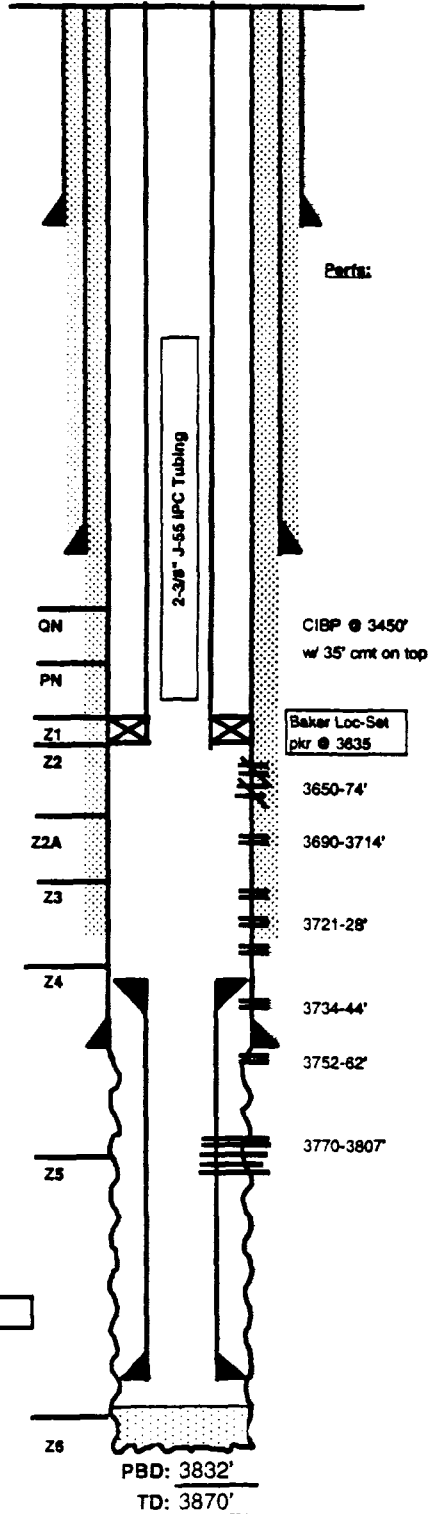
10-3/4" OD
 # CSG
 Set @ 319' w/ 200 SX
 Cmt circ.? yes
 TOC @ surf by calc

7-5/8" OD 26.4#
 ST&C # CSG Gr.
 Set @ 1271' w/ 400 SX
 Cmt circ.? yes
 TOC @ _____ by _____

Tubing Detail:

5-1/2" OD 17#
 # CSG Gr.
 Set @ 3749' w/ 400 SX
 Cmt circ.? Yes
 TOC @ _____ by _____

Liner Detail: TOL @ 3741' to 3832' WLTD.



Completion Data

6/36 Natural - no stimulation.

Subsequent Workover or Reconditioning:

1/47 Acdz w/ 1000 gals 20%.
 10/49 Installed gas lift.
 9/54 Rod pump installed. B- 5/120. A- 27/161.
 4/86 Ran GR/CCL/CNL and perf OH f/ 3300-02, 3788-90, 3782-84 & 3769-71 (4 JHPF). ACZD OH w/ 4500 gals 20% NeFe HCl fr 3749-3867'.
 5/86 Dump sand to 3818'. Dump 149 gals Hydromite to 3780'. DO to 3815'.
 Perf 3650-52, 3660-62, 3668-70, 3688-90, 3693-95, 3718-20, 3723-25 & 3734-36 (4 JNPF). ACZD w/ 4000 gals 5% NeFe HCl. Push pieces RBP to 3815'. Set WL CIBP @ 3730'. B: 0/140
 10/28/87 DO CIBP and push to 3822'. Run 4" Liner (6 jts. 4"-13.4# L80 RFC spiral-lined and 6 jts. 4" 12.93# L80 RFC liner, set @ 3822' w/ 50 SX CI C). SQZD TOL w/ 45 SX. WLTD = 3832'. TOL 3741' to 3832' WL. Perf 3650-74, 3690-3714, 3721-28, 3734-44, 3752-62 & 3770-3807'. ACZD w/ 5600 gal 15% NeFe HCl. Swb; SFL=1400', EFL=1700'. B: 1/24 A: 0/60.
 12/88 Set CIBP @ 3766'. Cmt squeeze 3770-3807' w/ 1200 SX. Comm. around CR. Reperf 3650-3762'.
 11/11/98 TA'd - Set CIBP @ 3450' w/35' cmt on top

Additional Data:

T/Queen Formation @ 3327'
 T/Penrose Formation @ 3455'
 T/Grayburg Zone 1 @ 3613'
 T/Grayburg Zone 2 @ 3650'
 T/Grayburg Zone 2A @ 3678'
 T/Grayburg Zone 3 @ 3704'
 T/Grayburg Zone 4 @ 3738'
 T/Grayburg Zone 5 @ 3786'
 T/Grayburg Zone 6 @ 3830'
 T/San Andres Formation @ 3832'
 KB @ 3567'

Current

Inj. _____ bwpd @ _____ psi Date: _____
 Prod. _____ bopd _____ bwpd Date: _____
 Gas _____ mcfpd

FILE: EMSU210WB.XLS
 LCJI - 4/15/99

EMSU #212

30-025-04504

UWPWB-_____

Eunice Monument South Unit

Lea County, New Mexico

October 22, 1999

PROCEDURE TO CONVERT TO INJECTION:

(All depths referenced from Dresser-Atlas GR-CNL-CCL dated 12/23/86 w/ KB of 8'.)

1. MIRU PU. ND WH. TOH w/ rods & rotor. NU BOP. TOH w/ tbg & pump.
2. TIH w/ 4-3/4" bit, 240' of tbg, & csg scraper. Ream csg from 3550 to 3650. CO to 3890+/- TOH.
3. TIH w/ 5-1/2" nickel-plated/plastic-coated Baker Loc-Set pkr w/ 1.81" profile, XL On-Off Tool, & 2-3/8" IPC tbg. Use stabbing guide to run IPC tbg.
4. Set inj pkr @ 3625+/-.
5. ND BOP. NU inj WH. Perform OCD MIT. RD PU.
6. Clean and clear location.

T. Love 687-7645

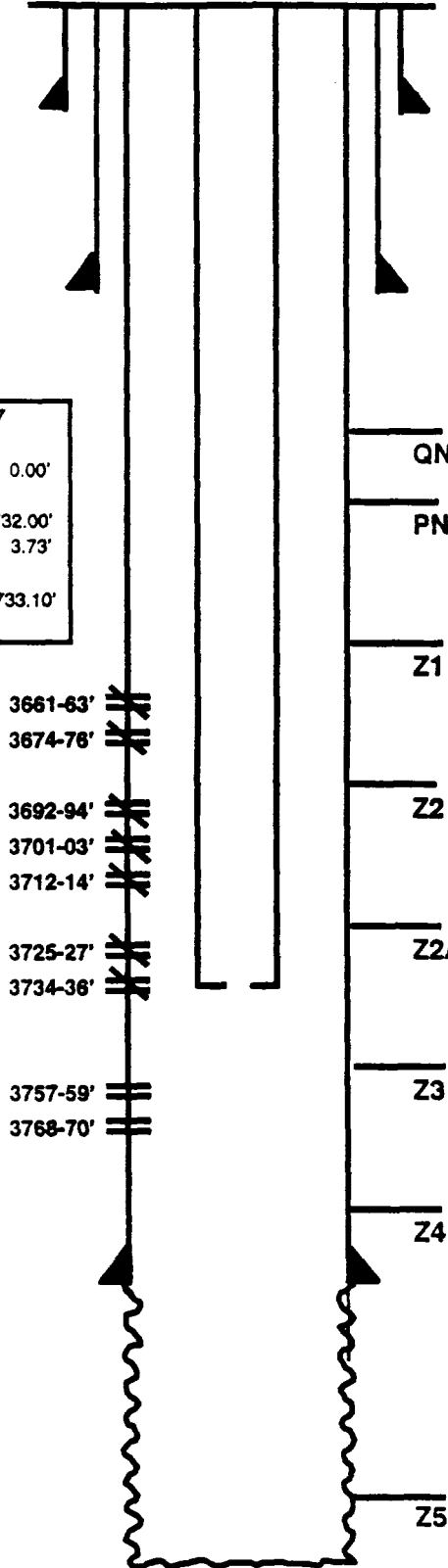
CURRENT WELLBORE DIAGRAM

LEASE: EMSU WELL: 212 FIELD: Eunice-Monument API: 30-025-04504
 LOC: 3258 FNL & 660 FEL, Unit I SEC: 5 BLK: T21S, R36E REF NO: FA5646:01
 SVY: N.M.P.M. GL: 3569 CTY/ST: Lea Co., NM SPUD: _____
 CURRENT STATUS: Producer KB: 3577 DF: _____ TD DATE: _____

12-1/2" OD Surface
 Pipe set @ 252' w/
 200 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.

8-5/8", 26.4# Csg.
 set @ 1358' w/ 400 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 11/14/97	
KBTH:	0.00'
114 Jts. 2-3/8" J-55 EUE:	3732.00'
API SN	3.73'
Landed @	3733.10'



Data Completed: 12-24-35
Initial Production: NA
Initial Formation: Grayburg Fr: 3798' To: 3887'
Completion Data:
 12/35 Natural OH completion.
Workover History:
 3/43 ACDZ w/ 2000 gals 15% Acid (3837-3887).
 4/48 ACDZ 3840-3887' w/ 50 gals 20%.
 3/51 ACDZ 3840-3887 w/ 500 gals 20%.
 1/56 ACDZ w/ 3000 gals Acid.
 1/57 FRAC 3800-3887' w/ 10,000 gals lease oil & 10,000 # 20/40 sand. CO fill to 3873'.
 12/28/86 Perf 3661-3770' w/ 1/2" hole (2 JH-PF), or 36 holes. ACDZ w/ 3000 gals NeFe. ACDZ OH w/ 4000 gal 15% NeFe.
 8/89 Chemical treatment.
 11/3/97 CO well to 3890'. ACDZ perms 3757-3770' & OH w/ 3000 gals 15% Resisol II w/ 500 gal 70Q GBW. Swb. 13 runs. PB w/ 3500# 20/40 sd to 3752'. Set CIBP @ 3740, pkr @ 3640. Wash sd to 3750'. RIH CICR, set @ 3604'. SQZD perms 3661-3736 w/ 300 SX Cl C (47 SX in form.) - D/O cmt to 3740'. CO CIBP, wash sd and ream to 3890'. Swb. RIH tag @ 3890'. No fill. Run prod. equipment.

Additional Data:
 T/Queen Formation @ 3344'
 T/Penrose Formation @ 3481'
 T/Grayburg Zone 1 @ 3646'
 T/Grayburg Zone 2 @ 3685'
 T/Grayburg Zone 2A @ 3721'
 T/Grayburg Zone 3 @ 3751'
 T/Grayburg Zone 4 @ 3792'
 T/Grayburg Zone 5 @ 3849'
 T/Grayburg Zone 6 @ 3911'
 T/San Andres Formation @ 3945'
 KB @ 3577'

5-1/2", 17#/ft Csg.
 set @ 3798' w/ 100 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

TD @ 3887'

FILE: EMSU212WB.xls
 DKTS: 11/10/98

PROPOSED WELLBORE DIAGRAM

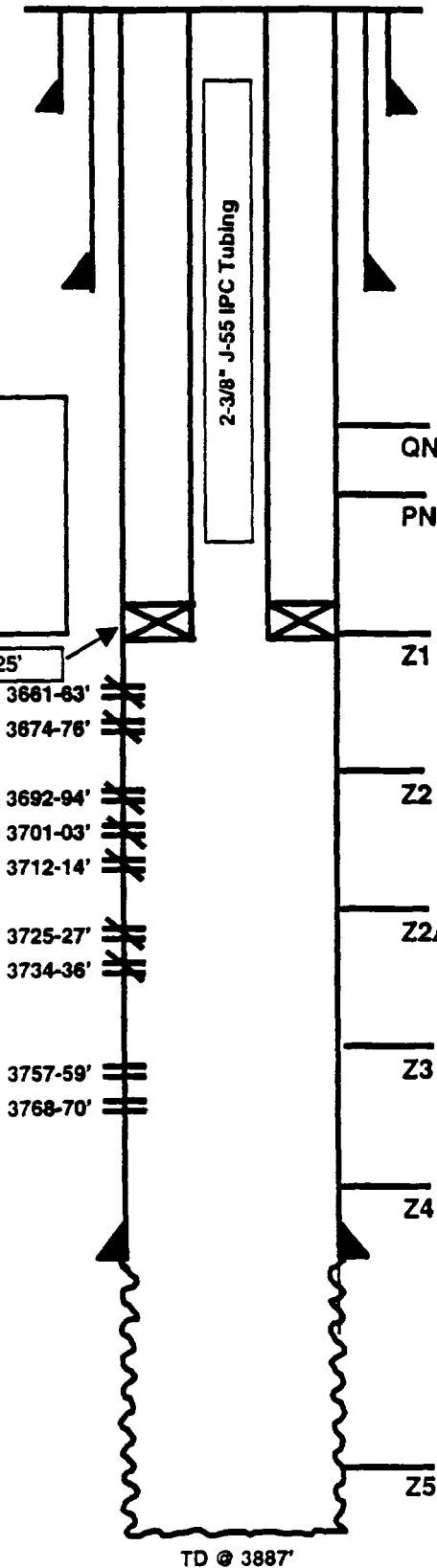
LEASE: EMSU	WELL: 212	FIELD: Eunice-Monument	API: 30-025-04504
LOC: 3258 FNL & 660 FEL, Unit I	SEC: 5	BLK: T21S, R36E	REF NO: FA5646:01
SVY: N.M.P.M.	GL: 3569	CTY/ST: Lea Co., NM	SPUD:
CURRENT STATUS: Producer	KB: 3577	DF:	TD DATE:

12-1/2" OD Surface
 Pipe set @ 252' w/
 200 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.

8-5/8", 26.4# Csg.
 set @ 1358' w/ 400 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Tubing Detail:

Baker Loc-Set pkr @ 3625'



Date Completed: 12-24-35
 Initial Production: NA
 Initial Formation: Grayburg Fr: 3798' To: 3887'
 Completion Data:
 12/35 Natural OH completion.
 Workover History:
 3/43 ACDZ w/ 2000 gals 15% Acid (3837-3837).
 4/48 ACDZ 3840-3887' w/ 50 gals 20%.
 3/51 ACDZ 3840-3887' w/ 500 gals 20%.
 1/56 ACDZ w/ 3000 gals Acid.
 1/57 FRAC 3800-3887' w/ 10,000 gals lease oil & 10,000 # 20/40 sand.
 CO fill to 3873'.
 12/28/86 Perf 3661-3770' w/ 1/2" hole (2 JHPF), or 36 holes. ACDZ w/
 3000 gals NeFe. ACDZ OH w/ 4000 gal 15% NeFe.
 8/89 Chemical treatment.
 11/3/97 CO well to 3890'. ACDZ perms 3757-3770' & OH w/ 3000 gals
 15% Resisol II w/ 500 gal 70Q GBW. Swb, 13 runs. PB w/ 3500# 20/40
 sd to 3752'. Set CIBP @ 3740, pkr @ 3640. Wash sd to 3750'. RIH
 CIBP, set @ 3604'. SQZD perms 3661-3736 w/ 300 SX CI C (47 SX in
 form.) - D/O cmt to 3740'. CO CIBP, wash sd and ream to 3890'. Swb.
 RIH tag @ 3890'. No fill. Run prod. equipment.

Additional Data:
 T/Queen Formation @ 3344'
 T/Penrose Formation @ 3481'
 T/Grayburg Zone 1 @ 3648'
 T/Grayburg Zone 2 @ 3685'
 T/Grayburg Zone 2A @ 3721'
 T/Grayburg Zone 3 @ 3751'
 T/Grayburg Zone 4 @ 3792'
 T/Grayburg Zone 5 @ 3849'
 T/Grayburg Zone 6 @ 3911'
 T/San Andres Formation @ 3945'
 KB @ 3577'

5-1/2", 17#/ft Csg.
 set @ 3798' w/ 100 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

FILE: EMSU212WB.xls
 DKTS: 11/10/98

EMSU #222
30-025-04531

October 25, 1999

UWPWB-_____
Eunice Monument South Unit
Lea County, New Mexico

PROCEDURE TO CONVERT TO INJECTION:

(All depths referenced from Welex GR-DSN-CCL dated 01/30/98 w/ KB @ GL.)

1. MIRU PU. ND WH. TOH w/ rods & pump. NU BOP. TOH w/ tbg.
2. TIH w/ 4-3/4" bit, 6 3-1/2" DC's, 90' of tbg, & csg scraper. Deepen OH to 4010'. Ream csg from 3630 to 3730. TIH to 4010' & circ clean. TOH.
3. TIH w/ 5-1/2" nickel-plated/plastic-coated Baker Loc-Set pkr w/ 1.81" profile, XL On-Off Tool, & 2-3/8" IPC tbg. Use stabbing guide to run IPC tbg.
4. Set inj pkr @ 3720+/-.
5. ND BOP. NU inj WH. Perform OCD MIT. RD PU.
6. Clean and clear location.

T. Love 687-7645



CURRENT WELL DATA SHEET

LEASE: EMSU WELL: 222
 LOC: 3300' F S L & 1980' F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: O ST: N.M.
 (formerly: H.T. Orcutt NCT-A #8)

FORM: Grayburg / San Andres DATE: _____
 GL: 3573' STATUS: Producer
 KB: 3573' API NO: 30-025-04531
 DF: _____ CHEVNO: FA 5673:01

Date Completed: #####
 Initial Production: 1/ 600 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3767' to 3873' / GOR 6420

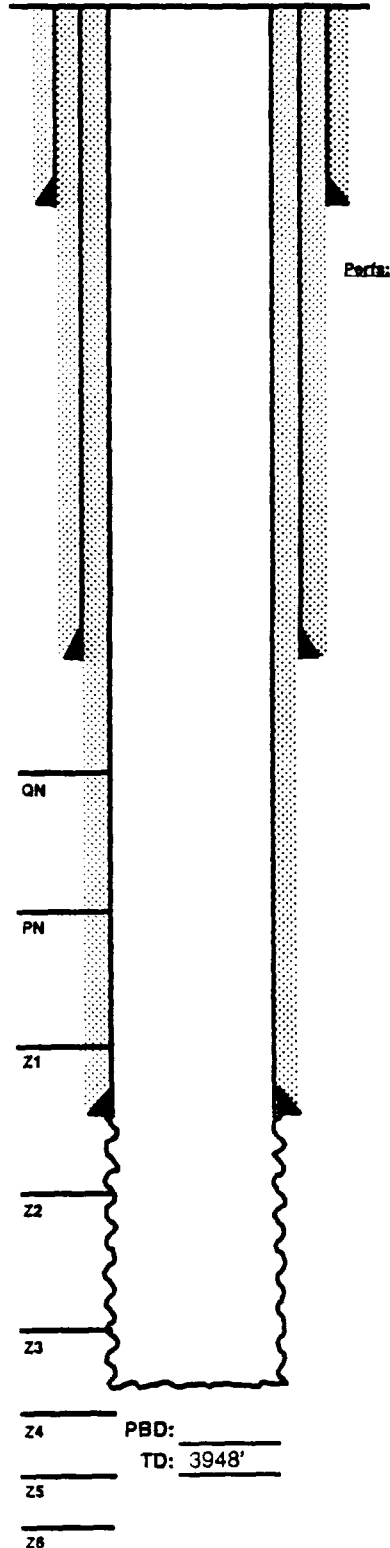
16" OD
70# CSG
 Set @ 34' W/ 30 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (17-1/2" hole)

Tubing & Rod Detail: 1/31/88	
Original KB to THF:	0.00'
4 Jts. 2-3/8" 4.7# J-55 EUE 8rd	
tbq:	123.31'
2-3/8" 4.7# J-55 EUE 8rd tbq:	31.28'
126 Jts. 2-3/8" 4.7# H-40 10V	
tbq:	3738.59'
2-3/8" H-40 SN:	1.10'
2-3/8" H-40 Perf Sub:	4.00'
2-3/8" H-40 10V BPMA:	30.87'
Landed @	3929.15'

7-5/8" OD
22# CSG 8rd
 Set @ 1165' W/ 600 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (9-7/8" hole)

Rod Detail: 1/31/88	
1-1/4" X 16' Polished Rod	
3/4" X 8' SR	
3/4" X 6' SR	
102 - 3/4" KD SRs	
52 - 3/4" Grd D SRs	
3/4" X 2' Sub Rod	
2 X 1-1/2" X 12' RWTC Pump	

5-1/2" OD
17# CSG 10rd
 Set @ 3754 W/ 175 SX
 Cmt circ.? no
 TOC @ 2500' by calc.
 (4-3/4" hole)



Completion Data
 11/12/36 ACDZ w/ 2000 gals acid.

Subsequent Workover or Reconditioning:
 8/15/56 Install ppg. equipment.
 4/25/74 ACDZ w/ 750 gals. A/W - 56 BO/ 6 BW. B/4 - 39 BO / 3 BWPD.
 7/8/81 ACDZ w/ 750 gals.
 1/88 Pulled PE. CO to 3873'. Deepen to 3948'. Log w/ GR, CCL, CNL, caliper. Ran PE. A/W - 3 BO/ 132 BW/ GOR 7666. B/4 - 5 BO/ 30 BW/ GOR 600.

Additional Data:
 T/Queen Formation @ 3380'
 T/Penrose Formation @ 3539'
 T/Grayburg Zone 1 @ 3730'
 T/Grayburg Zone 2 @ 3805'
 T/Grayburg Zone 3 @ 3919'
 T/Grayburg Zone 4 @ 3963'
 T/Grayburg Zone 5 @ 4026'
 T/Grayburg Zone 6 @ 4090'
 T/San Andres Formation @ 4119'
 KB @ 3573'



PROPOSED WELL DATA SHEET

LEASE: EMSU WELL: 222
 LOC: 3300' F S L & 1980' F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: O ST: N.M.
 (formerly: H.T. Orcutt NCT-A #6)

FORM: Grayburg / San Andree DATE: _____
 GL: 3573' STATUS: Producer
 KB: 3573' API NO: 30-025-04531
 DF: _____ CHEVNO: FA 5673:01

Date Completed: 11/11/1936
 Initial Production: 1/ 600 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3767' to 3873' / GOR 6420

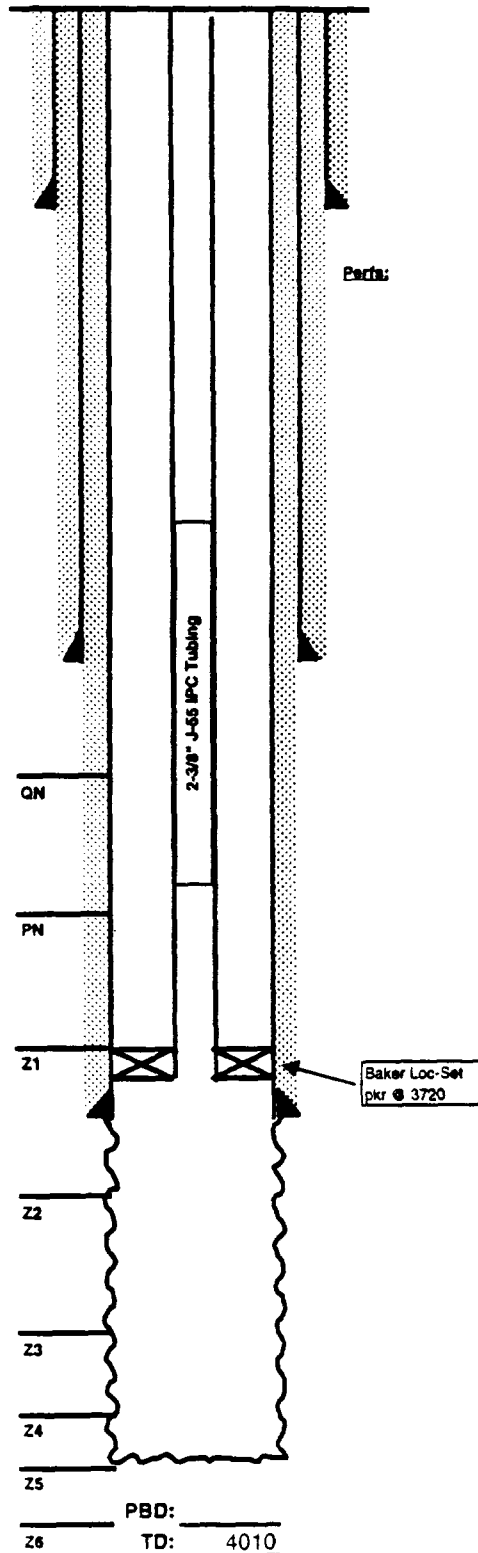
16" OD
70# CSG
 Set @ 34' W/ 30 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (17-1/2" hole)

Tubing & Rod Detail:

7-5/8" OD
22# CSG 8rd
 Set @ 1165' W/ 600 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (9-7/8" hole)

Rod Detail:

5-1/2" OD
17# CSG 10rd
 Set @ 3754' W/ 175 SX
 Cmt circ.? no
 TOC @ 2500' by calc.
 (4-3/4" hole)



Completion Data
 11/12/36 ACDZ w/ 2000 gals acid.

Subsequent Workover or Reconditioning:
 8/15/56 Install ppg. equipment.
 4/25/74 ACDZ w/ 750 gals. A/W - 56 BO/ 6 BW. B/4 - 39 BO / 3 BWPD.
 7/8/81 ACDZ w/ 750 gals.
 1/88 Pulled PE. CO to 3873'. Deepen to 3948'. Log w/ GR, CCL, CNL, caliper. Ran PE. A/W - 3 BO/ 132 BW/ GOR 7666. B/4 - 5 BO/ 30 BW/ GOR 600.

Additional Data:
 T/Queen Formation @ 3380'
 T/Penrose Formation @ 3539'
 T/Grayburg Zone 1 @ 3730'
 T/Grayburg Zone 2 @ 3805'
 T/Grayburg Zone 3 @ 3919'
 T/Grayburg Zone 4 @ 3963'
 T/Grayburg Zone 5 @ 4026'
 T/Grayburg Zone 6 @ 4090'
 T/San Andree Formation @ 4119'
 KB @ 3573'

EMSU #252
30-025-04528

October 25, 1999

UWPWB- _____
Eunice Monument South Unit
Lea County, New Mexico

PROCEDURE TO CONVERT TO INJECTION:

(All depths referenced from Welex GR-DSN-CCL dated 01/11/88 w/ KB @ GL.)

1. MIRU PU. ND WH. TOH w/ rods & pump. NU BOP. TOH w/ tbg.
2. TIH w/ 4-3/4" bit, 230' of tbg, & csg scraper. Ream csg from 3650 to 3750. CO to 3977+/- . TOH.
3. TIH w/ 5-1/2" nickel-plated/plastic-coated Baker Loc-Set pkr w/ 1.81" profile, XL On-Off Tool, & 2-3/8" IPC tbg. Use stabbing guide to run IPC tbg.
4. Set inj pkr @ 3725+/-.
5. ND BOP. NU inj WH. Perform OCD MIT. RD PU.
6. Clean and clear location.

T. Love 687-7645



CURRENT WELL DATA SHEET

LEASE: EMSU WELL: 252
 LOC: 660' F S L & 1980' F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: W ST: N.M.
 (formerly: Graham State "NCT-E" #1)

FORM: Grayburg / San Andres DATE: _____
 GL: 3588' STATUS: Producer
 KB: 3588' API NO: 30-025-04528
 DF: _____ CHEVNO: FA 5670:01

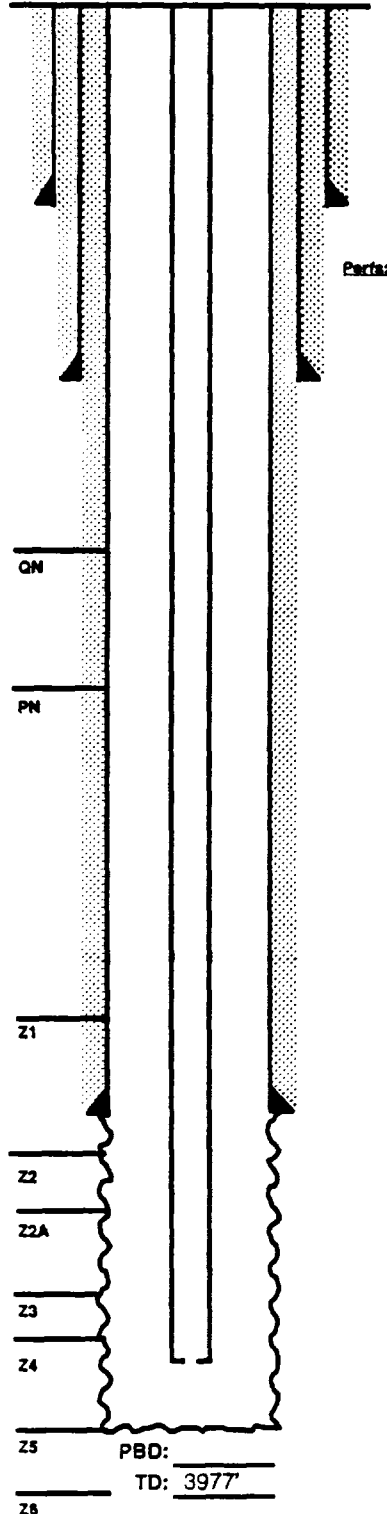
Date Completed: 3/19/1936
 Initial Production: 7/484 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3769' to 3890' / GOR 2446

10-3/4" OD
40# CSG
 Set @ 321' W/ 250 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

7-5/8" OD
26# CSG 8rd
 Set @ 1267' W/ 250 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 8/30/93	
Original KB to THF:	6.50'
117 Jts. 2-7/8" J-55 6.5# EUE tbg:	3813.99'
5-1/2" X 2-7/8" TAC:	2.85'
9 Jt. 2-7/8" EUE J-55 6.6 tbg:	278.88'
2-7/8" EUE IPC 8.5# tbg:	31.00'
Seating Nipple:	1.10'
2-7/8" Perf Sub:	3.86'
Mud Jt. w/ BPOB:	30.84'
Landed @	3969.02'
Rod Detail: 8/30/93	
78 - 7/8" KD Rods	
78 - 3/4" KD Rods	
2-1/2" X 2" X 20' Pump	
No Subs	

5-1/2" OD
17# CSG 10rd
 Set @ 3758' W/ 300 SX
 Cmt circ.? No
 TOC @ 450' by calc.



Completion Data
 ACDZ w/ 1000 gals Dowell X solution.

Subsequent Workover or Reconditioning:
 4/46 Install Flow valve in the Tst 136 Bo/10 Bw
 7/50 Tbg stuck. Aczd w/ 500 gal. Tst 24 Bo/80 BWPD.
 6/53 Install Ppg Equip. Tst 67 Bo/8 BWPD.
 2/54 Between period & int. csg string 15# Continuous weak blow of ga. Checked 1 hour later & no blow. Continued no leak.
 2/66 Over 500. Acid 15% NeFeA in csg. Test 13 Bo/41 BWPD B14 tst 12 Bo/13 BWPD.
 5/74 Trtd OH w/ 4000 gal 15% NeFeA in 4 stgs w/ BAF's GRs as diverter. Test 12 Bo/50 BWPD. B/4 tst 1 Bo/33 BWPD.
 9/81 Pump stuck. Pull tbg retrieve pump. Pump 750 gal. 15% DI HCL dn tbg. Scale and indicate current in pump. Test 5 Bo/40 Bw. B/4 tst 8 Bo/66 BWPD.
 2/82 Pump stuck. Freed pmp. Pump 1000 gal 15% NeFeA dn tbg. Test 6 Bo/55 BWPD. B/4 - 8 Bo/44 BWPD.
 4/84 Chem. sqzd OH.
 1/88 C/O WH. Tag btm @ 3874' (16' f.) Circ w/ foam comm to 7 5/8" int. csg. ind hole in 5 1/2 prod csg. C/O & deepened to 3977' Ran logs. Return well do prod. Test 14 Bo/181 Bw/46 mcfpd FL @ 183' asn. B/4 test 7 Bo/68 BW/2mcfpd.
 2/90 Chem sqzd OH. Fluid coming out int. csg when press on prod. string.
 8/93 Aczd OH w/ 6000 gal 15% NeFeA w/ 2? antisludging compound in 1st 1500 gal in 4 stgs w/ 2000 GRs. EFL @ 2200', Rcur 99 bbls...2% oil cut. SN @ 3934'. Tst: B-2Bo/139 Bw/1 MCF. A - 16 Bo/434 Bw/39 MCF.

Additional Data:
 T/Queen Formation @ 3396'
 T/Penrose Formation @ 3550'
 T/Grayburg Zone 1 @ 3727'
 T/Grayburg Zone 2 @ 3801'
 T/Grayburg Zone 2A @ 3850'
 T/Grayburg Zone 3 @ 3914'
 T/Grayburg Zone 4 @ 3940'
 T/Grayburg Zone 5 @ 4010'
 T/Grayburg Zone 6 @ 4055'
 T/San Andres Formation @ 4124'
 KB @ 3588'



PROPOSED WELL DATA SHEET

LEASE: EMSU WELL: 252
 LOC: 660' F S L & 1980' F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: W ST: N.M.
 (formerly: Graham State "NCT-E" #1)

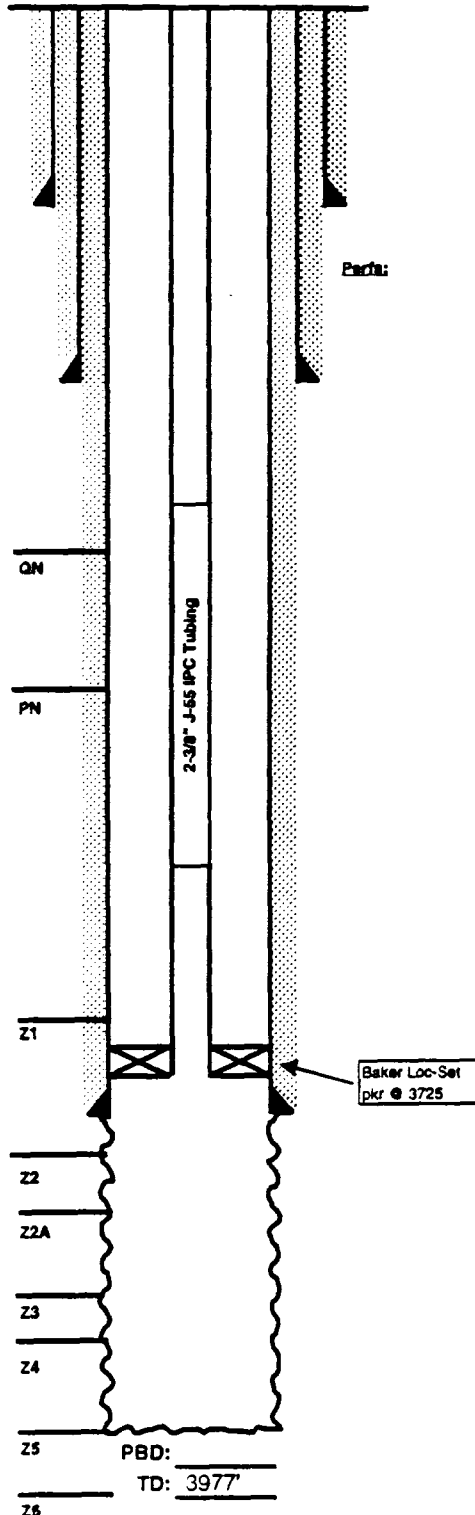
FORM: Grayburg / San Andres DATE: _____
 GL: 3588' STATUS: Producer
 KB: 3588' API NO: 30-025-04528
 DF: _____ CHEVNO: FA 5670:01

Date Completed: 3/19/1936
 Initial Production: 1/ 484 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3769' to 3890' / GOR 2446

10-3/4" OD
 40# CSG
 Set @ 321' W/ 250 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

7-5/8" OD
 26# CSG 8rd
 Set @ 1267' W/ 250 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

Tubing Detail:



Completion Data

ACDZ w/ 1000 gals Dowell X solution.

Subsequent Workover or Reconditioning:

4/46 Install Flow valve in the Tst 136 Bo/10 Bw
 7/50 Tbg stuck. Aczd w/ 500 gal. Tst 24 Bo/80 BWPD.
 6/53 Install Ppg Equip. Tst 67 Bo/8 BWPD.
 2/54 Between period & int. csg string 15# Continuous weak blow of ga. Checked 1 hour later & no blow. Continued no leak.
 2/66 Over 500. Acid 15% NeFeA in csg. Test 13 Bo/41 BWPD B14 tst 12 Bo/13 BWPD.
 5/74 Trtd OH w/ 4000 gal 15% NeFeA in 4 stgs w/ BAF's GRs as diverter. Test 12 Bo/50 BWPD. B/4 tst 1 Bo/33 BWPD.
 9/81 Pump stuck. Pull tbg retrieve pump. Pump 750 gal. 15% DI HCL dn tbg. Scale and indicate current in pump. Test 5 Bo/40 Bw. B/4 tst 8 Bo/66 BWPD.
 2/82 Pump stuck. Freed pmp. Pump 1000 gal 15% NeFeA dn tbg. Test 6 Bo/55 BWPD. B/4 - 8 Bo/44 BWPD.
 4/84 Chem. sqzd OH.
 1/88 C/O WH. Tag btm @ 3874' (16' f.) Circ w/ foam comm to 7 5/8" int. csg. ind hole in 5 1/2 prod csg. C/O & deepened to 3977' Ran logs. Return well do prod. Test 14 Bo/181 Bw/46 mcfpd FL @ 183' asn. B/4 test 7 Bo/68 BW/2mcfpd.
 2/90 Chem sqzd OH. Fluid coming out int. csg when press on prod. string.
 8/93 Aczd OH w/ 6000 gal 15% NeFeA w/ 2? antisludging compound in 1st 1500 gal in 4 stgs w/ 2000 GRs. EFL @ 2200', Rcur 99 bbls...2% oil cut EFL @ 2100'. Rcur 64 bbls...2% oil cut, SN @ 3934'. Tst: B-2Bo/139 Bw/1 MCF. A - 16 Bo/434 Bw/39 MCF.

Additional Data:

T/Queen Formation @ 3396'
 T/Penrose Formation @ 3550'
 T/Grayburg Zone 1 @ 3727'
 T/Grayburg Zone 2 @ 3801'
 T/Grayburg Zone 2A @ 3850'
 T/Grayburg Zone 3 @ 3914'
 T/Grayburg Zone 4 @ 3940'
 T/Grayburg Zone 5 @ 4010'
 T/Grayburg Zone 6 @ 4055'
 T/San Andres Formation @ 4124'
 KB @ 3588'

5-1/2" OD
 17# CSG 10rd
 Set @ 3758' W/ 300 SX
 Cmt circ.? No
 TOC @ 450' by calc.

PBD: _____
 TD: 3977'

EMSU #258 WBS#
API: 30-025-21251
Eunice Monument Grayburg / San Andres
Lea County, New Mexico
October 26, 1998

Procedure to Convert to Injection

(All depths referenced from log w/ KB of 15'.)

1. MIRU PU. ND WH. POH w/ rods & pump. NU BOP. TOH w/ tbg.
2. TIH w/ 3-3/4" bit, csg scraper, & WS. Ream csg from 3550 to 3650. TIH to 3824 & circ clean. TOH.
3. TIH w/ 4-1/2" nickel-plated/plastic-coated Baker Loc-Set pkr w/ 1.81" profile, XL On-Off Tool, & 2-3/8" IPC tbg. Use stabbing guide to run IPC tbg.
4. Set inj pkr @ 3630+/-.
5. ND BOP. NU inj WH. Perform OCD MIT. RD PU
6. Clean and clear location.

T. Love 687 - 7645



CURRENT WELL DATA SHEET

LEASE: EMSU WELL: 258

LOC: 940' F S L & 940' F W L SEC: 4

TOWNSHIP: 21S CNTY: Lea

RANGE: 36E UNIT: U ST: N.M.

FORM: Grayburg / San Andres DATE: _____

GL: 3581' STATUS: Producer

KB: 3596' API NO: 30-025-21251

DF: _____ CHEVNO: FF4609:01

Date Completed: 4/12/1965

Initial Production: P34 BOPD / 111 BWPD

Initial Formation: Oil Center Blinebry

FROM: 5872' to 5949'

Completion Data

ACDZ w/ 3300 gal 15% Ne-frac w/ 30,550 gal GBW and 1-2 ppg.

Subsequent Workover or Reconditioning:

5/11/65 Set CIBP @ 3920' w/ 1 SX. cement cap. Perf 3768-3771, 3814-17 & 3845-48 (4-5/8" JHPF). ACDZ w/ 3000 gals 15% ONE.

12/13/76 Add perfs 3711-13 & 3737-39. ACDZ w/ 3000 gal 15% Ne acid.

2/23/87 CO added perfs, stim. / return prod. POH w/ tbg., SLM=3911' (SWIFN). TIH w/ 3-3/4" bit & csg scraper, tag @ 3911'. Set Howco RTTS pkr @ 3827', between 3814-17 & 3845-48 intervals. Swb. Rise pkr, move to 3780'. Swb to chk FL - rec 0 bbls. Move pkr below perfs & set @ 3873'. Swb. Tst CIBP & tbg. OK. PUH above all perfs to 3654', test ann. 500# held OK. SWIFN.

2/25/87 RU D-A, perf 3659-61, 3666-68, 3691-93, 3751-53, 3807-09, 3829-31 & 3840-42 (2 JHPF @ 120 deg phasing, total of 28 holes). PU Howco pkr. TIH to 3591' & set pkr. ACDZ w/ 4500 gals 15% NeHCl w/ additives. Pmax-1110#, Pmin=50#, Pavg-700#. Air- 5 BPM, ISIP=0. RD D-A, then swb. SFL-2400'. EFL-3591'. Rec. 20 bbls. Dry SWIFN.

2/26/87 Rise pkr. POH, L/D pkr. RIH w/ prod. tbg. Run pmp and rods. RTP.

3/18/88 Perf 3752-62, 3778-86 & 3792-3800 (3 SPF @ 120 deg phasing). ACDZ

3654-3800 w/ 3500 gal 15% 90/10 Resisol II w/ 700 20# gelled 1% KCl wtr as div. Swb. ACDZ 3730-3659 w/ 1000 gal 15% NeFe. TIH w/ CIBP NSET @ 3612'. SQZD 3659-3730' w/ 300 SX Cl C nitrified cmt. Approx. 50 SX sqzd in form. Drill cmt & CIBP @ 3730' & CO to 3907'. Swb. RIH prod. tbg. and rods, RTP.

Additional Data:

T/Queen Formation @ 3336'

T/Penrose Formation @ 3472'

T/Grayburg Zone 1 @ 3637'

T/Grayburg Zone 2 @ 3674'

T/Grayburg Zone 2A @ 3706'

T/Grayburg Zone 3 @ 3737'

T/Grayburg Zone 4 @ 3770'

T/Grayburg Zone 5 @ 3820'

T/Grayburg Zone 6 @ 3874'

T/San Andres Formation @ 3896'

KB @ 3596'

8-5/8" OD # _____

CSG _____

Set @ 1246' W/ 375 SX

Cmt circ.? yes

TOC @ _____ by _____

Tubing Detail:

4-1/2" OD 11.6#

CSG J-55 Gr.

Set @ 6024' W/ 550 SX

Cmt circ.? No

TOC @ 2400' by calc.

Rod Detail: 3/30/98

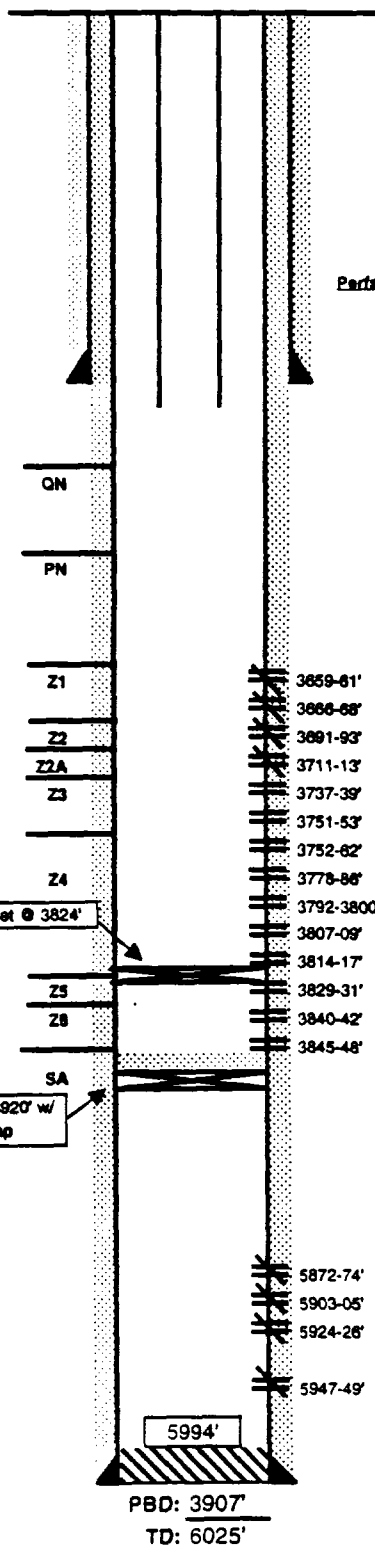
1-1/2" X 28' Polished Rod

2 - 4' N-97 Sube

130 - 7/8" N-97 Rods

20 - 1-1/2" KBars

2-1/2" X 2 X 20' RWBC pump



Current

Inj. _____ bwpd @ _____ psi Date: _____

Prod. _____ bopd _____ bwpd Date: _____

Gas _____ mcfpd



PROPOSED WELL DATA SHEET

LEASE: EMSU WELL: 258

LOC: 940' F S L & 940' F W L SEC: 4

TOWNSHIP: 21S CNTY: Lea

RANGE: 36E UNIT: U ST: N.M.

FORM: Grayburg / San Andres DATE: _____

GL: 3581' STATUS: Producer

KB: 3596' API NO: 30-025-21251

DF: _____ CHEVNO: FF4609:01

Date Completed: 4/12/1965

Initial Production: P34 BOPD / 111 BWPD

Initial Formation: Oil Center Blinbry

FROM: 5872' to 5949'

Completion Data

ACDZ w/ 3300 gal 15% Ne, frac w/ 30,550 gal GBW and 1-2 ppg.

Subsequent Workover or Reconditioning:

5/11/65 Set CIBP @ 3920' w/ 1 SX cement cap. Perf 3768-3771, 3814-17 & 3845-48 (4-5/8" JHPF). ACDZ w/ 3000 gals 15% ONE.

12/13/76 Add perfs 3711-13 & 3737-39. ACDZ w/ 3000 gal 15% Ne acid.

2/23/87 CO added perfs, stim. / return prod. POH w/ tbg., SLM=3911' (SWIFN). TIH w/ 3-3/4" bit & csg scraper, tag @ 3911'. Set Howco RTTS pkr @ 3827', between 3814-17 & 3845-48 intervals. Swb. Rise pkr. move to 3780'. Swb to chk FL - rec 0 bbls. Move pkr below perfs & set @ 3873'. Swb. Tst CIBP & tbg. OK. PUH above all perfs to 3654', test ann. 500# held OK. SWIFN.

2/25/87 RU D-A, perf 3659-61, 3666-68, 3691-93, 3751-53, 3807-09, 3829-31 & 3840-42 (2 JHPF @ 120 deg phasing, total of 28 holes). PU Howco pkr. TIH to 3591' & set pkr. ACDZ w/ 4500 gals 15% NeHCl w/ additives. Pmax-1110#, Pmin=50#, Pavg=700#. Air- 5 BPM, ISIP=0. RD D-A, then swb. SFL-2400', EFL-3591'. Rec. 20 bbls. Dry SWIFN.

2/26/87 Rise pkr, POH, L/D pkr. RIH w/ prod. tbg. Run pmp and rods. RTP.

3/18/98 Perf 3752-62, 3778-86 & 3792-3800 (3 SPF @ 120 deg phasing). ACDZ

3654-3800 w/ 3500 gal 15% 90/10 Resisol II w/ 70Q 20# gelled 1% KCl wtr as div. Swb. ACDZ 3730-3659 w/ 1000 gal 15% NeFe. TIH w/ CICR NSET @ 3612'. SQZD 3659-3730' w/ 300 SX Cl C nitrified cmt. Approx. 50 SX sqzd in form. Drill cmt & CIBP @ 3730' & CO to 3907'. Swb. RIH prod. tbg. and rods, RTP.

Additional Data:

T/Queen Formation @ 3336'

T/Penrose Formation @ 3472'

T/Grayburg Zone 1 @ 3637'

T/Grayburg Zone 2 @ 3674'

T/Grayburg Zone 2A @ 3706'

T/Grayburg Zone 3 @ 3737'

T/Grayburg Zone 4 @ 3770'

T/Grayburg Zone 5 @ 3820'

T/Grayburg Zone 6 @ 3874'

T/San Andres Formation @ 3896'

KB @ 3596'

8-5/8" OD #
CSG
Set @ 1246' w/ 375 SX
Cmt circ.? yes
TOC @ _____ by _____

Tubing Detail:

4-1/2" OD 11.6#
CSG J-55 Gr.
Set @ 6024' w/ 550 SX
Cmt circ.? No
TOC @ 2400' by calc.

Rod Detail: 3/30/98

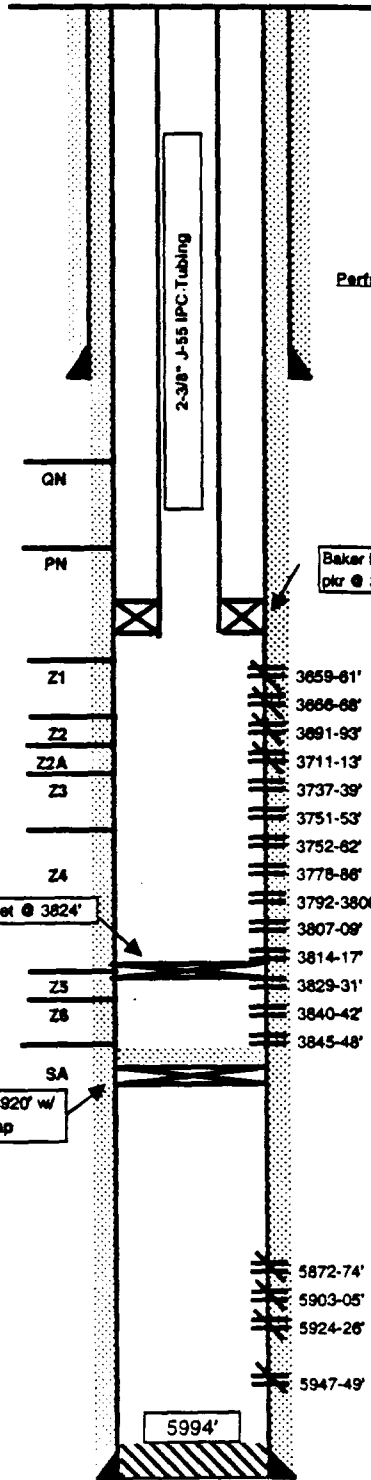
1-1/2" X 26' Polished Rod

2 - 4' N-97 Subs

130 - 7/8" N-97 Rods

20 - 1-1/2" KBars

2-1/2" X 2 X 20' RWBC pump



PBD: 3907'
TD: 6025'

Current

inj. _____ bwpd @ _____ psi Date: _____

Prod. _____ bopd _____ bwpd Date: _____

Gas _____ mcfpd



R 36 E

R 37 E

UNIT AREA "B"

T
20
S

Surface Land Owners
LEGEND

- FEE SURFACE OWNER - BOLD - EXAMPLE: EDWARD H. KLEIN ESTATE
- FEDERAL OWNED SURFACE - BOLD -
- STATE OWNED SURFACE - BOLD -
- SURFACE LESSOR - ITALIC - EDWARD H. KLEIN ESTATE



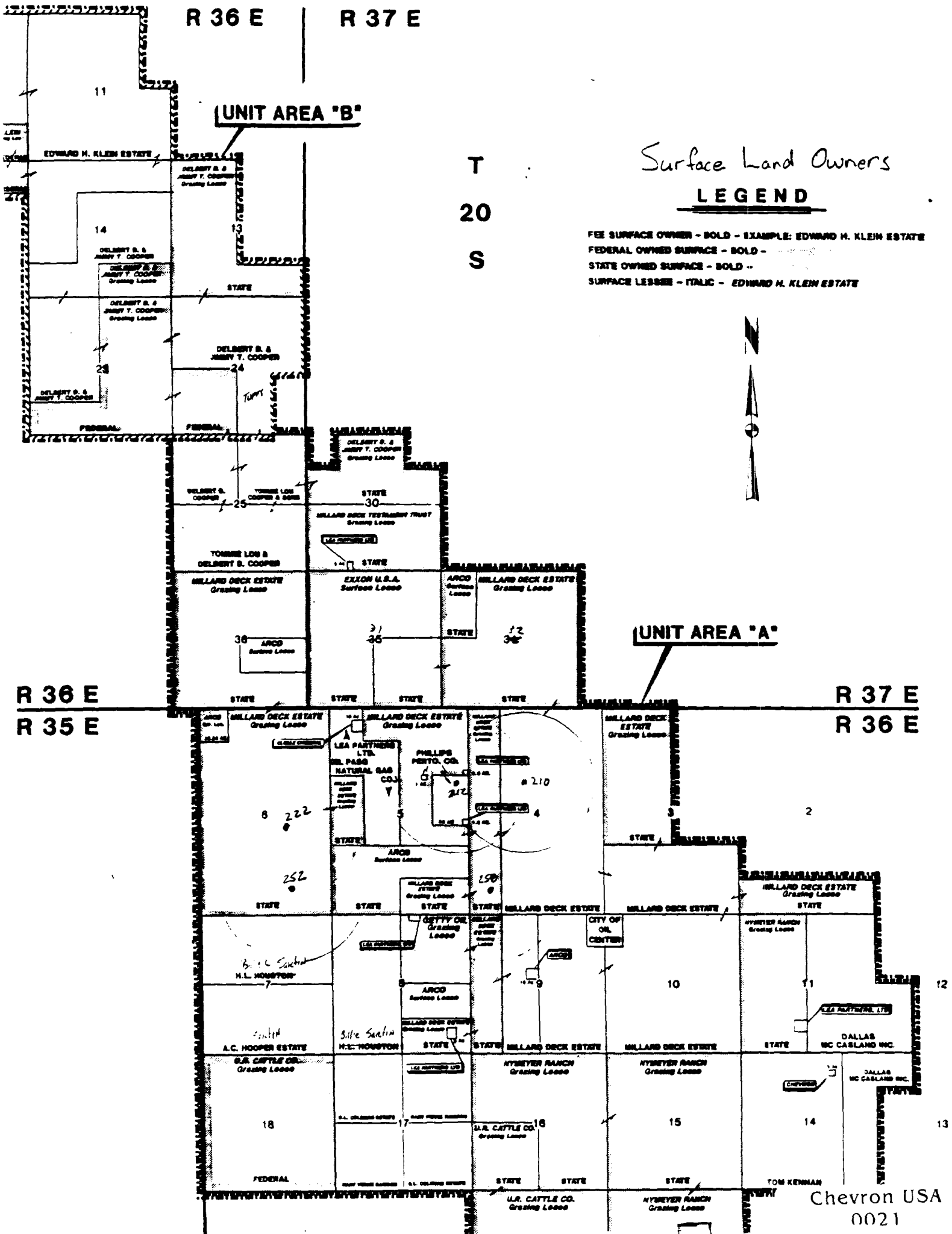
R 36 E

R 35 E

R 37 E

R 36 E

UNIT AREA "A"





WELL DATA SHEET

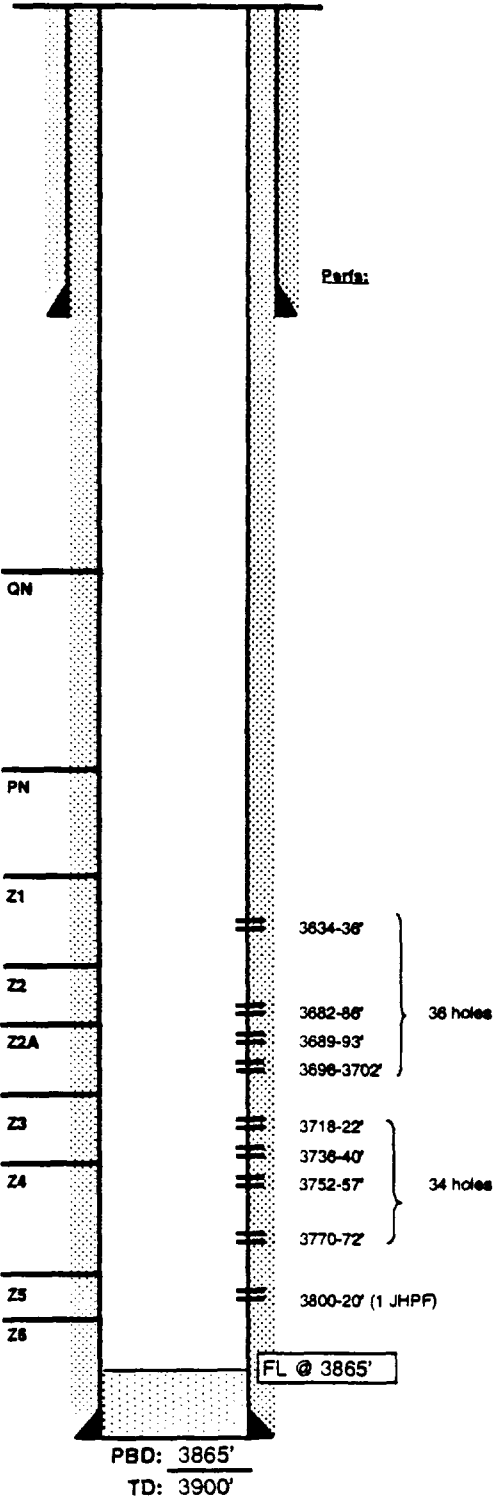
LEASE: EMSU WELL: 182
 LOC: 460' F N L & 1780' F W L SEC: 4
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: C ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3536' STATUS: Producer
 KB: 3554' API NO: 30-025-29868
 DF: _____ CHEVNO: IH 4142:01

Date Completed: 6/1/1987
 Initial Production: 3 BOPD / 1BWPD / 7 MCFGPD
 Initial Formation: Grayburg
 FROM: 3800' to 3820'

8-5/8" OD K-55
 24# CSG
 Set @ 1203' W/ 800 SX
 Cmt circ.? yes
 TOC @ surf. by calc
 (12-1/4" hole)

Tubing Detail# 8/12/96	
Original KBTH:	17.60'
123 Jts. 2-3/8" J-55 4.7# 8rd tbg:	3794.64'
2-3/8" API SN:	1.10'
2-3/8" Perf Sub	4.10'
1 2-3/8" MAJ BPOB	32.00'
Landed @:	3849.44'



Completion Data
 6/87 Log w/ GR, CCL fr 3862-3300'. Perf @ 3800-20'
 (1JHPF). ACDZ w/ 1600 gals 15% NeFe HCL + BS. ISIP =
 750 psi. Swab. Chem sqz - FOP. Test 3 BOPD/ 1BWPD/ 7
 MCFGD.

Subsequent Workover or Reconditioning:
 7/91 Perf. 3772-3718' (34 holes) & 3702-3634' (36 holes).
 ACDZ 3634-3772' w/ 3250 gals NeFe. ISIP = 600 psi. Swb.
 Rec 10% oil SFL-2750 EFL-2750 FER 10 BPH. RTP. Test:
 4 BW / 12 BW / 12 MCFG. EV4 - 0 BO / 32 BW / 2 MCFG.

8/96 Acdz w/ 3000 gals 80/20 Resisol II

Additional Data:
 T/Queen Formation @ 3320'
 T/Penrose Formation @ 3446'
 T/Grayburg Zone 1 @ 3625'
 T/Grayburg Zone 2 @ 3681'
 T/Grayburg Zone 2A @ 3683'
 T/Grayburg Zone 3 @ 3707'
 T/Grayburg Zone 4 @ 3740'
 T/Grayburg Zone 5 @ 3783'
 T/Grayburg Zone 6 @ 3827'
 T/San Andres Formation @ 3829'
 KB @ 3554'

5-1/2" OD K-55 LT&C
 15.5# CSG
 Set @ 3900' W/ 700 SX
 Cmt circ.? yes
 TOC @ 167' by calc w/ 30%
 (7-7/8" hole)



WELL DATA SHEET

LEASE: EMSU WELL: 183WIC

LOC: 660' FNL & 660' FWL SEC: 4

TOWNSHIP: 21S CNTY: Lea

RANGE: 36E UNIT: D ST: N.M.

formerly: Bell Ramsey #10

FORM: Grayburg / San Andres DATE:

GL: 3547 STATUS:

KB: 3547 API NO: 30-025-04493

DF: CHEVNO: FA 5635:01

Date Completed: 8/1/1936

Initial Production: F 237BOPD

Initial Formation: Grayburg

FROM: 3717' to 3844' / GOR 2268

Completion Data

Acdz 3717'-3844' w/2000 gals

Subsequent Workover or Reconditioning:

2/13/37 Acdz w/ 4000 gals.
 6/18/53 Install pumping equipment.
 3/28/62 Acdz w/1000 gals 15% NeFe HCL + 1000 gals Gypsol.
 4/20/65 Acdz w/ 750 gals 15% NeFe HCL. A/W - 15 BO/ 22BW B/4 - 10 BO/14 BW
 10/82 Chemical treat
 7/6/86 CO WH. CO to 3855'. Log GR, CCL, CNL. Acdz w/ 4000 gals. 15% NeFe HCL + 1500# GRS in 4 stgs. Swab 0 BO/ 30 BW EFL-3400'. RIH w/ Baker TSN pkr on 2-3/8" IPC. Pkr set @ 3635'. PWOI.
 11/6/86 588 BWPD @ vacuum.
 5/26/89 Checked well f/ intermediate cs flow. Intermediate will build to 50#. But will not flow. Well is OK.
 9/30/89 PB to 3803' w/ sand & hydromite. Perf 3776-3800, 3732-36, 3668-86, 3648-54 & 3610-20'. Acdz w/ 2550 gals 15% NeFe HCL. Swab dry. RIH w/ inj equip. PWOI - 299 BWIPD @ 0 psi.
 10/11/94 Acdz w/ 2500 gals 15% NeFeA w/ Pentol solution. A - 965 BWIPD @ 580 psi B - 103 BWIPD @ 786 psi
 11/10/97 RIH w/ 4" HSCG & perf 3700-08' (3 JHPF). Set pkr @ 3473' w/ TP @ 3597'. Spot 500 gals 15% NeHCl to pkr. ACDZ perfs 3610-86' & OH w/ 2000 gals 15% Resisol II pump'g 70Q GBW. Dump 1500# 20/40 sand dwn csg. Spot 2350# sand, RIH & tag sd @ 3632'. Wash to 3693'. Circ hole clean. Set CIBP @ 3692', then set CICR @ 3558'. SION. M&P 150 SX CL "C" w/ additives - SQZD 133 SX in form. D/O cmt and CICR to 3690'. Fin D/O CIBP & wash sd to 3803'. Set Guib G-6 pkr @ 3563' & run MIT. RTI.

Additional Data:

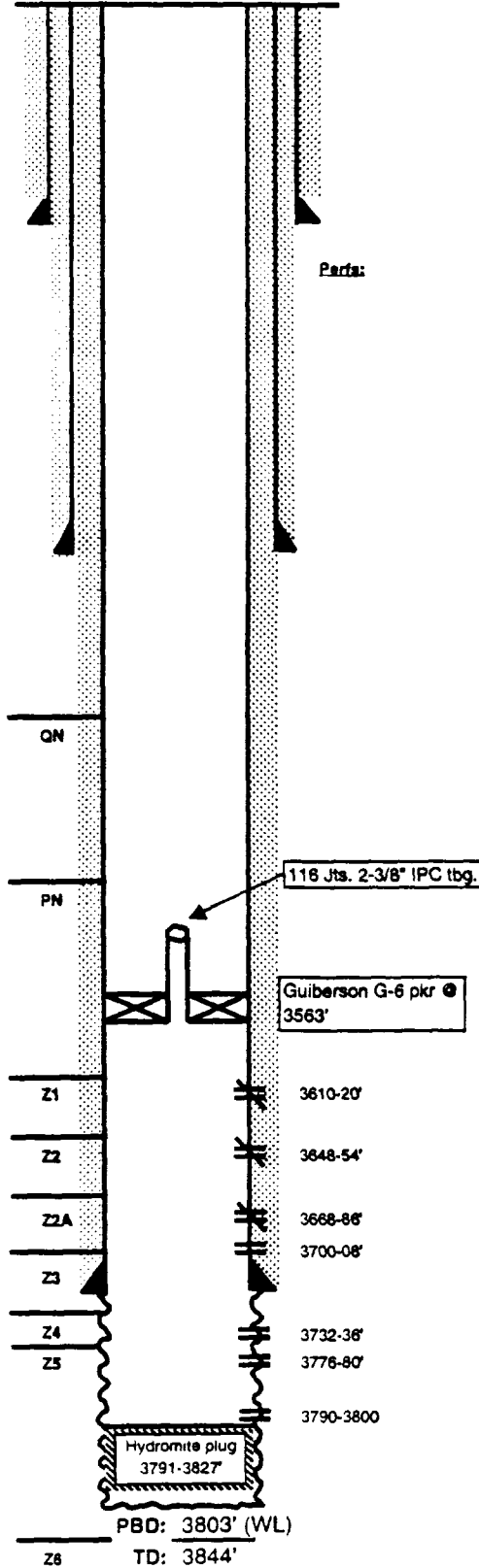
T/Queen Formation @ 3304'
 T/Penrose Formation @ 3438'
 T/Grayburg Zone 1 @ 3602'
 T/Grayburg Zone 2 @ 3638'
 T/Grayburg Zone 2A @ 3665'
 T/Grayburg Zone 3 @ 3695'
 T/Grayburg Zone 4 @ 3721'
 T/Grayburg Zone 5 @ 3767'
 T/Grayburg Zone 6 @ 3820'
 T/San Andres Formation @ 3840'
 KB @ 3547'

10-3/4" OD
 CSG
 Set @ 301' W/ 250 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (13-3/4" hole)

7-5/8" OD
 22# CSG 8rd
 Set @ 1235' W/ 250 SX
 Cmt circ.? yes
 TOC @ 159' by calc.
 (9-7/8" hole)

Tubing Detail: 10/11/97	
Original KBTH:	0.00'
116 Jts. 2-3/8" J-55 4.7# EUE 8rd IPC tbg:	3560.75'
2-3/8" X 5-1/2" PC'D XL O/O Tool w/ 1.781 F Nipple	1.97'
Guiberson G-6 on 8 pts Comp	3.74'
Nickel plated pump-out plug	0.52'
Landed @:	3566.96'

5-1/2" OD
 17# CSG 10rd
 Set @ 3717' W/ 300 SX
 Cmt circ.? yes
 TOC @ 398' by calc.
 (6-3/4" hole)





WELL DATA SHEET

LEASE: EMSU WELL: 200

LOC: 1941' F N L & 660' F W L SEC: 4

TOWNSHIP: 21S CNTY: Lea

RANGE: 36E UNIT: E ST: N.M.

formerly Bell-Ramsay (NCT-A) #9

FORM: Grayburg / San Andres DATE: _____

GL: 3563' STATUS: Producer

KB: 3573' API NO: 30-025-04492

DF: _____ CHEVNO: FA 5634:01

Date Completed: 6/27/1936

Initial Production: 176 BOPD / 34 BWPD

Initial Formation: Grayburg

FROM: 3728' to 3870' GOR 3840

10-3/4" OD
32# CSG
Set @ 328' W/ 250 SX
Cmt circ.? yes
TOC @ surf. by calc
(13-3/4" hole)

7-5/8" OD
26# CSG 8rd
Set @ 1269' W/ 300 SX
Cmt circ.? yes
TOC @ surf. by calc
(9-7/8" hole)

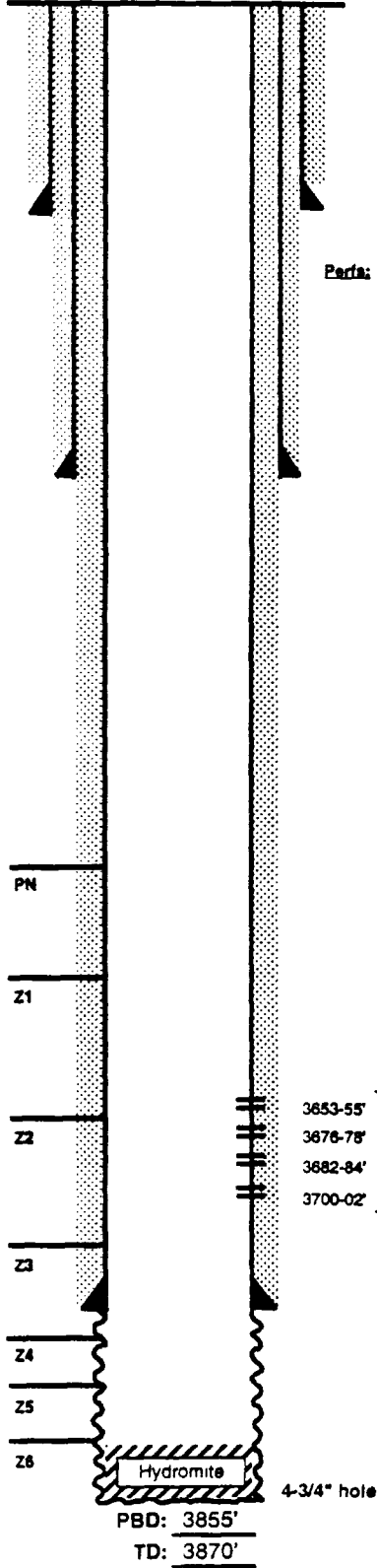
Tubing Detail: 1/31/87

Original KBTH:	10.00'
125 Jts. 2-3/8" J-55 4.7# 8rd EUE	
tbgs:	3797.11'
1 SN	1.10'
1 2-3/8" Perf Sub	4.00'
1 2-3/8" J-55 8rd EUE tbgs	31.04'
Landed @:	3818.25'

Rod Detail: 1/31/87

1 Polished Rod
62 3/4" X 25' Rods
89 5/8" X 25' Rods
1 2" X 1-1/4" X 12' Pump

5-1/2" OD
17# CSG 10rd
Set @ 3728' W/ 300 SX
Cmt circ.? yes
TOC @ 409' by calc
(6-3/4" hole)



Completion Data
6/22/36 Acdz w/2000 gals. Dowell X

Subsequent Workover or Reconditioning:

4/10/43 Acdz w/ 2000 gals. A/W 37 BO/ 7 BW / GOR 5910. B/4 - 37 BO/ 7 BW / GOR 5900.

6/15/51 Install gas lift.

11/4/57 PB to 3855' w/ 40 gals. hydromite. Frac OH f/ 3747-3855' w/ 6972 gal oil & 1 PPG sand, w/ 500# mothballs. Frac w/ 8022 gal oil w/ 1 PPG sd (2nd stg). A/W: 117 BO/ 5 BW / GOR 1313. B/4 - 4 BO / 1BW.

3/1/65 ACDZ w/ 750 gals 15% Ne. A/W: 25 BO/ 0 BW B/4 - 7 BO / 6 BW.

8/26/71 ACDZ w/ 750 gals 15% Ne. A/W: 12 BO/ 7 BW B/4 - 5 BO / 4 BW

1/87 CO 3842-3855'. Log w/ GR, CCL. Perf 3653-55, 3676-78, 3682-84, 3700-02 (2JHPF). ACDZ w/ 1200 gal 15% Ne HCl + 25 Bs. ISIP - vac. Acdz OH f/ 3728-3855' w/ 4000 gals 15% NeHCl. Swab dry. Rec 25 BW. RIH w/ PE. TOP. A/W: 0 BO / 16 BW / 12 mcfppd B/4 - 5 BO / 5 BW / GOR 1400.

3/21/97 Stim w/ 1000 gals Resisol II+.

Additional Data:

T/Penrose Formation @ 3453'

T/Grayburg Zone 1 @ 3619'

T/Grayburg Zone 2 @ 3661'

T/Grayburg Zone 3 @ 3719'

T/Grayburg Zone 4 @ 3753'

T/Grayburg Zone 5 @ 3796'

T/Grayburg Zone 6 @ 3848'

T/San Andres Formation @ 3898'

KB @ 3573'



WELL DATA SHEET

LEASE: EMSU WELL: 201WIC
 LOC: 1941' F N L & 1980' F W L SEC: 4
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: F ST: N.M.
 formerly Meyer "B-4" #12

FORM: Grayburg / San Andres DATE: _____
 GL: 3543' STATUS: Injector
 KB: 3553' API NO: 30-025-04472
 DP: _____ CHEVNO: FA 5614:01

Date Completed: 6/27/1936
 Initial Production: F 300 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3746' to 3860' / GOR 333

Completion Data

No completion data given.

Subsequent Workover or Reconditioning:

1/12/47 Acdz w/ 1000 gals
 6/25/50 Acdz w/ 2000 gals
 9/2/54 Install Pmp equip.
 11/21/59 Acdz w/ 2000 gals
 9/11/62 SS OH & Acdz
 6/1/64 Temporarily Abandoned
 7/16/86 CO to PBD log & acdz OH f/ 3746-3860' w/ 4000 gals 15% NeFe. RIH w/ 5-1/2" Baker TSN pkr on 2-3/8" IPC tbg. Set pkr @ 3676'. PWOI: 678 BWIPD @ 0 psig.
 2/16/90 Perf 5-1/2" csg @ 3676-82, 3644-48 w/ 2JHPF. TIH w/ PPI pkr & Acdz OH 3746-3850' w/ 2750 gal in 3 stages. Acdz perms 3676-82' w/ 600 gals. Acid & perms 3644-48' w/ 400 gals acid. PB w/ 96 gals Hydromite. PBD = 3842' (WL). RIH w/ inj equip. Pkr set @ 3610'. Test to 600 psi-OK. PWOI: 792 BWIPD @ 53 psi.
 8/14/97 Clean out fill & Hydromite to TD. Perf fr 3724-36' (3 JHPF). Spot 1500# 20/40 sand & tag sd @ 3789'. Wash out to 3800'. Set PIP @ 3570'. Acdz OH w/ 1500 gal RS II. Wash sd. Single-set PIP set @ 3824'. Set CIRC @ 3591'. M&P 500 SX CI C cmt. SQZD 410 SX in form. POH w/ pkr, PU bit & tag @ 3587'. D/O CIRC & cmt to 3804', cmt & form. in ref. Drg 100% form. to 3830'. Wash cmt fr perms @ 3724-36' & OH. Spot 500 gals 15% NeFe HCl to EOT.
 5/27/98 CO w/ CTU to 3842' w/ KCl wtr & N2; ACDZ perms & OH fr 3724-3842' w/ 1800 gals 15% HCl + additives (70Q foam down ann.)

Additional Data:

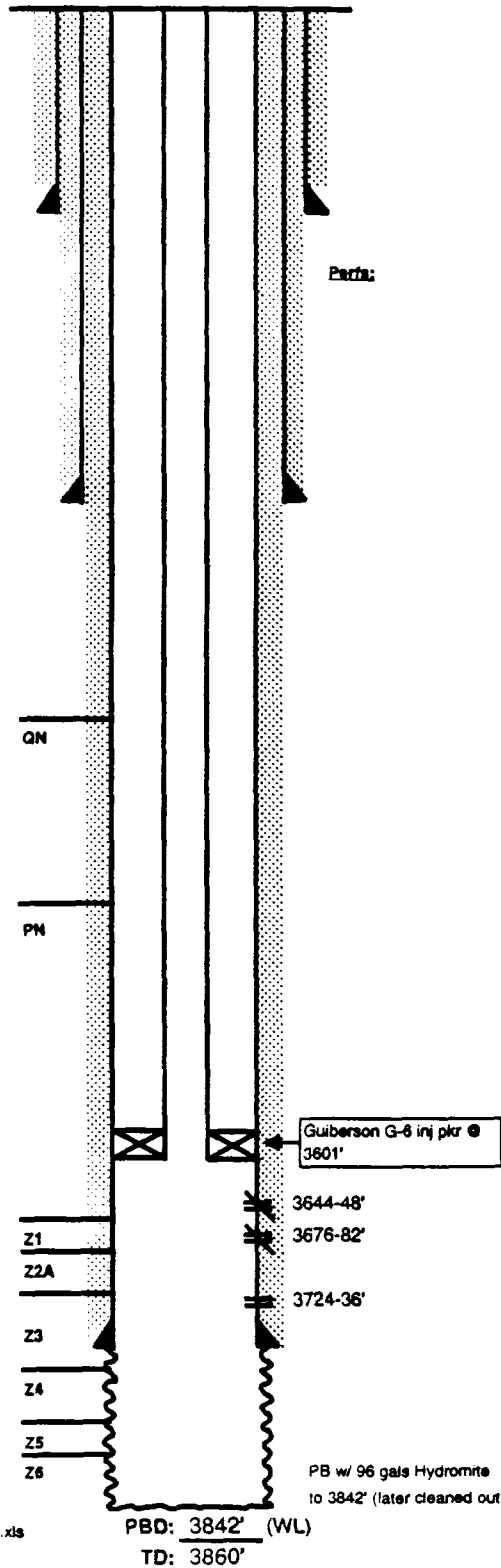
T/Queen Formation @ 3318'
 T/Penrose Formation @ 3456'
 T/Grayburg Zone 1 @ 3630'
 T/Grayburg Zone 2 @ 3665'
 T/Grayburg Zone 2A @ 3689'
 T/Grayburg Zone 3 @ 3720'
 T/Grayburg Zone 4 @ 3750'
 T/Grayburg Zone 5 @ 3797'
 T/Grayburg Zone 6 @ 3841'
 T/San Andres Formation @ 3843'
 KB @ 3553'

10-3/4" OD
 CSG
 Set @ 280' w/ 200 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (assume 13-3/4" hole size)

7-5/8" OD
 CSG
 Set @ 1238' w/ 400 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (assume 9-7/8" hole size)

Tubing Detail: 8/26/97	
Original KB to THF:	0.00'
117 Jts. 2-3/8" J-55 4.7# 8rd IPC tbg:	3599.07'
XL O/O Tool w/ 1.43 "F" Nipple	1.97'
Guiberson PC G-6 Inj pkr	4.15'
Landed @	3605.19'

5-1/2" OD
 CSG
 Set @ 3746' w/ 400 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (assume 6-3/4" hole size)





WELL DATA SHEET

LEASE: EMSU WELL: 202
 LOC: 1980' F N L & 1680' F E L SEC: 4
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: G ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3531.5' STATUS: Producer
 KB: 3549' API NO: 30-025-29866
 DF: _____ CHEVNO: IH 4132:01

Date Completed: 6/28/1987
 Initial Production: 1 BOPD 6 BHPD
 Initial Formation: Grayburg zones 2, 4, 5
 FROM: 3708' to 3857' / GOR 2000

Completion Data

6/26/87 Tag FC @ 3873'. Disp. w/ 8.6 CKF. Test csg 2000#, perf 3708-11, 3790-93, 3797-3800 & 3841-57. ACDZ w/ 2150 gals 15% NaFeA. Chemical sqz w/ Nalco scale inhibitor & surf. Run prod. equip.

Subsequent Workover or Reconditioning:

10/89 Chemical treat

Additional Data:

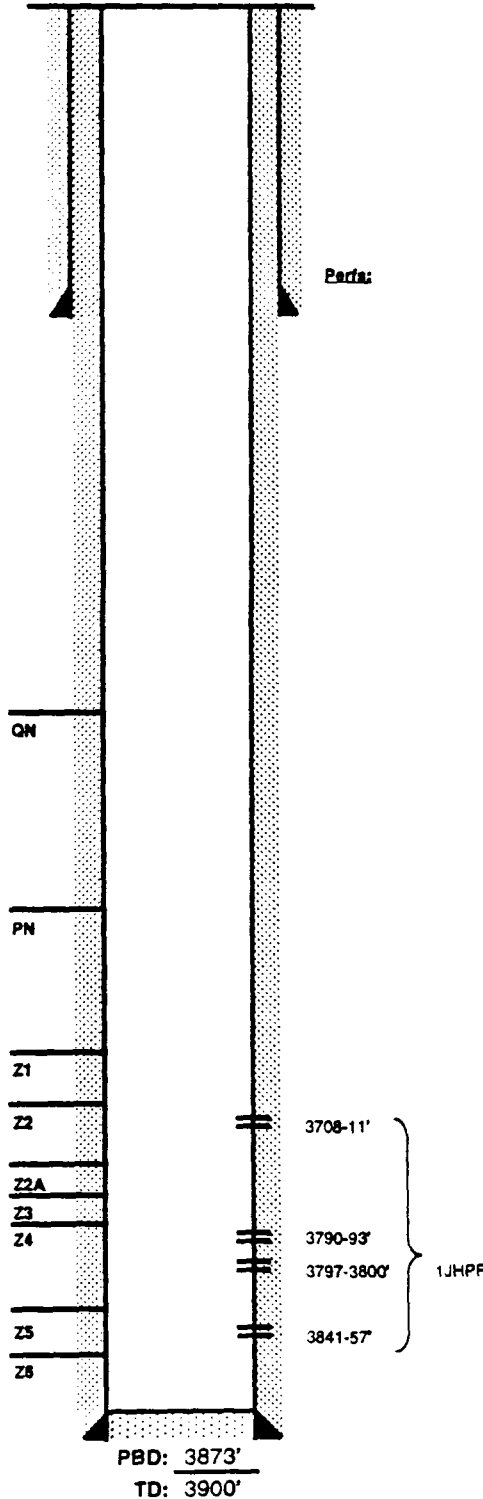
T/Queen Formation @ 3358'
 T/Penrose Formation @ 3481'
 T/Grayburg Zone 1 @ 3660'
 T/Grayburg Zone 2 @ 3697'
 T/Grayburg Zone 2A @ 3723'
 T/Grayburg Zone 3 @ 3746'
 T/Grayburg Zone 4 @ 3778'
 T/Grayburg Zone 5 @ 3824'
 T/Grayburg Zone 6 @ 3863'
 T/San Andres Formation @ 3864'
 KB @ 3549'

8-5/8" OD
24# CSG
 Set @ 1230' W/ 750 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (assume 12-1/4" hole size)

Tubing Detail: 6/29/97
 Original KB to THF: 15.00'
 123 Jts. 2-3/8" J-55 4.7# 8rd EUE
 tbg: 3819.11'
 2-3/8" API SN 1.10'
 2-3/8" X 4' perf sub J-55 8rd 4.12'
 2-3/8" J-55 8rd MAJ w/ BP 32.01'
 Landed @ 3871.34'

Rod Detail: 8/28/97
 RKB to top of polished rod: 5.00'
 1-1/4" X 22' polished rod w/
 14' liner: 22.00'
 1 6" X 3/4" rod sub: 8.00'
 151 3/4" X 25' K#1 rods: 3775.00'
 1 2" X 3/4" rod sub: 2.00'
 1 2" X 1-1/2" X 16" rod pump: 18.00'
 Approx. 9' stretch: 9.00'
 Pump in SN @ 3835.00'

5-1/2" OD
15.5# CSG J-55
 Set @ 3900' W/ 700 SX
 Cmt circ.? yes
 TOC @ 167' by calc.
 (assume 7-7/8" hole size)





WELL DATA SHEET

LEASE: EMSU WELL: 208
 LOC: 660' F N L & 660' F E L SEC: 4
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: I ST: NM

FORM: Grayburg / San Andres DATE: _____
 GL: 3538' STATUS: Producer
 KB: 3538' API NO: 30-025-04470
 DF: _____ CHEVNO: FA 56120:01

Date Completed: 6/6/1936
 Initial Production: f/ 480 BOPD
 Initial Formation: Grayburg
 FROM: 3752' to 3860' / GOR 42

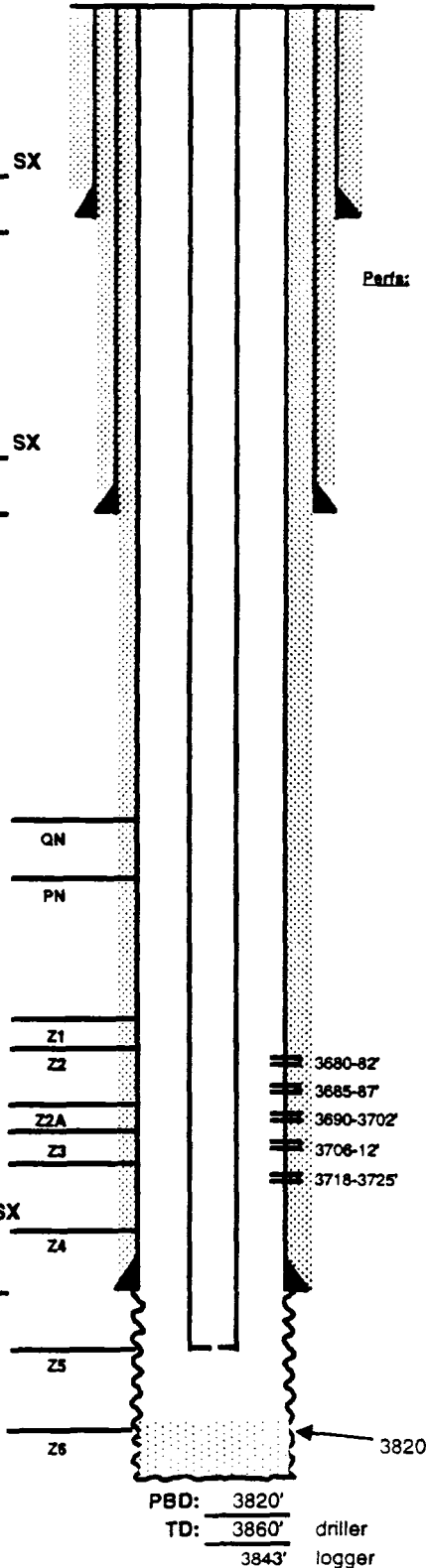
10 3/4 OD
 40.5 # CSG
 Set @ 281' W/ 200 SX
 Cmt circ.? yes
 TOC @ surf. by calc.

7 5/8 OD 26.4#
 # CSG
 Set @ 1268' W/ 400 SX
 Cmt circ.? yes
 TOC @ surf. by calc

Tubing Detail: 4/30/97
 KBTH: 0.00'
 114 Jts. 2-7/8" J-55 IPC tbg.
 1 TAC
 1 API SN
 1 Jt. IPC tbg.
 1 Jt. SMAJ
 Landed @

Rod Detail: 4/30/97
 63 7/8" "D" Rods
 87 3/4" Rods
 2-1/2 X 2 X 20' Pump

5 1/2 OD 17#
 # CSG
 Set @ 3752' W/ 400 SX
 Cmt circ.? yes
 TOC @ surf. by calc



Completion Data

Natural
 Gravity oil=35
 DST 3676-3750' - 1620 mcfg and 7 jts mud, no oil.

Subsequent Workover or Reconditioning:

3/45 - Acdz OH 1000 gal 20% acid. Tst f/ 28 BO/1% water bg gas lift.
 4/45 - Reacdz OH w/3000 gal 205 acid.
 7/52 - Acdz OH w/500 gal acid. Tst 25 BO/3 BWPD.
 1/55 - Trtd w/500 gal acid, 500 gal jp/block, 1000 gal acid. Hot oiled w/62 bbk. Tst 17 BO/ 0 BWPD.
 3/83 - Tag @ 3855'. SS OH 3780-3860 w/ 700 grains. CK for fill, no fill. Acdz OH w/ 3780 gal 15% NeFeA in 2 stgs. Scale trtd. Put on prod. Tst 3 BO/10 BW/20 mcfgpd.
 2/87 - XO WH. Tag @ 3840'. Ran logs. Perf 3680-82, 3685-87' w/ 2JHPF. Acdz perms w/1000 gal 15% NeFeA & 16RCNBs. Acdz OH w/4000 gal 15% NeFeA in 4 stgs. Swb 35 BAW. Fer = 0BPH. C/O to 3843'. Put well on prod. Tst 0Bo/11Bw/12mcf. FL = 90' ASN. B/4 - 3Bo/2Bw/GASTSTM.
 6/87 - Perf OH 3740 - 3820'. C/O fill & expended guns to 3843'. Acdz OH w/3500 gal 15% NeFeA. Scale trt. Put well on prod. Tst 2Bo/3Bw/15mcf. FL = 215'ASN. B/4 - 1Bo/38Bw/7mcf.
 9/89 - Scale trt.
 4/97 - Swab Test; Swab 2BPH from Z6, 0% oil cut; Swab 18BPH from zones 2-5, 5% oil cut; Perf 3718-75, 3706-3712, 3690-3702; Spot sand from 3840-3818; Acdz w/6000 gal 80/70 Resisol II + w/ continuous Trimix salt block.

Additional Data:

T/Queen Formation @ 3315'
 T/Penrose Formation @ 3447'
 T/Grayburg Zone 1 @ 3627'
 T/Grayburg Zone 2 @ 3664'
 T/Grayburg Zone 2A @ 3688'
 T/Grayburg Zone 3 @ 3710'
 T/Grayburg Zone 4 @ 3742'
 T/Grayburg Zone 5 @ 3788'
 T/Grayburg Zone 6 @ 3831'
 T/San Andres Formation @ 3850'
 KB @ 3538'



WELL DATA SHEET

LEASE: EMSU WELL: 209WIC
 LOC: 3233' F N L & 1980' F E L SEC: 4
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: J ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3562' STATUS: Injector
 KB: 3572' API NO: 30-025-04473
 DF: _____ CHEVNO: FA 5615:01

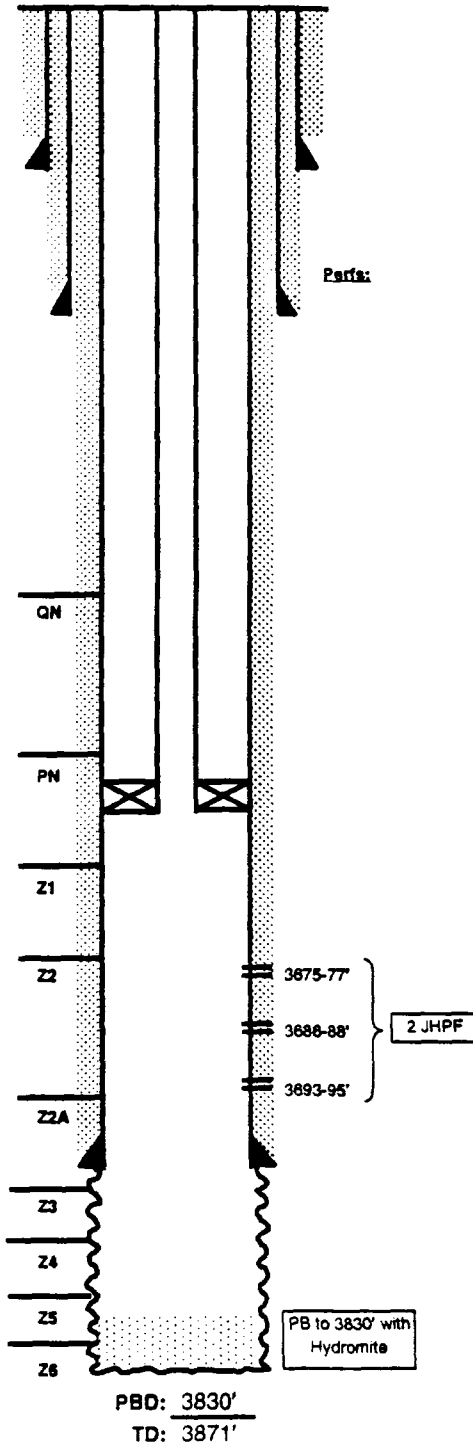
Date Completed: 9/2/1936
 Initial Production: 1/ 1800 BCPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3716 to 3871' / GOR 833

10-3/4" OD
 40.5# CSG
 Set @ 310' W/ 200 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

7-5/8" OD
 26.4# CSG
 Set @ 1283' W/ 400 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 10/23/97
 Original KBTH: 0.00'
 117 Jts. 2-3/8" J-55 4.7# IPC 8rd
 tbg: 3605.36'
 XL O/O Tool w/ 1.781" F Nipple 1.98'
 Guiberson G-6 PC Pkr 4.20'
 Landed @: 3611.56'

5-1/2" OD
 17# CSG
 Set @ 3716' W/ 425 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.



Completion Data

9/36 DST - 3712 - 3750'. Opn 10 min showed 240' oil and 824 mcf gas. Natural completion OH 3716-3871'.

Subsequent Workover or Reconditioning:

10/47 Requested OCD permission to gas lift well using gas from another well (Mayer B-4 #6 system). Gas lift installed.
 1/51 Aczd OH w/ 1000 gals. Gas lift valves @ 1795-2868, 3651'. Test = 11.4 BO/44.2 BW/122 mcfpd - **Note input gas = 86.6 mcfpd. Formation GOR = ((122-86.6)/1000)/11.4 = 3105 scf/5160.
 7/54 Aczd 1000 gal. Tst: 13 BO / 70 BW on gas lift.
 9/54 Install ppg unit. Remove gas lift equipment. Tst: 54 BO / 115 BW/3mcf. Ppg unit Bath 114D. SL=54". 1-3/4" pump, 20 SPM. Reason - not enough gas for gas lift equip.
 1/80 Tag fill (BaSO4 scale) @ 3857'. Try to CO. Couldn't circ. Log well. Perf OH 3730-40', 3760-80', 3805-15' & 3825-35'. Aczd with 4956 gal 15% Nea in 2 stgs. Ppd. scale inhib. Tst 84 BO/24 BW/83 MCFG. B/4 = 50 BO/42 BW/ 82 MCFG.
 2/81 Scale sqzd.
 1/83 Aczd 840 gal 15% NeFeA and scale squeezed. Tst 77Bo/83Bw/61mcf B14 = 80Bo/52Bw/72mcf.
 12/86 XO WH. GIH w/ bit. Tag @ 3876'. Attempt to circ. No success. POH w/ bit. Perf 3675-77', 3686-88' & 3693-95' (2 JHPF). Aczd new perfs with 1000 gal NeFeA & balled out after 12 balls. Swb 0 BO/0 BW. GIH with 5-1/2" Baker TSN pkr on 2-3/8" J-55 IPC tbg. Set pkr @ 3612'. Load ann with pkr fld. Well conv to inj. Tst: 700 BWIPD @ 0 psig.
 2/90 POH w/ inj equip. GIH w/ dump boiler. PB OH to 3830' w/ Hydromite. GIH w/ inj. equip before. Tst: 720 BWIPD @ 0 psi. B/4=720 BWIPD @ 21psi. Inj. prof B/4 PB showed 35% - 57% going 3844' down.
 Note: Prod. log run 4-21-86 before conv to inj showed 35% 3815-TD (water), 47% 3751-92 (oil, gas, water), 2% 3730-51(water), 16% 3716-20 (oil, gas, & water).
 10/23/97 WLTD @ 3844'. Dump sand, tag @ 3728'. ACDZ perfs 3675-95' & OH fr 3716-27' w/ 500 gals 15% Ne HCl. Then ACDZ OH w/ 1500 gals 15% RS II ppg. 70Q GBW f/ foam. Dump 1200# 20/40 sd. Set CIRC @ 3605'. M&P 80 SX Cl 'C' + additives - SQZD 8 SX in form. D/O CR & cmt to 3723' - circ hole clean. Finish wash sd to 3830'. RIH w/ Guiberson pkr, perform MIT & RTI.

Additional Data:
 T/Queen Formation @ 3321'
 T/Penrose Formation @ 3466'
 T/Grayburg Zone 1 @ 3634'
 T/Grayburg Zone 2 @ 3673'
 T/Grayburg Zone 2A @ 3697'
 T/Grayburg Zone 3 @ 3728'
 T/Grayburg Zone 4 @ 3761'
 T/Grayburg Zone 5 @ 3809'
 T/Grayburg Zone 6 @ 3848'
 T/San Andres Formation @ 3850'
 KB @ 3572'

Note: History shows pump chgs - 1/69, 9/74, 8/75, 9/76, 1/77, 2/78, 3/78, 9/79. Each time w/ BaSO4 found on pump or rods. No history before '69.

FILE: EMSU209WB.XLS

printed: 10/28/1999



WELL DATA SHEET

LEASE: EMSU WELL: 210
 LOC: 3261' F N L & 1980' F WL SEC: 4
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: _____ ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3557' STATUS: TA'd
 KB: 3567' API NO: 30-025-04469
 DF: _____ CHEVNO: FA5611:01

Date Completed: 6/1/1936
 Initial Production: 2400 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3749' to 3870'

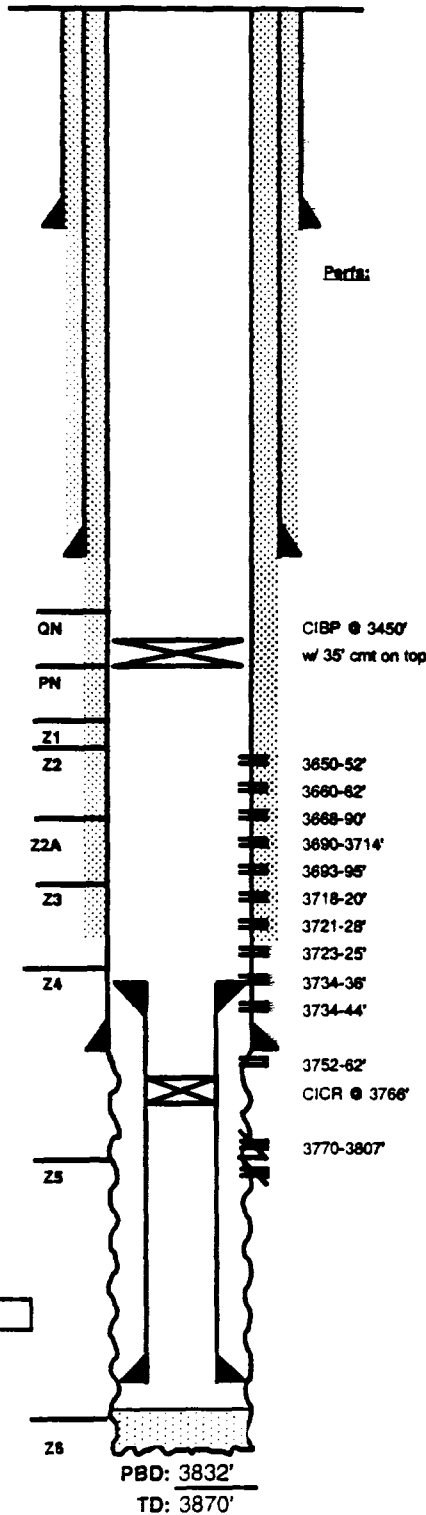
10-3/4" OD
 # CSG
 Set @ 319' W/ 200 SX
 Cmt circ.? yes
 TOC @ surf by calc

7-5/8" OD 26.4#
 ST&C # CSG Gr.
 Set @ 1271' W/ 400 SX
 Cmt circ.? yes
 TOC @ _____ by _____

Tubing Detail: 11/5/87	
KBTH:	11.00'
105 Jts. 2-7/8" 6.5# 10V EUE:	3202.18'
14 Jts. 2-1/16" J-55 3.25# 10rd:	454.16'
2-1/16 SN	0.87'
2-1/16 Perf Sub	2.94'
1 JL 2-1/16" 3.25# 10rd ID MA w/ BPOB:	33.22'
Landed @	3694.20'

5-1/2" OD 17#
 # CSG Gr.
 Set @ 3749' W/ 400 SX
 Cmt circ.? Yes
 TOC @ _____ by _____

Liner Detail: TOL @ 3741' to 3832' WLTD.



Completion Data
6/36 Natural - no stimulation.

Subsequent Workover or Reconditioning:
 1/47 Acdz w/ 1000 gals 20%.
 10/49 Installed gas lift.
 9/54 Rod pump installed. B- 5/120. A- 27/161.
 4/86 Ran GR/CCL/CNL and perf OH w/ 3800-02, 3788-90, 3782-84 & 3769-71 (4 JHPF). ACDZ OH w/ 4500 gals 20% NeFe HCl fr 3749-3867'.
 5/86 Dump sand to 3818'. Dump 149 gals Hydromite to 3780'. DO to 3815'. Perf 3650-52, 3660-62, 3668-70, 3688-90, 3693-95, 3718-20, 3723-25 & 3734-36 (4 JNPF). ACDZ w/ 4000 gals 15% NeFe HCl. Push pieces RBP to 3815'. Set WL CIBP @ 3730'. B: 0/140
 10/28/87 DO CIBP and push to 3822'. Run 4" Liner (6 jts. 4"-13.4# L80 RFC spiral-lined and 6 jts. 4" 12.93# L80 RFC liner, set @ 3822' w/ 50 SX Cl C). SQZD TOL w/ 45 SX. WLTD = 3832'. TOL 3741' to 3832' WL. Perf 3650-74, 3690-3714, 3721-28, 3734-44, 3752-62 & 3770-3807'. ACDZ w/ 5600 gal 15% NeFe HCl. Swb; SFL=1400', EFL=1700'. B: 1/24 A: 0/60.
 12/88 Set CIGR @ 3766'. Cmt squeeze 3770-3807' w/ 1200 SX. Comm. around CR. Reperf 3650-3782'.
 11/11/98 TA'd - Set CIBP @ 3450' w/35' cmt on top

Additional Data:
 T/Queen Formation @ 3327'
 T/Penrose Formation @ 3455'
 T/Grayburg Zone 1 @ 3613'
 T/Grayburg Zone 2 @ 3650'
 T/Grayburg Zone 2A @ 3678'
 T/Grayburg Zone 3 @ 3704'
 T/Grayburg Zone 4 @ 3736'
 T/Grayburg Zone 5 @ 3786'
 T/Grayburg Zone 6 @ 3830'
 T/San Andres Formation @ 3832'
 KB @ 3567'

FILE: EMSU210WB.XLS
 LCJI - 4/15/99

Current
 Inj. _____ bwpd @ _____ psi Date: _____
 Prod. _____ bopd _____ bwpd Date: _____
 Gas _____ mcfpd

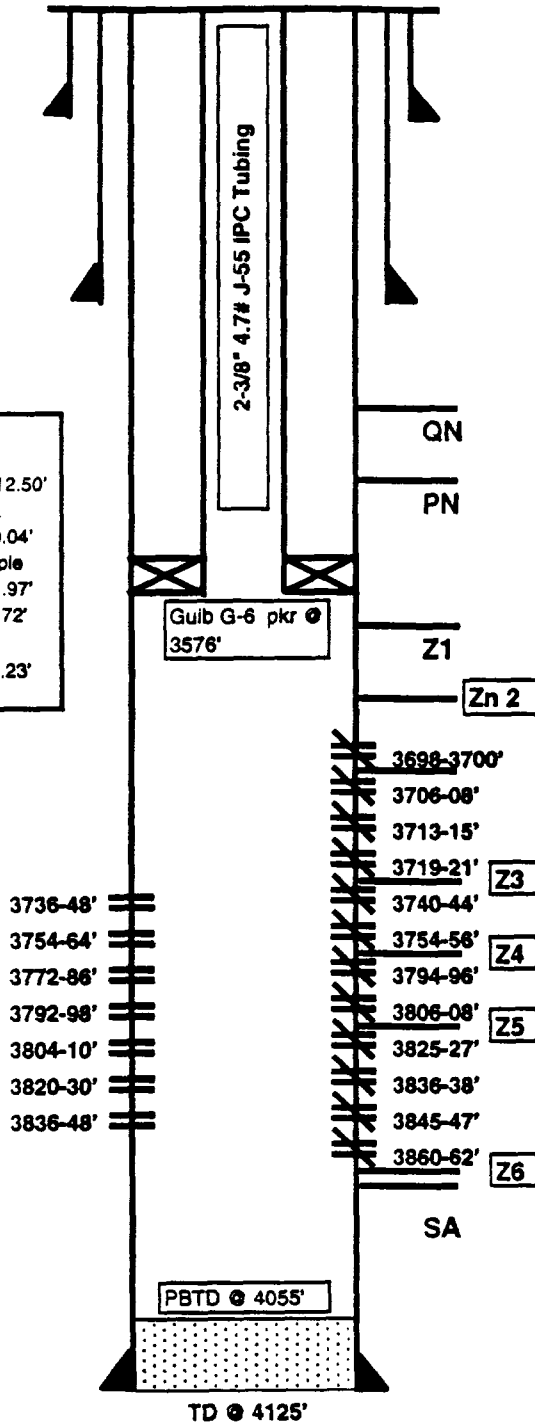
CURRENT WELLBORE DIAGRAM

LEASE: EMSU **WELL:** 211W1 **FIELD:** Eunice-Monument **API:** 30-025-29615
LOC: 3508 FNL & 410 FWL **SEC:** 4 **BLK:** T21S, R36E **REF NO:** FW6024:01
SVY: N.M.P.M. **GL:** 3564 **CTY/ST:** Lea Co., NM **SPUD:** _____
CURRENT STATUS: Injector **KB:** 3577 **DF:** _____ **TD DATE:** _____

11-3/4", 42#/ft Surface
 Pipe set @ 350' w/
 325 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.

8-5/8", 32# Csg.
 set @ 2589' w/ 650 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 3/24/97	
KBTH:	12.50'
116 Jts. 2-3/8" 4.7# J-55 IPC:	3600.04'
XL On/Off Tool w/ 1.78 F Nipple	1.97'
Guiberson G-6 Pkr	3.72'
Landed @	3618.23'



Date Completed: 11-6-86
Initial Injection: 653 BWPD @ 0 psig
Initial Formation: Grayburg Fr: 3698' To: 3862'
Completion Data:
 Perf 3698-3700, 3706-08, 3713-15 & 3719-21 (2 JHPF). ACDZ w/ 1500 gal 15% NaFeA & 24 RCNBs. Swb 13 BW to SN. ONSITP=0. Tbg. dry to SN. Perf 3740-44, 3754-56, 3794-96, 3806-08, 3825-27, 3836-38, 3845-47 & 3860-62 (2 JHPF). ACDZ w/ 4000 gal 15% NaFeA & 78 RCNBs. Swb 4 BW & dry. GIH w/ Trump pkr on 2-3/8" IPC tbg. Set pkr @ 3589'. Put on inj.
Workover History:
 10/94 ACDZ w/ 3500 gal NaFeHCl w/ Pentol solution. A - 1950 BWIPD @ vac. B - 172 BWIPD @ 765 psi.
 3/97 Pumped 386 BBL Marcit polymer into perms fr 3698-3721'. SI - 72 hrs. ACDZ w/ 2000 gal Resisol II fr 3820-PBTD.
 4/27/98 Pump 1000 gal 15% 90/10 NaHCl to clean up perms to be sqzd. Set CICR @ 3606'. SQZD perms fr 3698-3862' w/ 200 SX CI C (160 SX in form.). D/O cmt & CR, wash & drill soft cmt to 3696'. DO good cmt to 3735'. Test polysqzd perms to 500# OK. Fin D/O to 3854'. Perf 3836-48, 3820-30, 3804-10, 3792-86, 3754-64 & 3736-48 (3 JHPF). RIH set Guiberson G-6 w/ 5 jts. TP @ 3578'. ACDZ perms w/ 1900 gal 15% Pentol 200 w/ 70Q 1% KCl water // diversion. Swb. made 14 runs. Run H-5 - test OK. RTI.

Additional Data:
 T/Queen Formation @ 3342'
 T/Penrose Formation @ 3477'
 T/Grayburg Zone 1 @ 3637'
 T/Grayburg Zone 2 @ 3672'
 T/Grayburg Zone 2A @ 3704'
 T/Grayburg Zone 3 @ 3732'
 T/Grayburg Zone 4 @ 3768'
 T/Grayburg Zone 5 @ 3815'
 T/Grayburg Zone 6 @ 3868'
 T/San Andres Formation @ 3870'
 KB @ 3577'

5-1/2", 15.5#/ft Csg.
 set @ 4124' w/ 575 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

FILE: EMSU211WB.xls
DKTS: 11/10/98

CURRENT WELLBORE DIAGRAM

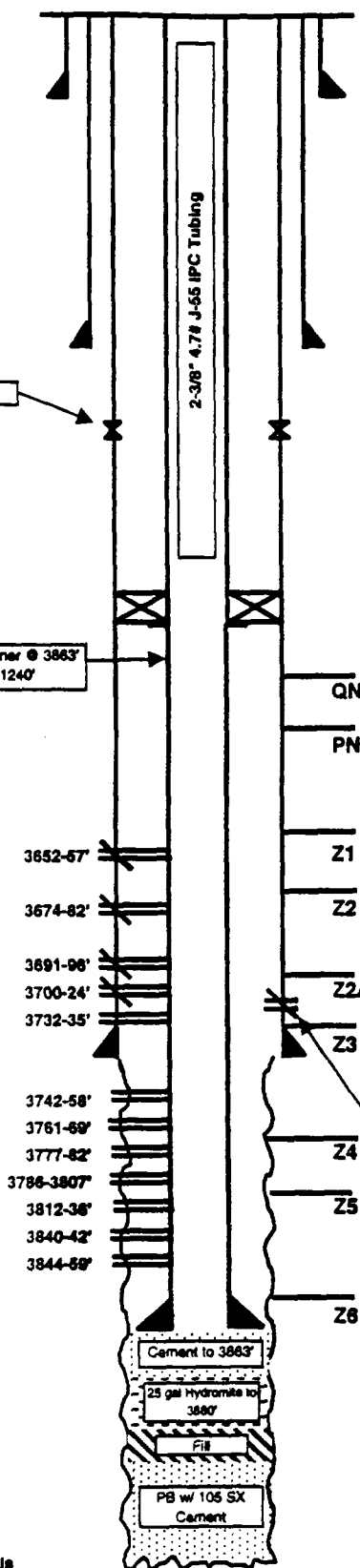
LEASE: EMSU WELL: 228WIC FIELD: Eunice-Monument API: 30-025-04490
 LOC: 3300 FSL & 660 FWL, Unit M SEC: 4 BLK: T21S, R36E REF NO: FA5632:01
 SVY: N.M.P.M. GL: 3582 CTY/ST: Lea Co., NM SPUD: _____
 CURRENT STATUS: Injector KB: 3582 DP: _____ TD DATE: _____

13", 48# K-55 ST&C
 Surf. Pipe set @ 368'
 w/ 300 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.
 (17-1/4" hole)

9-5/8", 36# K-55 Csg.
 set @ 1300' w/ 450 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.
 (12-1/4" hole)

Csg was parted @ 1986'

4-1/2" 11.35# K-55 RFC Liner @ 3863'
 cmtd. w/ 400 SX. TOC @ 1240'



Date Completed: 3-15-38
 Initial Prod: F230 BOPD / 1 BWPD / GOR 16696
 Initial Formation: Grayburg Fr: 3741' To: 3893'
 Completion Date:
 Drilled OH to 4217'. DST 4155-4217' - 3317' sulfur wr. PB w/ 20 SX
 cmt to 4135'. Swb well, 4085-4135'. 100% wr. PB w/ 25 SX cmt to
 4035'. DST 3980-4043' rec 36 stands sulfur wr. PB w/ 30 SX cmt to
 3893'. Test Flwg 230 BO/ 1 BW/ 3.84 MMCFGPD.
 Workover History:
 9/36 ACDZ OH w/ 2000 gal - test: 1/185 BO/ 1.5% BS&W/ 735 MCFPD.
 7/50 Install gas lift equip. Test: 116 BO/ 3 BWPD
 6/53 Install ppg. equip. Test: 107 BO/ 8 BW/ 124 MCFPD
 1/86 500 gal dump acid. Test: 28 BO/ 10 BW. B/4 - 5 BO/ 4 BWPD. 6/71
 CO fill 3877-3893'. PB w/ 25 gal Hydromite to 3880'. FRAC Ind OH
 3741-3880' w/ 14,000 gal Gal & 37,000# sand. Ppd 100% wr NG (after
 load mostly recovered showed 194 BW & 48 BLWR). B/4 - 8 BO/ 15
 BWPD.
 6/72 Fill @ 3849'. Set CIBP @ 3730'. Dump 2 SX cmt on top. PBTD
 3720'. Perf 3700-02' (4 JHPF). ACDZ w/ 1500 gal 15% NaA. Put on
 prod. Test 14 BO/ 154 BWPD. Before: 0 BO/ 14 BWPD.
 7/84 Scale treated.
 11/86 XO WH. CO to 3870'. Perf 3715-17 & 3724-26 (2 JHPF). ACDZ
 new perfs w/ 750 gal 15% NaFeA & 8 RCNAs. ACDZ OH 3741-3870' w/
 4000 gal 15% NaFeA in 4 stg w/ GRS as block. Move pkr to 3680'.
 Swab perf & OH. Swb dry 1 run. Scale sqzd. Put on prod. Test: 7 BO/
 148 BW/ 9 MCFPD, FI @ SN.
 3/90 Scale squeezed.
 9/90 Scale squeezed.
 1/92 Log. Perf 3674-82, 3691-96 & 3700-24 (2 JHPF). ACDZ perfs &
 OH w/ 4000 gal 15% NaFeA. Swb 8 runs, rec 3 BW. Find csg parted @
 1986'. Run downhole camera. Ran 4.5" 11.35# K-55 RFC liner to 3863'.
 Cmtd w/ 400 SX cmt. TOC @ 1240'. Do cmt to 3863'. Perf 3844-58,
 3840-42, 3812-36, 3786-3807 & 3777-82 (2 JHPF). ACDZ w/ 4500 gal
 15% NaFeA in 5 stgs w/ GRS as block. Swb 72 BW. Perf 3761-69,
 3742-58, 3732-35, 3700-24, 3691-96, 3674-82 & 3652-57 (2 JHPF).
 ACDZ w/ 4500 gal 15% NaFeA in 4 stg w/ GRS as block. Swb 48 BW.
 GIH w/ Guib UNI-IV 4.5" pkr on 2-3/8" IPC tbq. Set pkr @ 3581'. Put on
 inj. Test 1284 BWPD @ 0 psig.
 6/97 SQZD perfs fr 3652-3724' w/ 120 SX Cl C; ACDZ w/ 3000 gal
 Resisol II foamed w/ N2 (50Q-70Q).

Additional Data:
 T/Queen Formation @ 3341'
 T/Penrose Formation @ 3477'
 T/Grayburg Zone 1 @ 3639'
 T/Grayburg Zone 2 @ 3678'
 T/Grayburg Zone 2A @ 3702'
 T/Grayburg Zone 3 @ 3733'
 T/Grayburg Zone 4 @ 3775'
 T/Grayburg Zone 5 @ 3820'
 T/Grayburg Zone 6 @ 3866'
 T/San Andres Formation @ 3885'
 KB @ 3582'

3724-26' behind liner (SQZD)

7", 24#/ft K-55 Csg.
 set @ 3741' w/ 500 SX
 Cmt Circ.? No
 TOC @ 405' by calc.
 (8-5/8" hole)

FILE: EMSU228WB.xls
 DKTS: 11/10/98

PBTD @ 3863'
 TD @ 4217' 10/28/1998

CURRENT WELLBORE DIAGRAM

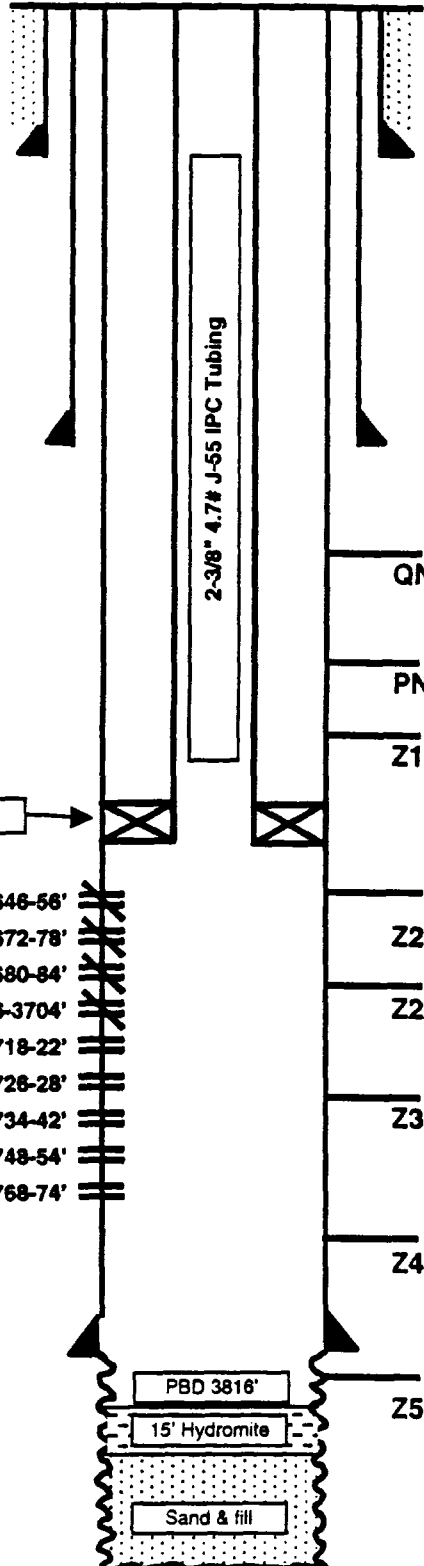
LEASE: EMSU	WELL: 229WIC	FIELD: Eunice-Monument	API: 30-025-04467
LOC: 3300 FSL & 1980 FWL	SEC: 4	BLK: T21S, R36E	REF NO: FA5609:01
SVY: N.M.P.M.	GL: 3567	CTY/ST: Lea Co., NM	SPUD: _____
CURRENT STATUS: Injector	KB: 3567	DF: _____	TD DATE: _____

10-3/4", 40.5# K-55 Csg.
set @ 311' w/ 200 SX
Cmt Circ.? Yes
TOC @ surf. by calc.

7-5/8", 26.4# K-55 Csg.
set @ 2582' w/ 900 SX
Cmt Circ.? Yes
TOC @ surf. by calc.

5-1/2", 17#/ft K-55 Csg.
set @ 3782' w/ 150 SX
Cmt Circ.? No
TOC @ 2122' by calc.

FILE: EMSU229WB.xls
DKTS: 11/10/98



Date Completed: 4-18-36
Initial Prod: NA
Initial Formation: Grayburg Fr: 3782' To: 3864'
Completion Data:
 DST 3750-3785' showed 200' drilling fluid and 155 MCF gas. Completed OH naturally.

Workover History:
 9/48 ACDZ w/ 4000 gal 20% Acid.
 2/7/50 PI test. SIBHP=428 psi. Flwg BHP=195 psi. Flowrate = 58 BOPD. PI=0.249
 3/53 Install flow valves & ACDZ 500 gal. Test 19 BO/ 0 BW/ 20 MCF.
 6/57 Install ppg. equip. Test 25 BO/ 26 BW/ 25 MCFPD.
 7/57 SQZD csg lk @ 860-1034' w/ 200 SX. Co & return to prod. Tst 25 BO/ 24 BW/ ETSTM 22 hrs. FL=239'.
 6/76 SS OH w/ 700 grain SS. Reshoot w/ 70', 1000 grain. CO to TD. Scale squad - test: 7 BO/ 19 BW/ 21.3 MCFPD.
 10/86 XO WH. CO to TD. Run logs. Logger TD=3857'. ACDZ OH w/ 4000 gal 15% NeFeA in 4 stg w/ GRS as block. Swb 15 BBL wtr & dry. GIH w/ Baker TSN on 2-3/8" IPC tbg. Set pkr @ 3722'. Put on inj. Test 681 BWIPD @ 0 psig.
 9/89 Tag @ 3850'. Perf 3648-56, 3672-73, 3680-84, 3696-3704, 3718-22, 3726-28 & 3734-42 (2 JHPF). Spotted sd t/ 3841-3829'. Capped w/ 15' Hydromite to 3814'. Set CIBP @ 3755' cap w/ 5' cmt. ACDZ perms w/ 1000 gal 15% NeFeA & 100 RCNBs. Swb 35 BW EFL=3400', ONFe=100'. D/O CIBP @ 3755'. CO to 3816'. GIH w/ inj. pkr. on 2-3/8" IPC tbg. Set pkr @ 3631'. Resume inj @ 936 BWIPD @ 87 psig. B/4 - 504 BWIPD @ 600 psig.
 7/23/96 ACDZ w/ 4000 gal acid.
 5/16/97 SQZD perms fr 3648-3704' w/ 64 SX Cl C; perf 3768-74' & 3748-54' (3 JHPF). ACDZ perms 3718-74' & OH w/ 3000 gal Resisol II foamed w/ N2 (50Q-70Q).

Additional Data:
 T/Queen Formation @ 3324'
 T/Penrose Formation @ 3452'
 T/Grayburg Zone 1 @ 3617'
 T/Grayburg Zone 2 @ 3656'
 T/Grayburg Zone 2A @ 3679'
 T/Grayburg Zone 3 @ 3713'
 T/Grayburg Zone 4 @ 3744'
 T/Grayburg Zone 5 @ 3790'
 T/Grayburg Zone 6 @ 3856'
 T/San Andres Formation @ 3857'
 KB @ 3567'

PBTD @ 3816'
TD @ 3864'

10/28/1999



WELL DATA SHEET

LEASE: EMSU
 LOC: 3300' F S L & 1980' F E L
 TOWNSHIP: 21S
 RANGE: 36E UNIT: O

WELL: 230
 SEC: 4
 CNTY: Lea
 ST: N.M.

FORM: Grayburg / San Andres
 GL: 3564'
 KB:
 DF:

DATE:
 STATUS: TA'd
 API NO: 30-025-04478
 CHEVNO: FA5620:01

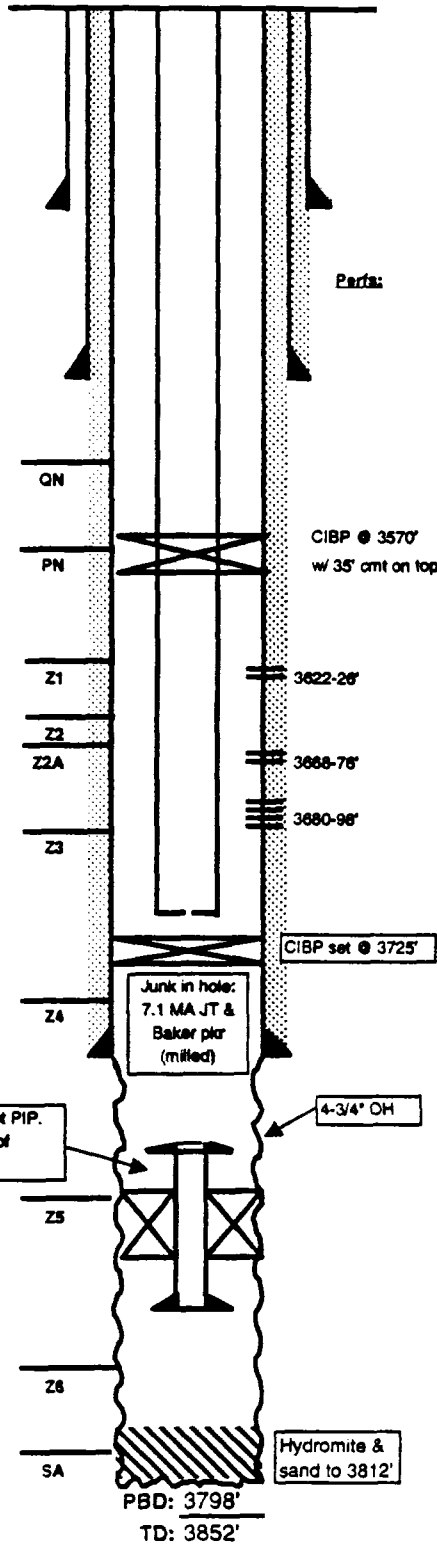
10-3/4" OD 40#
 # CSG
 Set @ 313' W/ 200 SX
 Cmt circ.? yes
 TOC @ 0 by calc.

7-5/8" OD 26.4#
 # CSG
 Set @ 1687' W/ 400 SX
 Cmt circ.? yes
 TOC @ 0 by calc.

Tubing Detail: 7/21/93	
KBTH:	0.00'
122 Jts. 2-7/8" 6.5# H-40 EUE 10V	
tbg.:	3575.83'
5-1/2" X 2-7/8" TAC	2.85'
2-7/8" 6.5# H-40 EUE 10V tbg.	117.24'
2-7/8" API SN	1.10'
1 J. 2-7/8" OP MUD JT	31.02'
Landed @	3712.42'

5-1/2" OD 17#
 # CSG J-55 Gr.
 Set @ 3743' W/ 400 SX
 Cmt circ.? Yes
 TOC @ 0 by calc.

Rod Detail: 7/21/93	
1 Rodless AGF	
3 - 7/8" Steel Rod Sub (6', 4', 4')	
84 - 7/8" Steel Rods	
62 - 3/4" Steel Rods	
1 - 2-1/2" X 1-3/4" X 20' RHBC	
Insert Pump	



Date Completed: 5/1/1936
 Initial Production: 2208 BOPD / 0 BWPD / GOR 720
 Initial Formation: Grayburg
 FROM: 3743' to 3852'

Completion Data

Natural OH completion.

Subsequent Workover or Reconditioning:

11/54 Install ppg. equipment.
 3/83 CO to TD. String shut OH w/ 700 grains prima cord. CO to TD. ACDZ OH in 2 stages w/ 4200 gal 15% NeFeA. Chem sqzd OH. Test 7 BO/ 55 BW/ 19 MCFPD. B/4 - 3 BO/ 20 BW/ 71 MCFPD.
 4/85 Chem sqzd OH.
 5/86 Chem sqzd OH.
 1/87 CO WH. Tag @ 3838'. ACDZ OH w/ 4000 gal 15% NeFeA in 4 stages. Put back on prod. Test (off rpt 8/7/87) - 1 BO/96 BW/ 2.8 MCF, FL=116' ASN. B/4 - 3 BO/ 41 BW/ 2.2 MCFPD.
 2/88 Chem sqzd OH.
 9/88 Chem sqzd OH.
 8/89 Tag @ 3836'. PB OH w/ 6 SX 12/20 sd. Perf (Z1-Z3) 3622-26, 3668-76 & 3680-98 (2 JHPF). tag sd @ 3806'. Dump Hydromite (600#) to new PBTD of 3801'. PB w/ Hydromite to 3791'. ACDZ perms w/ 1500 gal 15% NeFeA & 75 RCNBs. Swb dry. Put on prod. Test 1 BO/ 411 BW/ 3 MCFPD - FL @ 280' ASN. B/4 - 5 BO/ 430 BW/ 5 MCF - complete after unsuccessful attempt to shut off wtr.
 11/89 Prod log indicates 57% of wtr is fr below 3799'. Capacity indicates bottom oil entry @ 3790'.
 3/90 CO to 3806'. Set OH pkr @ 3790' (est. inj rate 3 BPM @ 1000 psi - no comm.) Poly trt OH 3790' and below w/ 125 BBL polymer to final press. 3310 BHP. Let poly set up. POH w/ OH pkr. Put well on prod. Tst: 1 BO/ 469 BW/ 1 MCF. FL=118' ASN. B/4 test: 1 BO/ 510 BW/ 3 MCFPD.
 5/90 CO fill 3793-3812'. Set infl. pkr @ 3790'. Could not pump below pkr (up to 2500 psi) - no comm. Put on pump. Tst 5/5/90: 5 BO/ 530 BW/ 3 MCF, FL=333' ASN. Ran prod. log 6/6/90 - shows 100% of fluid fr 3742-60'. Took off rpt on 8/14/90 @ 1 BO/ 520 BW/ 3 MCF. FL=284'. B/4 test: 1 BO/ 487 BW/ 2 MCF.
 6/92 Shut-in well.
 7/93 Junk in hole - attempt to recover 7.1 MA JT & Baker pkr. Set CIBP @ 3725'. ACDZ perms 3622-3698' w/ 40 bbl 15%. Swb 23 bbl, then 1 bbl. SN @ 3696'. Tst: B-3 BO/ 53 BW/ 3 MCF. A-1 BO/ 32 BW/ 3 MCF. FL=11 ASN.
 8/9/98 TA'd - Set CIBP @ 3570' w/ 35' cmt on top

Additional Data:

- T/Queen Formation @ 3308'
- T/Penrose Formation @ 3444'
- T/Grayburg Zone 1 @ 3613'
- T/Grayburg Zone 2 @ 3648'
- T/Grayburg Zone 2A @ 3678'
- T/Grayburg Zone 3 @ 3702'
- T/Grayburg Zone 4 @ 3736'
- T/Grayburg Zone 5 @ 3780'
- T/Grayburg Zone 6 @ 3831'
- T/San Andres Formation @ 3840'

Current

Inj. _____ bwpd @ _____ psi Date: _____
 Prod. _____ bopd _____ bwod Date: _____
 Gas _____ mcfpd



WELL DATA SHEET

LEASE: EMSU WELL: 239WIC

LOC: 1980' F S L & 1980' F E L SEC: 4

TOWNSHIP: 21S CNTY: Lea

RANGE: 36E UNIT: R ST: N.M.

FORM: Grayburg / San Andres DATE: _____

GL: 3578' STATUS: Injector

KB: 3578' API NO: 30-025-04468

DP: _____ CHEVNO: FA 5610:01

Date Completed: 4/1/1936

Initial Production: 1/ 2592 BOPD / 0 BWPD / GOR 424

Initial Formation: Grayburg

FROM: _____

10-3/4" OD
CSG
Set @ 298' w/ 200 SX
Cmt circ.? yes
TOC @ surf. by calc.
(13-3/4" hole)

7-5/8" OD
26.4# CSG
Set @ 1666' w/ 400 SX
Cmt circ.? yes
TOC @ surf. by calc.
(9-7/8" hole)

Tubing Detail: 1/10/97

KBTH: 0.00'

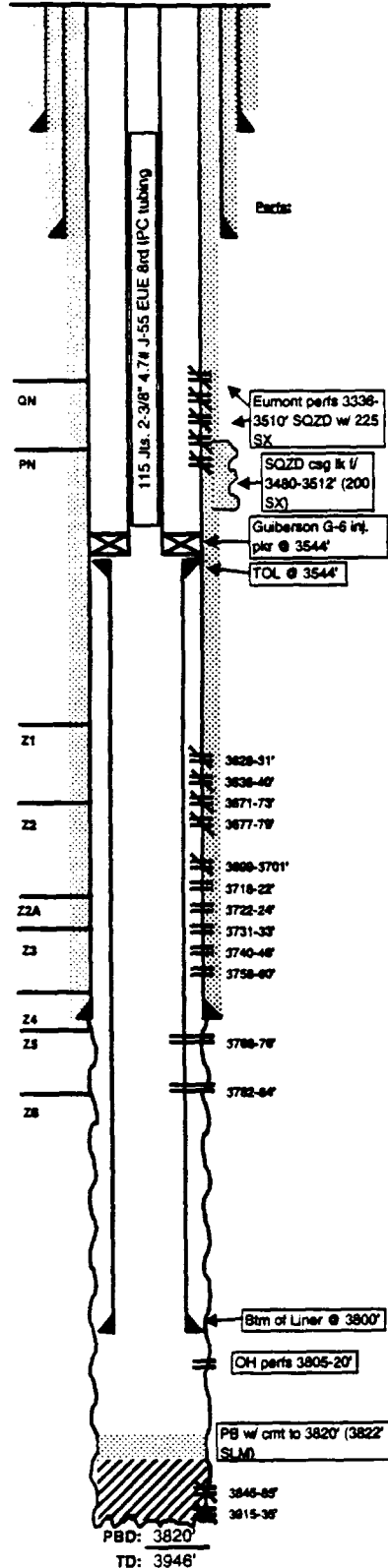
115 Jts. 2-3/8" 4.7# J-55 8rd IPC
tbg: 3537.85'

XL O/O Tool w/ 1.78" F Nipple 1.97'

Guberson G-6 P.C. in 5 pts 4.28'

Landed @ 3544.11'

5-1/2" OD
17# CSG
Set @ 3762' w/ 400 SX
Cmt circ.? yes
TOC @ surf. by calc.
(6-3/4" hole)



Completion Data

4/36 Natural OH completion.

Subsequent Workover or Reconditioning:

11/54 install pumping equipment.

1/58 Dual w/ Eumont gas. Frac perms w/ 10,000 gals-10,000# sd.

4/59 ACDZ OH w/ 3000 gals.

9/73 SQZD perms 3336-3510' (Eumont gas) w/ 225 SX. Drill to 3946'. Run 4-1/2" liner. Stuck @ 3800'. Unable to recover. Top @ 3548'. D/O to 3942'. Perf OH @ 3915, 20, 25, 30 & 35. ACDZ w/ 500 gals. Spot 20 SX plug & perf OH @ 3845-3885'. ACDZ w/ 2500 gals.

7/77 Install Reda pump.

8/81 CI.

7/88 Wash & ream 3850-3941'. Run logs. Could not set log below 3900'. Perf 3671-73, 3677-79, 3699-3701, 3722-24, 3731-33, 3758-60 & 3782-84 (2 JHPF). ACDZ perms & OH w/ 4000 15% - old perms. Locate csg. leak 1/ 3480-3512'. SQZD w/ 200 SX. GIH w/ 2-3/8" IPC tbg w/ inj. pkr. PWOI: 627 BWIPD @ 0 psig.

1/90 GIH w/ bit. Tag up @ 3923' (PBTD). Spot 11 SX sand on btm, tag sd @ 3836'. Perf 3628-31 & 3636-40. ACDZ w/ 3000 gals 15% NeFeA. PB w/ sand, pea gravel, hydromils (3824'). GIH w/ 2-3/8" IPC tbg. w/ inj. pkr. Set pkr @ 3477'. Inj. 1008 BWIPD @ 173 psig.

4/90 Ran injector profile log. Showed PBTD @ 3882'. Approx. 50% of wtr entering Zn 6.

8/90 CO to 3840'. Log w/ CCL. cal. SQZD Zn 6 w/ 50 SX cmt. POH w/ pkr. DO cmt to 3820' (3822' SLM). Perf 3805-20' (4 SPF). Run inj. profile. w/ 237 BIPD: 20% - Openhole (Zn 5)
60% - 3758-60 (Zn 4)
15% - 3722-24 (Zn 3)
5% - 3671-79 (Zn 2)
0% - (Zn 1)

12/91 Tag @ 3800. CO to 3820' (PBD). ACDZ OH 3800-3820' w/ 1000 gals 15% NeFe HCl - unsuccessful. REACDZ w/ 1200 gals. Swb. ACDZ Zn 1-4 w/ 2000 gal 15% NeFe HCl. Swb. RIH w/ 5-1/2" Baker TSN pkr on 2-3/8" IPC tbg. Set pkr @ 3479'. Test csg to 600 psi. 1/ 30 min - OK.

8/3/98 ACDZ w/ 3600 gals 15% NeFe HCl.

9/12/97 ACDZ w/ 1500 gals 90/10 Resolol II. ISIP @ 1800#. Perf 3718-22, 3740-46 & 3768-78 (3 JHPF). Spot 1250# 20/40 sand, tag @ 3772'. spot 600# sd - tag @ 3700' & wash to 3710'. Set BP @ 3710'. M&P lead 200 SX CI C w/ N2 and tail w/ 200 SX CI C. Pkr @ 3473' and test sqz to 300 psi; bled to 0 in 2 min. Test ann. to 300# & bled to 220# in 5 min. TIH, set pkr @ 3540' & test tbg to 300#. Held OK - pull to 3200', test tbg to 300#. RESQZD 3336-3510'. Pump 50 SX CI C & tag cmt @ 3200'. D/O to 3512' & fell through to TOL (3548'). D/O fr 3564-68, fell thru to 3583'. D/O hard cmt to 3705' & D/O CIBP, hard cmt & sand to 3781'. Wash sd to 3830 and ACDZ w/ 600 gals 15% NeFe HCl.

5/26/98 CO w/ cooled tbg unit fr 3718-3830' w/ KCl water & N2; ACDZ OH & perms w/ 1800 gals 15% HCl w/ 70Q foam ss diverter.

Additional Data:

T/Queen Formation @ 3328'

T/Perosse Formation @ 3454'

T/Grayburg Zone 1 @ 3618'

T/Grayburg Zone 2 @ 3657'

T/Grayburg Zone 2A @ 3681'

T/Grayburg Zone 3 @ 3708'

T/Grayburg Zone 4 @ 3748'

T/Grayburg Zone 5 @ 3790'

T/Grayburg Zone 6 @ 3855'

T/San Andres Formation @ 3882'

KB @ 3578'

CURRENT WELLBORE DIAGRAM

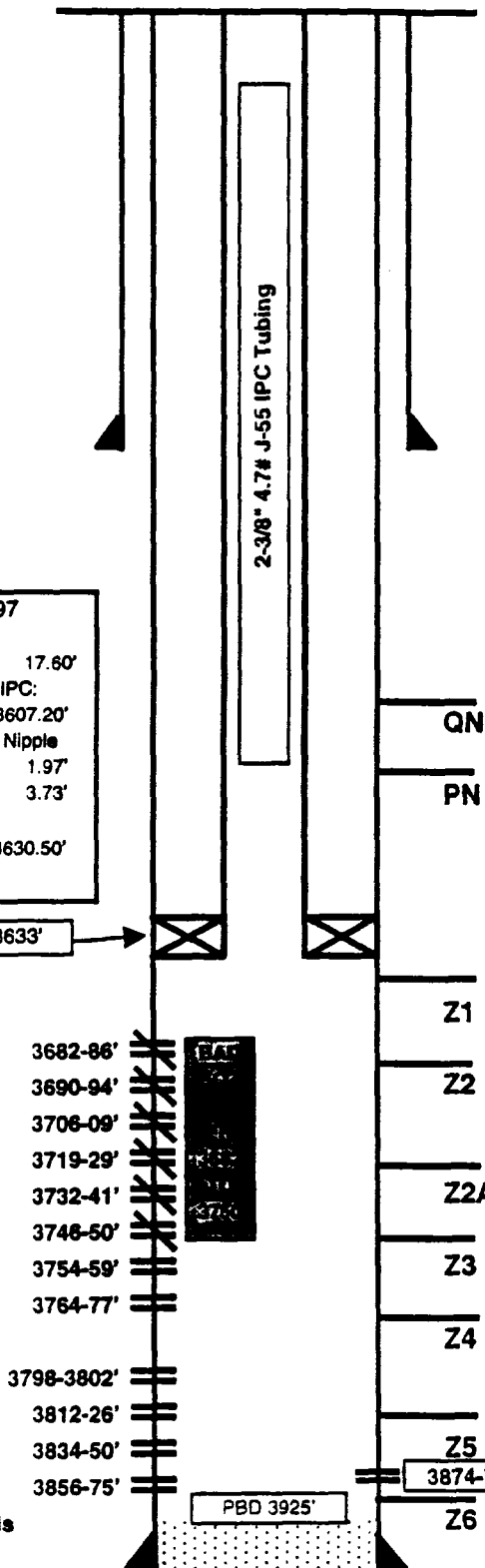
LEASE: EMSU	WELL: 240WIC	FIELD: Eunice-Monument	API: 30-025-29867
LOC: 1830 FSL & 2080 FWL, Unit S	SEC: 4	BLK: T21S, R36E	REF NO: IH4136:01
SVY: N.M.P.M.	GL: 3570	CTY/ST: Lea Co., NM	SPUD: 6/9/1987
CURRENT STATUS: Injector	KB: 3587	DF:	TD DATE: 6/13/1987

8-5/8", 24# K-55 Csg.
set @ 1300' w/ 800 SX
Cmt Circ.? Yes
TOC @ surf. by calc.
(12-1/4" hole)

Tubing Detail: 6/13/97

KBTH:	17.60'
117 Jts. 2-3/8" 4.7# J-55 IPC:	3607.20'
XL OrvOff Tool w/ 1.78 F Nipple	1.97'
Guiberson G-6 Pkr	3.73'
Landed @	3630.50'

Guib G-6 inj pkr @ 3633'



Date Completed: 8-14-87
Initial Prod: 1 BO / 107 BWPD
Initial Formation: Grayburg Fr: 3682' To: 3875'
Completion Data:
 D/O cmt to 3925' (PBD). Perf @ 3874-78' (4 holes) for cmt sqz due to poor cement bond. Brk down/ACDZ w/ 400 gal. SQZD w/ 182 SX cmt to improve cement bond. D/O cmt. Tst sqz OK. Perf 3798-3802, 3812-26, 3834-50, 3856-75 (1 JHPF). ACDZ w/ 3500 gal 20% NeFeA in 3 stages w/ GRS as block. Swb 1 BO/ 59 BW/ FeR=8.8 BPH. Swb 2 BO/ 29 BW FeR=10 BPH. Perf 3682-86, 3690-94, 3706-09, 3719-29, 3732-41, 3746 50 & 3764-77 (1 JHPF). ACDZ perms w/ 4000 gal 15% NeFeA & 75 RCNBs. Swb dry, 2 runs. No Fe. Put on prod. Tst: 1 BO/ 107 BW/ 10 MCFPD FL-240' ASN.

Workover History:
 1/89 Scale squeezed.
 8/89 Scale squeezed.
 8/90 Scale squeezed.
 1/91 Scale squeezed.
 1/92 ACDZ perms 3682-3875' w/ 3000 gal 15% NeFeA in 4 stages w/ GRS as block. Swb 37 BW. FeR=7 BPH. GIH w/ Guiberson G-6 inj pkr on 2-3/8" IPC tbg. Set pkr @ 3633'. Put on inj. Test 1439 BWIPD @ 75 psig.
 6/97 SQZD perms fr 3682-3750' w/ 150 SX Cl C; squeeze did not hold pressure. Comm. w/ backside during acid job: PUH & ACDZ w/ 3000 gal Resisol II foamed w/ N2 fr 3624 to 3925' PBD.

Additional Data:
 T/Queen Formation @ 3353'
 T/Penrose Formation @ 3486'
 T/Grayburg Zone 1 @ 3652'
 T/Grayburg Zone 2 @ 3694'
 T/Grayburg Zone 2A @ 3729'
 T/Grayburg Zone 3 @ 3751'
 T/Grayburg Zone 4 @ 3783'
 T/Grayburg Zone 5 @ 3828'
 T/Grayburg Zone 6 @ 3875'
 T/San Andres Formation @ 3886'
 KB @ 3587'

5-1/2", 15.5#/ft K-55 Csg.
set @ 3950' w/ 650 SX
Cmt Circ.? Yes
TOC @ surf. by calc.
(7-7/8" hole)

PBD @ 3925'
TD @ 3950'

FILE: EMSU240WB.xls
DKTS: 11/10/98

10/28/1999

CURRENT WELLBORE DIAGRAM

LEASE: EMSU **WELL:** 241WIC **FIELD:** Eunice-Monument **API:** 30-025-04489
LOC: 1980 FSL & 660 FWL, Unit T **SEC:** 4 **BLK:** T21S, R36E **REF NO:** FA5631:01
SVY: N.M.P.M. **GL:** 3594 **CTY/ST:** Lea Co., NM **SPUD:** _____
CURRENT STATUS: Injector **KB:** 3594 **DF:** _____ **TD DATE:** _____

10-3/4", 40# K-55 ST&C
 Surf. Pipe set @ 350'
 w/ 225 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.

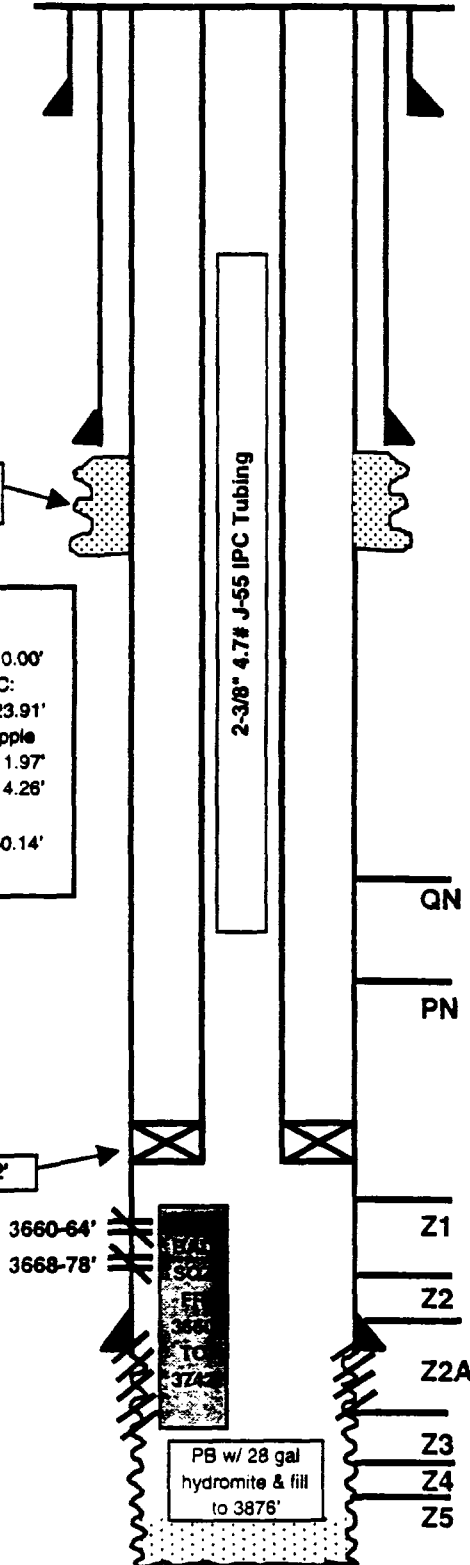
7-5/8", 26# K-55 Csg.
 set @ 1334' w/ 350 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Csg lk f/ 1292-1353', SQZD w/ 200 SX.

Tubing Detail: 6/3/97	
KBTH:	0.00'
118 Jts. 2-3/8" 4.7# J-55 IPC:	3623.91'
XL On/Off Tool w/ 1.78 F Nipple	1.97'
Guiberson G-6 Pkr	4.26'
Landed @	3630.14'

5.5", 17#/ft K-55 Csg.
 set @ 3723' w/ 325 SX
 Cmt Circ.? No
 TOC @ 127' by calc.

Baker TSN pkr @ 3632'



Date Completed: 12-9-35
Initial Prod: N/A
Initial Formation: Grayburg Fr: 3723' To: 3896'
Completion Data:
 Completion OH Natural.
Workover History:
 5/37 BHP test: 1338 psi
 1/38 BHP test: 1282 psi
 6/53 Install pumping equip. Tst: 60 BO/ 12 BW/ 35.7 MCFGPD
 2/58 PB w/ 28 gal Hydromite to 3876'. Set OH pkr @ 3748'. Frac w/ 3780 gal oil & 3780# sand. Screen out. Fnd csg lk @ 546'. RTP. Tst: 16 BO/ 48 BW/ 12 MCFGPD.
 1/66 500 gal dump acid. Tst: 17 BO/ 30 BW. B/4 - 7 BO/ 36 BW.
 4/69 Treated w/ 750 gal 15% NeA.
 7/86 XO WH. Tag btm @ 3858'. Tst for csg lk. Fnd lk @ 1292-1353'. SQZD lk w/ 200 SX. D/O & CO cmt. Test csg OK. CO hole to 3876'. Ran logs (logger TD @ 3885'.) ACDZ OH w/ 3000 gal 15% NeFea in 3 stages w/ GRS as block. Swb 4 BW & dry. GiH w/ Baker TSN on 2-3/8" IPC tbg. Set pkr @ 3632'. Put on inj. Test 648 BWIPD @ 0 psig.
 5/97 Sqz perms f/ 3660-64, 3668-78 & OH fr 3714-3750 w/ 175 SX Cl C. Sqz did not hold press; ACDZ OH w/ 3000 gal Resisol II foamed w/ N2 (perms were shown on marked log. T. Love said to show).

Additional Data:
 T/Queen Formation @ 3346'
 T/Penrose Formation @ 3483'
 T/Grayburg Zone 1 @ 3646'
 T/Grayburg Zone 2 @ 3684'
 T/Grayburg Zone 2A @ 3712'
 T/Grayburg Zone 3 @ 3743'
 T/Grayburg Zone 4 @ 3776'
 T/Grayburg Zone 5 @ 3828'
 T/Grayburg Zone 6 @ 3875'
 T/San Andres Formation @ 3918'
 KB @ 3594'

SQZ OH & 3714-3750' w/ 175 SX Cl C

PBTD @ 3876'
 TD @ 3896'

FILE: EMSU241WB.xls
 DKTS: 11/10/98

10/28/1999



WELL DATA SHEET

LEASE: EMSU WELL: 258

LOC: 940' F S L & 940' F W L SEC: 4

TOWNSHIP: 21S CNTY: Lea

RANGE: 36E UNIT: U ST: N.M.

FORM: Grayburg / San Andres DATE: _____

GL: 3581' STATUS: Producer

KB: 3596' API NO: 30-025-21251

DF: _____ CHEVNO: FF4609:01

Date Completed: 4/12/1965

Initial Production: P34 BOPD / 111 BWPD

Initial Formation: Oil Center Blinbry

FROM: 5872' to 5949'

Completion Data

ACDZ w/ 3300 gal 15% Ne, frac w/ 30,550 gal GBW and 1-2 ppg.

Subsequent Workover or Reconditioning:

5/11/65 Set CIBP @ 3920' w/ 1 SX. cement cap. Perf 3768-3771, 3814-17 & 3845-48 (4-5/8" JHPF). ACDZ w/ 3000 gals 15% ONE.

12/13/76 Add perfs 3711-13 & 3737-39. ACDZ w/ 3000 gal 15% Ne acid.

2/23/87 CO added perfs, stim. / return prod. POH w/ tbg., SLM=3911' (SWIFN). TIH w/ 3-3/4" bit & csg scraper. tag @ 3911'. Set Howco RTTS pkr @ 3827'. between 3814-17 & 3845-48 intervals. Swb. Rise pkr, move to 3780'. Swb to chk FL - rec 0 bbls. Move pkr below perfs & set @ 3873'. Swb. Tst CIBP & tbg. OK. PUH above all perfs to 3654', test ann. 500# held OK. SWIFN.

2/25/87 RU D-A, perf 3659-61, 3668-68, 3691-93, 3751-53, 3807-09, 3829-31 & 3840-42 (2 JHPF @ 120 deg phasing, total of 28 holes). PU Howco pkr, TIH to 3591' & set pkr. ACDZ w/ 4500 gals 15% NeHCl w/ additives. Pmax-1110#, Pmin=50#, Pavg=700#. Air- 5 BPM, ISIP=0. RD D-A, then swb. SFL-2400', EFL-3591'. Rec. 20 bbls. Dry SWIFN.

2/26/87 Rise pkr, POH, L/D pkr. RIH w/ prod. tbg. Run pmp and rods. RTP.

3/18/98 Perf 3752-62, 3778-86 & 3792-3800 (3 SPF @ 120 deg phasing). ACDZ

3654-3800 w/ 3500 gal 15% 90/10 Resisol II w/ 70Q 20# gelled 1% KCl wtr as div. Swb. ACDZ 3730-3859 w/ 1000 gal 15% NeFe. TIH w/ CIGR NSET @ 3812'. SQZD 3659-3730' w/ 300 SX Cl C nitrified cmt. Approx. 50 SX sqzd in form. Drill cmt & CIBP @ 3730' & CO to 3907'. Swb. RIH prod. tbg. and rods, RTP.

Additional Data:

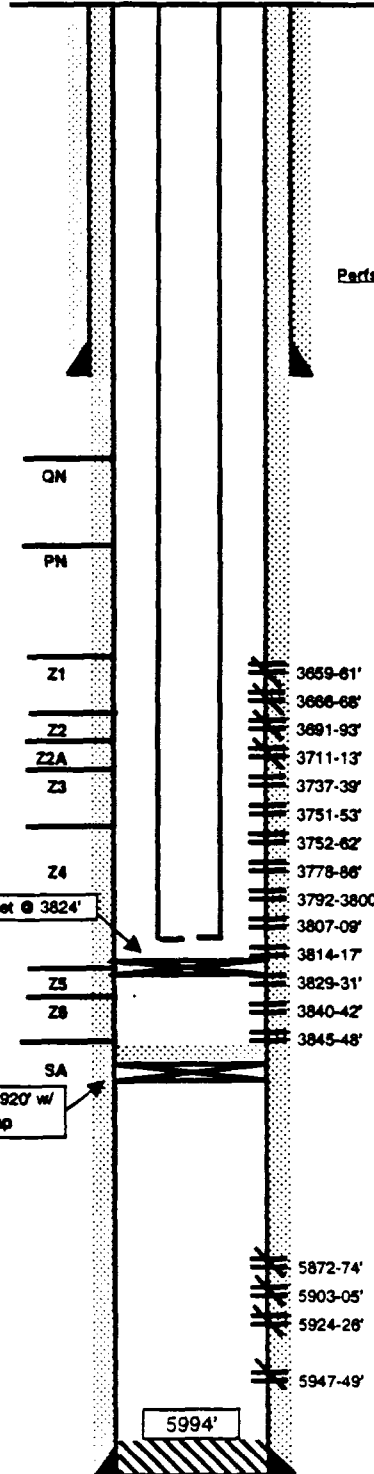
- T/Queen Formation @ 3336'
- T/Penrose Formation @ 3472'
- T/Grayburg Zone 1 @ 3637'
- T/Grayburg Zone 2 @ 3674'
- T/Grayburg Zone 2A @ 3706'
- T/Grayburg Zone 3 @ 3737'
- T/Grayburg Zone 4 @ 3770'
- T/Grayburg Zone 5 @ 3820'
- T/Grayburg Zone 6 @ 3874'
- T/San Andres Formation @ 3896'
- KB @ 3596'

8-5/8" OD #
CSG
Set @ 1246' W/ 375 SX
Cmt circ.? yes
TOC @ _____ by _____

Tubing Detail: 3/30/98	
KBTH:	15.00'
123 Jts. 2-7/8" 6.5# 8rd EUE w/ turned dwn:	3888.63'
Collars:	
2-7/8" API SN	1.10'
1 Jt. 2-7/8" MAJ Open-ended	31.02'
Landed @	3836.80'

4-1/2" OD 11.6#
CSG J-55 Gr.
Set @ 6024' W/ 550 SX
Cmt circ.? No
TOC @ 2400' by calc.

Rod Detail: 3/30/98	
1-1/2" X 26' Polished Rod	
2 - 4' N-97 Sube	
130 - 7/8" N-97 Rods	
20 - 1-1/2" KBars	
2-1/2" X 2 X 20' RWBC pump	



Current
Inj. _____ bwpd @ _____ psi Date: _____
Prod. _____ bopd _____ bwpd Date: _____
Gas _____ mcfpd

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 259W1	FIELD: Eunice-Monument	API: 30-025-04462
LOC: 3508 FNL & 410 FWL, Unit V	SEC: 4	BLK: T21S, R36E	REF NO: FA5604:01
SVY: N.M.P.M.	GL: 3582	CTY/ST: Lea Co., NM	SPUD: _____
CURRENT STATUS: Injector	KB: 3582	DF: _____	TD DATE: _____

10-3/4" OD Surface
 Pipe set @ 329' w/
 200 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.

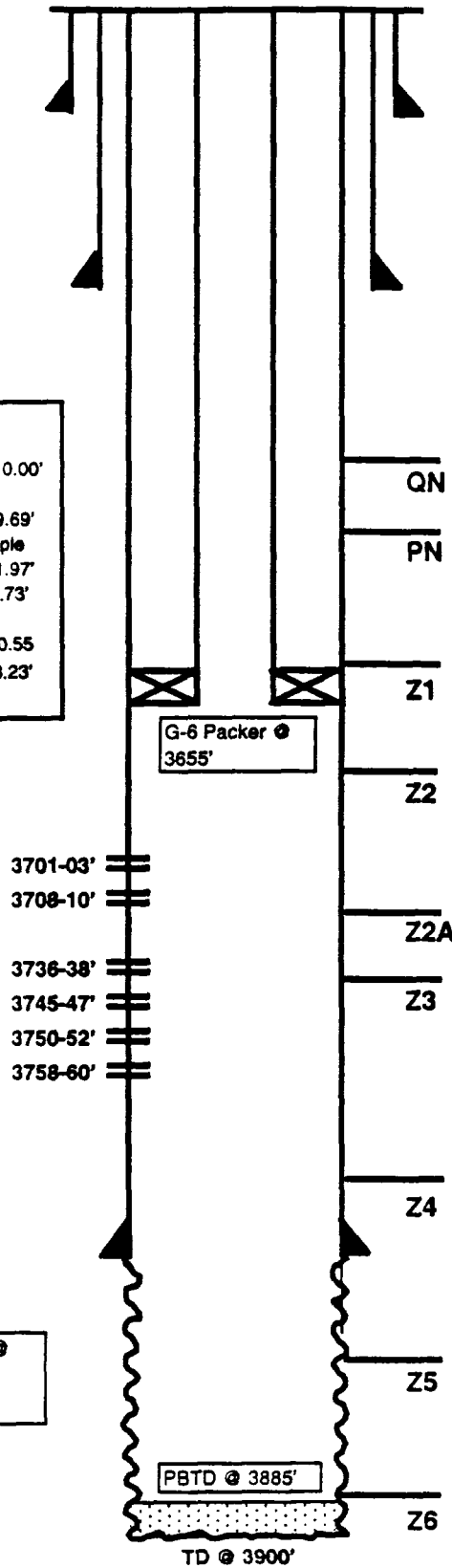
7-5/8", 26.4# Csg.
 set @ 1614' w/ 400 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 1/13/98	
KBTH:	0.00'
119 Jts. 2-3/8" J-55 IPC:	3649.69'
XL On/Off Tool w/ 1.78 F Nipple	1.97'
Guiberson G-6 Pkr	3.73'
Nickel plated Pump Out Plug w/ WL Re-entry guide	0.55'
Landed @	3618.23'

Date Completed: 2-28-36
Initial Production: NA
Initial Formation: Grayburg Fr: 3783' To: 3900'
Completion Data:

Workover History:
 9/11/50 ACDZ w/ 1000 gals.
 5/16/54 Frac w/ 6000 gals oil and 6000# sand.
 10/20/54 Install pumping equipment.
 3/10/64 String shot OH and acidized.
 7/14/86 Ran 4-3/4" bit & bailer to 3872'. CO to 3985' (hard fill). Ran GR/CNL/CCL fr 3878-3000'. ACDZ w/ 4000 gal 15% HCl w/ 1500# GRS for block. AVRO 5 BPM @ 600 psi. Swb 37 BW. EFL @ 3400'. Set Baker TSN pkr @ 3722'.
 7/23/86 Perfed 3701-3760 & ACDZ w/ 600 gals 15% NeFe HCl.
 7/23/96 ACDZ w/ 6000 gals acid.
 12/23/98 CO well to 3883'. Spot 5000# 20/40 sd. Bail on well until free of sand (to 3742'). TIH w/ CIBP @ 3742'. Set CIBC @ 3615'. SQZD well w/ 300 SX CI C w/ 150 SCF/BBL N2. Cannot pump into sqz. Spot acid and brk down perms again - SQZD w/ 200 SX CI C (90 SX in form.) Drill CR, cmt, CIBP fr 3616-3875'. Set pkr @ 3655'. Run H-5 and RTI.

Additional Data:
 T/Queen Formation @ 3350'
 T/Penrose Formation @ 3485'
 T/Grayburg Zone 1 @ 3648'
 T/Grayburg Zone 2 @ 3687'
 T/Grayburg Zone 2A @ 3715'
 T/Grayburg Zone 3 @ 3743'
 T/Grayburg Zone 4 @ 3774'
 T/Grayburg Zone 5 @ 3826'
 T/Grayburg Zone 6 @ 3884'
 T/San Andres Formation @ 3915'
 KB @ 3582'



5-1/2", 17#/ft Csg.
 set @ 3783' w/ 400 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Note: Csg shoe may be @ +/-3765' from GR & CCL indications. RCB

FILE: EMSU259WB.xls
 DKTS: 11/10/98



WELL DATA SHEET

LEASE: EMSU **WELL:** 260
LOC: 330' F S L & 2310' F E L **SEC:** 4
TOWNSHIP: 21S **CNTY:** Lea
RANGE: 36E **UNIT:** W **ST:** N.M.

FORM: Grayburg / San Andrea **DATE:** _____
GL: 3582' **STATUS:** Producer
KB: 3582' **API NO:** 30-025-04463
DF: _____ **CHEVNO:** FA 5605:01

Date Completed: 9/1/1937
Initial Production: 156 BOPD
Initial Formation: Grayburg
FROM: 3668' to 3834' / GOR 4807

10-3/4" OD
 40.5# CSG
 Set @ 310' W/ 200 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (12-1/4" hole)

7-5/8" OD
 26.4# CSG
 Set @ 1626' W/ 400 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (8-3/4" hole)

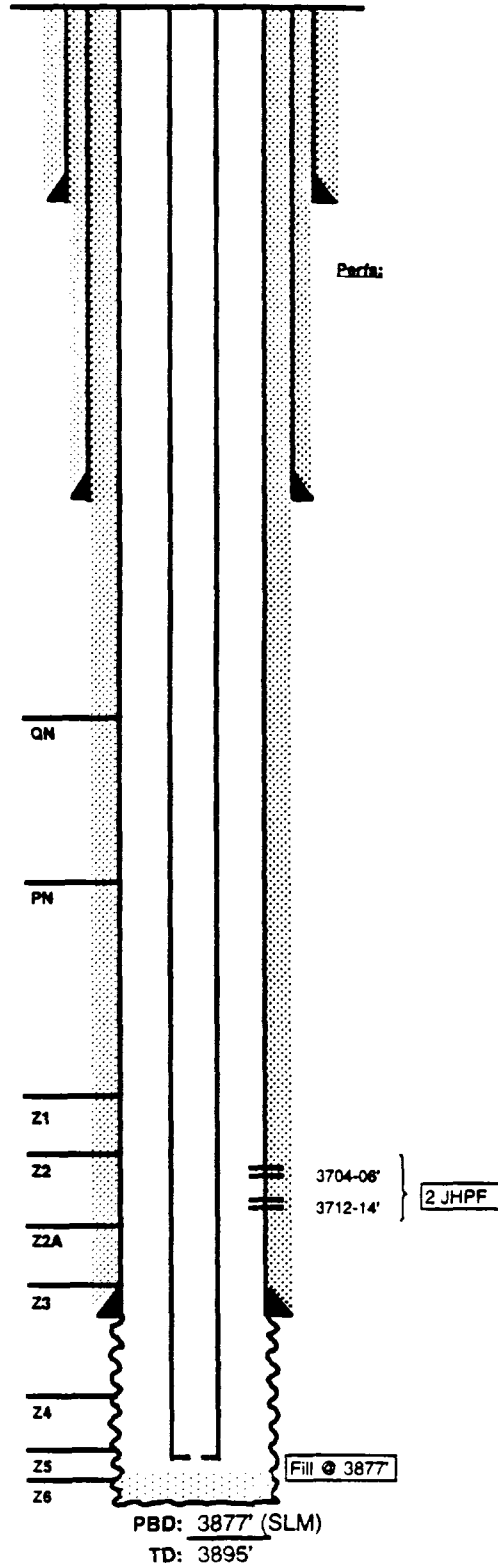
Tubing Detail: 2/18/87

Original KBTH:	0.00'
127 Jts. 2-7/8" H-40 8.5# EUE 10V	
tbq:	3837.81'
2-1/2" SN	1.10'
4" Perf Sub	4.00'
2-7/8" 8.5# 10V EUE H-40 MAJ w/ BPOB	30.00'
Landed @:	3872.91'

Rod Detail: 2/18/87

1-1/4" X 12' Polished Rod
54 - 7/8" X 25' Rods
98 - 3/4" X 25' Rods
2-1/2" X 1-1/2" X 12' Pump

5-1/2" OD
 17# CSG 10rd
 Set @ 3747' W/ 400 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (6-1/4" hole)



Completion Data

Subsequent Workover or Reconditioning:

9/54 Install pumping equip.
 3/64 ACDZ OH.
 2/81 SS OH. CO to 3884'. ACDZ w/ 4200 gals.
 2/10/87 CO WH. Log w/ CNL, GR, CCL, Cal. Logged TD 3877'. Perf 3704-06 & 3712-14. ACDZ perms w/ 800 gals 15% NeHCl + 16 Bs. ISIP = 0. ACDZ OH w/ 4000 gals 15% NeHCl. ISIP = 650#. Swab test. SFL - 2500'. EFL - 2800'. Rec'd 35 BBLs/ 6 runs. RIH w/ PE. RTP. A/W - 9 BO / 47 BW / GOR 222. B/4 - 5 BO / 26 BW.
 8/87 Chemical treat.
 2/88 Chemical treat.
 8/88 Chemical treat.
 12/88 Chemical treat.
 11/89 Chemical treat.
 8/90 Chemical treat.

Additional Data:

T/Queen Formation @ 3360'
 T/Penrose Formation @ 3488'
 T/Grayburg Zone 1 @ 3647'
 T/Grayburg Zone 2 @ 3690'
 T/Grayburg Zone 2A @ 3717'
 T/Grayburg Zone 3 @ 3746'
 T/Grayburg Zone 4 @ 3780'
 T/Grayburg Zone 5 @ 3825'
 T/Grayburg Zone 6 @ 3878'
 T/San Andrea Formation @ 3916'
 KB @ 3582'

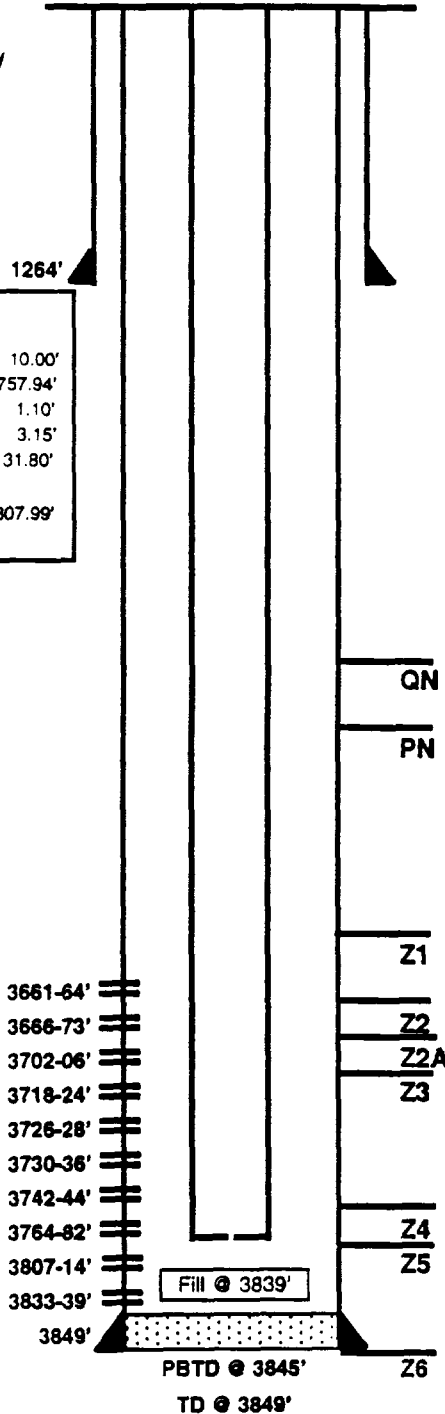
CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 609	FIELD: Eunice-Monument	API: 30-025-31406
LOC: 1260 FWL & 4050 FSL, Unit L	SEC: 4	BLK: T21S, R36E	REF NO: KZ3276:01
SVY: N.M.P.M.	GL: 3564	CTY/ST: Lea Co., NM	SPUD: 11/26/1991
CURRENT STATUS: <u>Producer</u>	KB: 3574	DF:	TD DATE:

8-5/8", 23#/ft M-50
Surf. Pipe set @ 1264' w/
799 SX cement
Cmt Circ.? Yes
TOC @ surf. by calc.
(12-1/4" hole)

Tubing Detail: 1/4/94	
KBTH:	10.00'
122 Jts. 2-7/8" 6.5# J-55:	3757.94'
1 API SN	1.10'
1 Perf Sub	3.15'
1 MJ-W / BPOB	31.80'
Landed @	3807.99'

5.5", 15.5#/ft K-55 Csg.
set @ 3849' w/ 675 SX
Cmt Circ.? Yes
TOC @ surf. by calc.
(7-7/8" hole)



Date Completed: 1-13-92
Initial Prod: 120 BOPD/ 270 BWPD/ GOR 250
Initial Formation: Grayburg From: 3661' To: 3839'
Completion Data:
 Drill out to 3845' (PBD). Perf 3764-82, 3807-14 & 3833-39 (2 JHPF).
 Swb 3 BF, 25% OC. ACDZ w/ 3000 gal 15% NeFeA & 105 RCNBs. Swb
 61 Bbls - trace oil. Circ. ball sealers out. Swb 67 Bbls, 2% oil. 48 BW.
 Swb 13 BO/ 48 BW. Straddle Zn 5 only 3833-39. Swb 115 BF - 1% oil.
 Swb 3764-82. Rec 55 Bbls - 2% oil. Swb 14 BO/ 86 BW. IFL=60%,
 FFC=2%. Perf 3661-64', 3666-73, 3702-06, 3718-24, 3726-28, 3730-36
 & 3742-44 (2 JHPF). ACDZ 3702-3744 w/ 1750 gal 15% NeFeA & 84
 RCNBs. Swb 45 BO/ 29 BW. Put well on prod.

Workover History:
 1/94 Fill @ 3839' (6' fill). ACDZ perms 3661-3839 w/ 2500 gal 15%. Swab
 115 bbls. SN @ 3773'. TST: B-48 BO/ 155 BW/ 4 MCF. A-47 BO/ 211
 BW/ 4 MCF. FL=0' ASN.
 5/95 Tag @ 3841'. Pickle tbg. ACDZ w/ 4000 gals Resisol II in 4 stages.
 RIH w/ PE Test A - 41 BO/ 573 BW/ 13 MCF, B - 20 BO/ 176 BW/ 2
 MCF.

Additional Data:
 T/Queen Formation @ 3336'
 T/Penrose Formation @ 3469'
 T/Grayburg Zone 1 @ 3634'
 T/Grayburg Zone 2 @ 3671'
 T/Grayburg Zone 2A @ 3695'
 T/Grayburg Zone 3 @ 3723'
 T/Grayburg Zone 4 @ 3757'
 T/Grayburg Zone 5 @ 3802'
 T/Grayburg Zone 6 @ 3847'
 T/San Andres Formation @ 3849'
 KB @ 3574'

Tubing Detail: 1/4/94	
1 Polished Rod	
1 2.5" X 2" X 20' Insert Pump	
1 7/8" X 4' Sub	
88 3/4" X 25' N-97 Rods	
61 7/8" X 25' Rods	

FILE: EMSU609WB.xls
DKTS: 11/4/98

10/28/1999

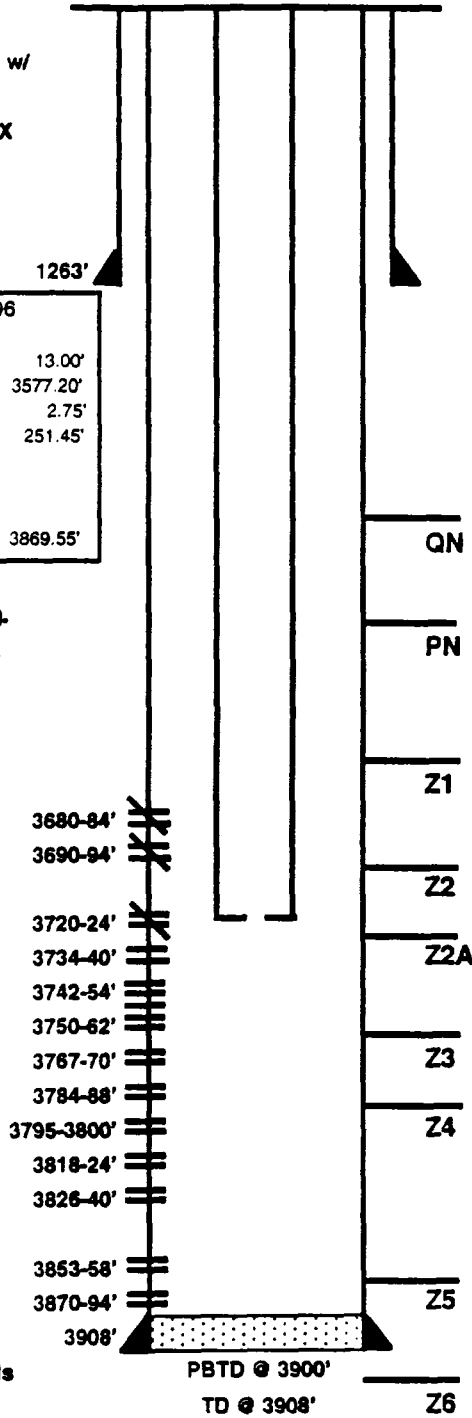
CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 625	FIELD: Eunice-Monument	API: 30-025-31425
LOC: 10 FWL & 2630 FSL, Unit T	SEC: 4	BLK: T21S, R36E	REF NO: KZ3279:01
SVY: N.M.P.M.	GL: 3584	CTY/ST: Lea Co., NM	SPUD: 11/23/1991
CURRENT STATUS: Producer	KB: 3597	DF: 3596	TD DATE:

8-5/8", 23#/ft M-50
Surf. Pipe set @ 1263' w/
780 SX cement
Cmt Circ.? Yes (332 SX
to surface)
(12-1/4" hole)

Tubing Detail: 11/5/96	
KBTH:	13.00'
115 Jts. 2-7/8" 6.5# J-55:	3577.20'
1 5-1/2" X 2-7/8" TAC	2.75'
8 2-7/8" 6.5# J-55:	251.45'
1 Pump Barrel	
	25.15'
Landed @	3869.55'

5.5", 15.5#/ft K-55 Csg.
set @ 3908' w/ 650 SX
Cmt Circ.? Yes
Circ. 60 SX to surf.
(7-7/8" hole)



Date Completed: 1-7-92
Initial Prod: 14 BOPD/ 637 BWPD/ 31 MCFGPD
Initial Formation: Grayburg From: 3680' To: 3894'
Completion Data:
Drill out to 3900' (PBTD). Perf 3818-24, 3828-40, 3853-58 & 3870-94 (1 JHPF). Swb 22 BW. Swb 4.5 BW. ACDZ w/ 2000 gal 15% NeFeA & 80 RCNBs. Swb 132 BF - 5% oil. ONFE=1200', swb 12 BF - 5% oil. Perf 3680-84, 3690-94, 3720-24, 3734-40, 3742-54, 3758-62, 3767-70, 3784-88 & 3795-3800 (1 JHPF). Swb 5 BW. Swb 41 BW. ACDZ w/ 2500 gal 15% NeFeA & 85 RCNBs. Swb 72 BW. Swb to SN. Rec 9 BC/ 13 BW. Put well on prod.

Workover History:
4/95 21 BO/ 365 BW/ 10 MCF, FL=0' ASN
6/96 Tag @ 3892. Pickle tbg. ACDZ w/ 6000 gals Resisol II in 5 stages. RIH w/ PE Test A - 28 BO/ 2043 BW/ 18 MCF. B - 22 BO/ 317 BW/ 4 MCF.
10/28/96 Set CIBP @ 3729', TIH CICR to 3670'. M&P 190SX C/C 150SCF N2 w/ cmt to SQZ perms 3680-3724'. Perf 3750-3762, 3795-3800, 3818-24 & 3853-58. Run PE and well TOTP.

Additional Data:
T/Queen Formation @ 3367'
T/Penrose Formation @ 3504'
T/Grayburg Zone 1 @ 3670'
T/Grayburg Zone 2 @ 3707'
T/Grayburg Zone 2A @ 3734'
T/Grayburg Zone 3 @ 3770'
T/Grayburg Zone 4 @ 3804'
T/Grayburg Zone 5 @ 3862'
T/Grayburg Zone 6 @ 3917'
T/San Andres Formation @ 3935'
KB @ 3597'

Tubing Detail: 11/5/96	
1 Polished Rod	
1 7/8" X 2' Pony Rod	
154 7/8" X 25' N-97 Rods	
1 Plunger	

FILE: EMSU625WB.xls
DKTS: 10/31/98

10/28/1999

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 626	FIELD: Eunice-Monument	API: 30-025-31465
LOC: 1630 FWL & 2650 FSL, Unit N	SEC: 4	BLK: T21S, R36E	REF NO: KZ3315:01
SVY: N.M.P.M.	GL: 3579	CTY/ST: Lea Co., NM	SPUD: 12/11/1991
CURRENT STATUS: <u>Producer</u>	KB: 3589	DF:	TD DATE:

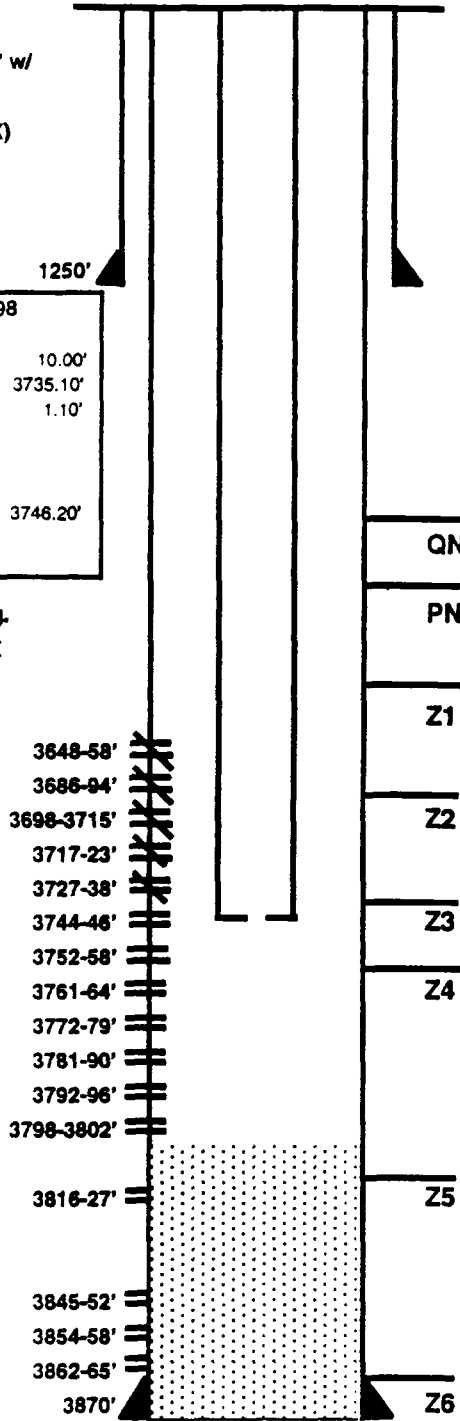
8-5/8", 23#/ft M-50
Surf. Pipe set @ 1250' w/
800 SX cement
Cmt Circ.? Yes (81 SX)
(12-1/4" hole)

Tubing Detail: 7/17/98

KBTH: 10.00'
120 Jts. 2-7/8" 6.5# J-55: 3735.10'
API SN 1.10'

Landed @ 3746.20'

5.5", 15.5#/ft K-55 Csg.
set @ 3870' w/ 825 SX
Cmt Circ.? Yes
Circ. 106 SX to surf.
(7-7/8" hole)



Date Completed: 1-15-92
Initial Prod: 54 BOPD/ 395 BWPD/ 20 MCFGPD
Initial Formation: Grayburg From: 3648' To: 3865'
Completion Data:
Drill out to 3868' (PBTD). Perf 3845-52, 3854-58 & 3862-65 (2 JHPF). ACDZ w/ 1000 gal 15% NeFeA & RCNBs. Swb 63 BW. Swb 2 BO/ 98 BW/ FFeR=20 BPH. Perf 3752-58, 3761-64, 3772-79, 3781-90, 3792-96, 3798-3802 (2 JHPF). ACDZ w/ 3600 gal 15% NeFeA & 140 RCNBs. Swb 49 BF, IFC=0% oil. FFC=2% oil, swb 9 BO/ 36 BW. FFeR=25 BPH. Perf 3648-58, 3686-94, 3698-3715, 3717-23 & 3727-38 (1 JHPF). ACDZ w/ 3600 gal 15% NeFeA & 96 RCNBs. Swb 163 BF. IFC=0% oil, FFC=2% oil. Swb 22 BF, IFC=60% oil, FFC=2% oil. Isolate 3686-3738. Swb 159 BF, IFC=2% oil. FFC=trace oil. Swb 5 BF, IFC=75% oil. Isolate 3648-58, swb 72 BF, 2% oil cut. FFeR=198 BPH. Put on prod.

Workover History:
12/96 Spot 2100# sand f/ 3698-3868. Set CIRC @ 3585. Cmt w/ 175 SX (115 SX in formation). D/O CIRC & cmt to 3800. CO sand to 3868.
7/2/98 Set CIBP @ 3806' & perf 3744-46' (3 SPF). ACDZ 3744-3806' w/ 3000 gal 15% S-3000 w/ 70Q 1% KCl foamed w/ N2. Spot 700# sand to PB to 3742'. Set CIBP @ 3741', RIH CIRC TO 3547'. ACDZ 3648-3740 w/ 1000 gal 15% 90/10 NeHCl. SQZD 3648-3738' w/ 300 SX Cl C cement foamed w/ 175 SCF/B N2 (68 SX in form.). DO CIBP to 3765' (no cmt below CIBP), wash sd to 3804' Circ. clean. Swb. Run PE. RTP.

Additional Data:
T/Queen Formation @ 3341'
T/Penrose Formation @ 3472'
T/Grayburg Zone 1 @ 3835'
T/Grayburg Zone 2 @ 3873'
T/Grayburg Zone 2A @ 3698'
T/Grayburg Zone 3 @ 3731'
T/Grayburg Zone 4 @ 3764'
T/Grayburg Zone 5 @ 3809'
T/Grayburg Zone 6 @ 3859'
T/San Andres Formation @ 3860'
KB @ 3589'

FILE: EMSU626WB.xls
DKTS: 10/31/98

PBTD @ 3806'
TD @ 3870'

10/28/1999

CURRENT WELLBORE DIAGRAM

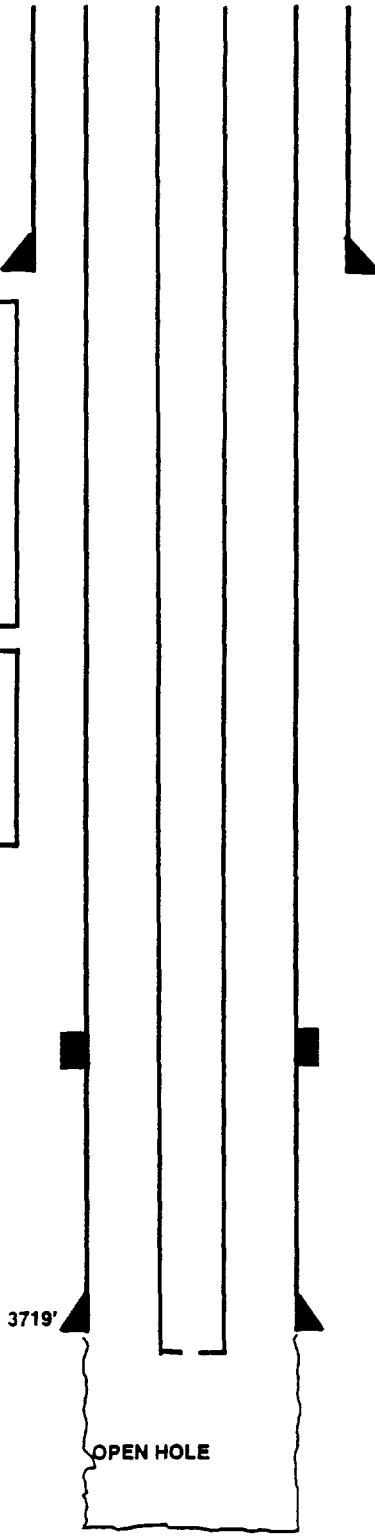
LEASE: <u>EMSU</u>	WELL: <u>653</u>	FIELD: <u>Eunice-Monument</u>	API: <u>30-025-34213</u>
LOC: <u>150' FSL & 90' FWL</u>	SEC: <u>4</u>	BLK: <u>T21S, R36E</u>	REF NO: <u>BP7314</u>
SVY: _____	GL: <u>3574</u>	CTY/ST: <u>Lea Co., NM</u>	SPUD: <u>12/20/1997</u>
CURRENT STATUS: <u>Producer</u>	KB: <u>3580</u>	DF: <u>3579</u>	TD DATE: <u>1/7/1998</u>

9-5/8", 36#/ft K-55
Surface Pipe set @ 520'
w/ 300 SX Cmt.
TOC @ 30' by temp. sur.
(12-1/4" hole)

Tubing Detail: 06/04/98	
KBTH:	6.00'
118 Jts. 2-7/8" 6.5#:	3649.74'
2-7/8" X 7 TAC:	2.70'
6 Jts. 2-7/8" Tbg 6.5#	
J-55 8RD Tbg	189.15'
2.25" Working Barrel	25.00'
Landed @	3872.59'

Rod Detail: 06-04-98	
1-1/2 X 28' Polish Rod	
1-2', 4', 6' & 8' N-97 Subs	
153 7/8 N-97 Rods	
2-1/4" Plunger	

7", 20# & 23#, K-55
Csg set @ 3719' w/
100 SX. Cmt. Circ? Y (50 SX)
TOC @ DV Tool (3244')
(8-3/4" hole)



Date Completed: 1-7-98
Initial Prod: 20 BOPD/737 BWPD/ 7 MCFPD
Initial Formation: Grayburg From: 3719 To: 3880 GOR:
Completion Data:
 Note that 7" 23# K-55 csg previously cemented @ 3719' w/ DV Tool @ 3244'.

12/20/97 Drill to 3720'. CMT 1st stage w/ 100 SX, circ. 50 SX to surf., drop bomb and open DV Tool w/ 700 psi, circ. CMT 2nd stage w/ 500 SX, followed by 175 SX. Circ. approx. 115 SX - six cores cut fr 3660-3880'.

Workover History:
5/28/98 Should have been +9 correction instead of -8'. TD @ 3883'. ACDZ 3823-3870 w/ 3500 gal 15% HCl, 1200 gal VES diverter & swb. SION. ACDZ zn 2-3 w/ 4500 gals 15% anti-sludge HCl & 1350 gals 4% diverter. Swab. RIH w/ prod tbg and TOTP.

Additional Data:
 T/Queen @ 3353'
 T/Penrose @ 3482'
 T/Grayburg Zone 1 @ 3670'
 T/Grayburg Zone 2 @ 3715'
 T/Grayburg Zone 3 @ 3775'
 T/Grayburg Zone 4 @ 3812'
 T/Grayburg Zone 5 @ 3858'
 T/San Andres Formation @ 3905'
 KB @ 3580'



WELL DATA SHEET

LEASE: EMSU WELL: 184
 LOC: 651' FNL & 660' FEL SEC: 4
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: A ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3547 STATUS: Producer
 KB: 3547 API NO: 30-025-04513
 DP: _____ CHEVNO: FA 5655:01

Date Completed: 4/8/1936
 Initial Production: 264 BOPD / 0 BOPD / GOR 1250
 Initial Formation: Grayburg
 FROM: 3730' to 3859'

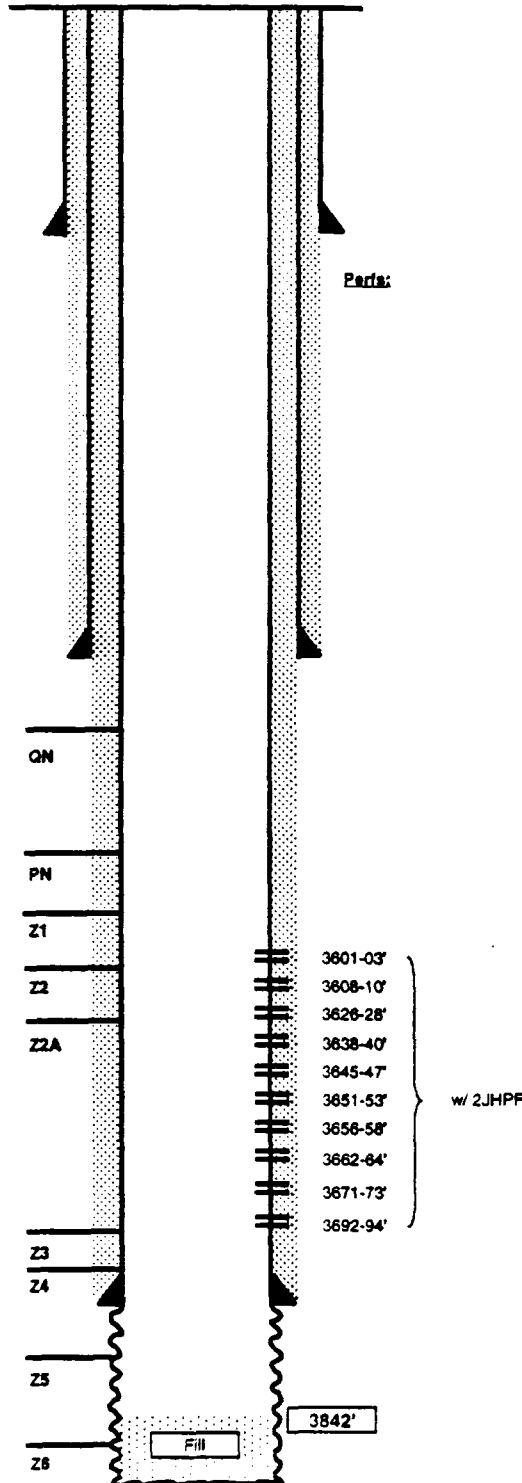
12-1/2" OD
50# CSG
 Set @ 251' W/ 200 SX
 Cmt circ.? no
 TOC @ 24' by calc
 (17-1/2" hole)

Tubing Detail: 1/22/87
 Original KBTH: 0.00'
 124 Jts. 2-3/8" H-40 4.7# 10V tbg: 3803.37'
 1 API Seat Nipple 1.10'
 1 4' Perf Sub 4.00'
 1 2-3/8" 10V H-40 MA w/ BP: 32.00'
 Landed @: 3850.47'

9-5/8" OD
36# CSG
 Set @ 1241' W/ 500 SX
 Cmt circ.? yes
 TOC @ surf. by calc
 (12-1/4" hole)

Rod Detail: 1/22/87
 151 Jts. 3/4" X 25' Rods
 1 2" X 3/4" X Rod Sub
 1 6" X 3/4" Rod Sub
 1 8" X 3/4" Rod Sub
 1 2" X 1-1/4" X 12" X 13" X 18 RHBC
 Pump

7" OD
24# CSG
 Set @ 3730' W/ 250 SX
 Cmt circ.? no
 TOC @ 2062' by calc
 (8-5/8" hole)



Completion Data
 Acdz OH w/ 2000 gal XX acid.

Subsequent Workover or Reconditioning:
 1/87 XO WH -tag @ 3842' (17' fill). GIH w/ 6-1/8" bit. C/O & deepen 12' to 3871' (DF). Log. Perf 3601-03, 3608-10, 3626-28, 3638-40, 3645-47, 3651-53, 3656-58, 3662-64, 3671-73, 3692-94 w/ 2JHPF. ACDZ perms w/ 3700 gal 15% NeFeA w/ 60 RCNB's (little ball action). Acdz OH w/ 4000 gal 15% NeFeA in 4 stages w/ 2250# GRS w/ some block action. Swab perms + OH, rec'd 24 BAW. SFL=2300' EFL=2800'. Swb 2 BO/65 BW in 24 runs. SFL=2800' EFL=2900'. Scale sqzd & put on prod. Tst 0 BO / 55 BW / 53 MCFG. B/4 - 3 BO / 19 BW / 13 MCFG.
 9/89 Scale sqzd.
 1/93 Install larger pumping equip. Tst: 11 BO / 192 BW / 8 MCFG. FL=0'
 3/96 Tag fill @ 3842'. Pickle tbg. Acdz w/ 5000 gals Resisol II in 5 stages. RIH w/ PE. Test A - 12 BO / 489 BW / 10 MCFG. B - 4 BO / 167 BW / 0.4 MCFG.

Additional Data:
 T/Queen Formation @ 3288'
 T/Penrose Formation @ 3424'
 T/Grayburg Zone 1 @ 3592'
 T/Grayburg Zone 2 @ 3627'
 T/Grayburg Zone 2A @ 3659'
 T/Grayburg Zone 3 @ 3685'
 T/Grayburg Zone 4 @ 3722'
 T/Grayburg Zone 5 @ 3766'
 T/Grayburg Zone 6 @ 3819'
 T/San Andres Formation @ 3863'
 KB @ 3547'

PBD: _____
 TD: 3871' DF

WELL DATA SHEET

FIELD: Eunice Monument South Unit

WELL NAME: EMSU No. 458-WSW

FORMATION: Grayburg

LOC: 2640' FNL & 1305' FEL
TOWNSHIP: 21-S
RANGE: 36-E

SEC: 4
COUNTY: Lea
STATE: NM

GL: 3540'
KB to GL: 17'
DF to GL: 18'

CURRENT STATUS: Water Supply
API NO: 30-026-29618
CHEVNO: FW-6269

16" OD, 85#/ft., H-40
Surf. pipe set @ 332'
w/ 600 exs omt.
Circ 250 exs omt to Surface.

Electric Submersible pump

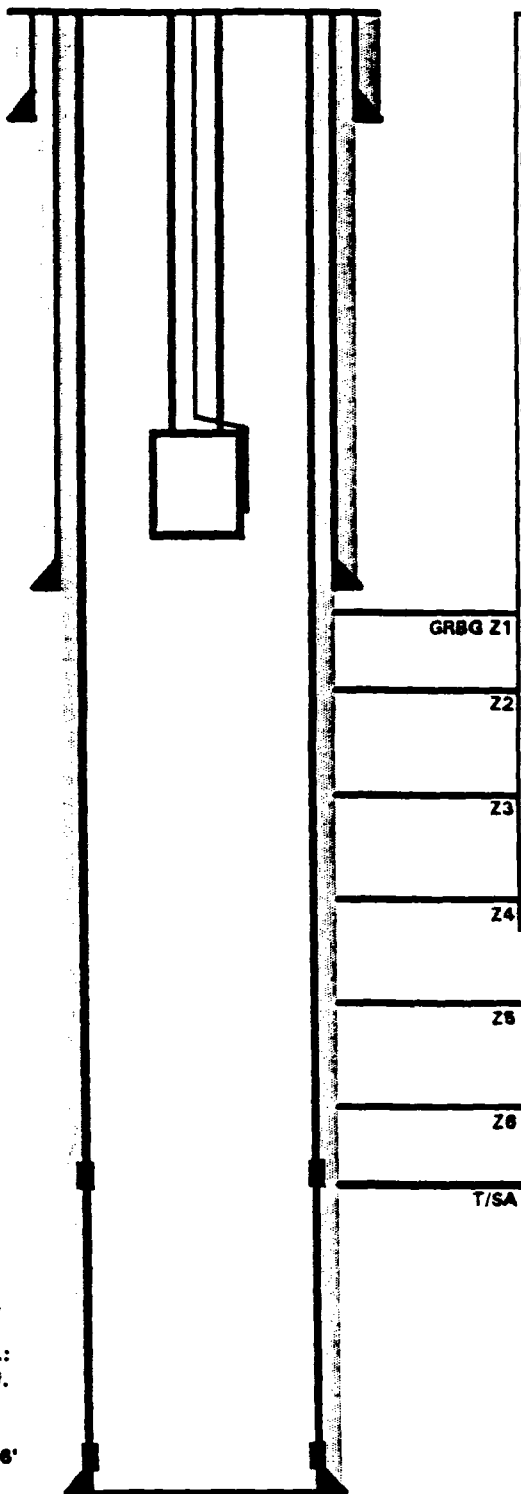
11-3/4" OD, 47#/ft., K-55
Intermed. csg set @ 2549'
w/ 1050 exs. Circ 190 ex TS

DV Tool @ 3847'

8-5/8" OD, 32#/ft., K-55
csg set @ 5000' w/ 1215 exs.
in two stages:
Stg 1: 215 exs, 47 exs to surf.:
Stg 2: 1000 ex, 250 ex to surf.

FC @ 4956'

P8TD @ 4866'
TD @ 5000'



Date Completed: 06/23/88
Initial Production:
Initial Formation: San Andree From: 4056' To: 4866'
Completion Data:
05-03-88 Drill to 3630'. Core 3630'-3918' w/ 5 core barrels.
Ream 3500'-3918' & drill to 5000'. Log SCHL LDT-CNL-EPT, DLL
MSFL & RFT (logr TD 4999'). Run 8-5/8" csg. DO cmt. & DV tool.
Tag FC @ 4956'.
10-18-88 Perf 4056'-4866' (SA) w/ tti 155 holes. RBP @ 4933.
ACDZ 4416'-4871' w/ 9000 gals 15% NEFE. Good block action.
Swb Rec 30 BW / 4 runs in 1 hr.; FL @ 1300' CION. Swb Rec
145 BW / 20 runs in 5 hrs.; SFL @ 1300', FER 29 BPH. CION.
Run submersible pump & shoot fluid levels. Total rec 925 BW in
1.5 hrs. / 12800 BWPD. TO to production.

Workover History:

02-29-89 Repair sub pump & replace 30 jts 4-1/2" csg. Test
pump 14400 BWPD.

12-28-90 Repair motor & pump and replace 55 jts 4-1/2" csg.
NDBOP & test pump 13536 BWPD.

Additional Data:
T/Queen @ 3332'
T/Penrose @ 3488'
T/EMSU Unit @
Z2 T/Grayburg Zone 1 @ 3842'
T/Grayburg Zone 2 @ 3887'
T/Grayburg Zone 3 @ 3730'
T/Grayburg Zone 4 @ 3784'
T/Grayburg Zone 5 @ 3808'
Z3 T/Grayburg Zone 6 @ 3848'
T/San Andree @ 3852'

Z4

Z5

Z6

T/SA



WELL DATA SHEET

LEASE: EMSU WELL: 185WIC
 LOC: 660' F N L & 1980' F E L SEC: 5
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: B ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3550' STATUS: injector
 KB: 3561' API NO: 30-025-04512
 DF: _____ CHEVNO: FA 56540:01

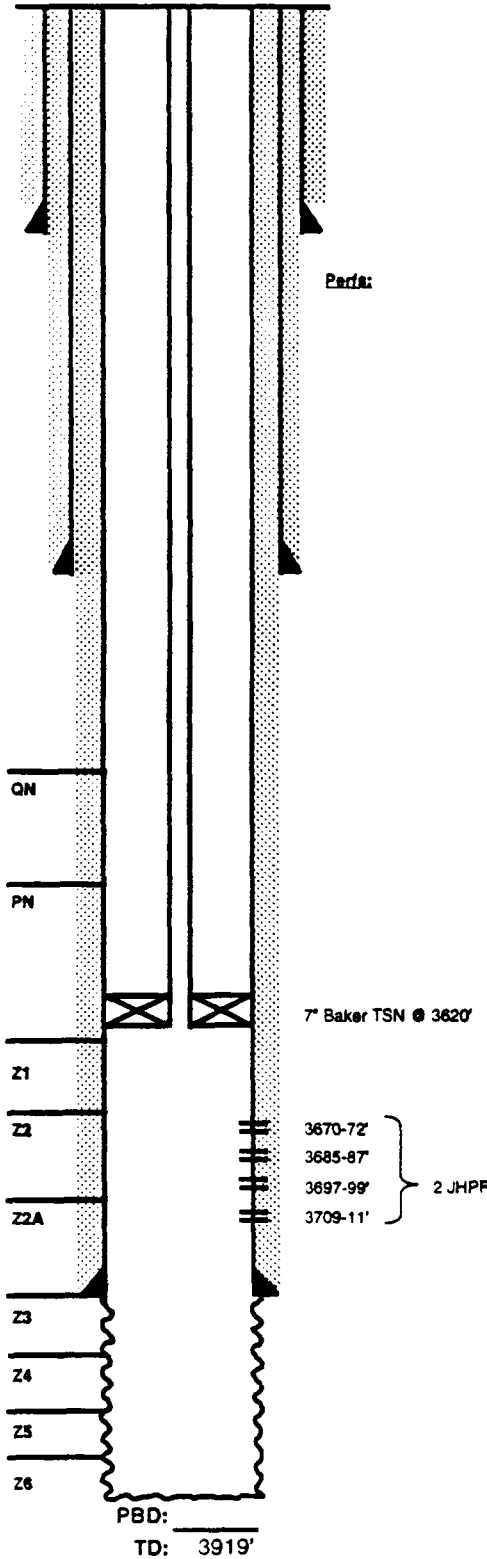
Date Completed: 2/13/1936
 Initial Production: 230 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3736' to 3866' / GOR 450

12-1/2" OD
50# CSG
 Set @ 275' W/ 230 SX
 Cmt circ.? yes
 TOC @ surf. by calc.

9-5/8" OD
36# CSG
 Set @ 1170' W/ 500 SX
 Cmt circ.? yes
 TOC @ surf. by calc.

Tubing Detail: 8/7/86
 Original KBTH: 11.00'
 116 Jts. 2-3/8" J-55 4.7# EUE 8rd IPC
 tbg: 3607.97'
 Baker 47B4 TSN II pkr 5.40'
 Landed @: 3620.37'

7" OD
24# CSG
 Set @ 3736' W/ 250 SX
 Cmt circ.? no
 TOC @ 1914' by calc.



Completion Data
 Acdz OH w/1000 gal Gravity Oil=35.5

Subsequent Workover or Reconditioning:
 11/54 Dump acid 1000 gal. Tst: 49 BO/ 9 BW/ GOR 2773. B/4 - 33 BO/ 5 BW.
 3/65 Dump acid 750 gal 15% NeA. Tst: 17 BO/ 8 BW. B/4 9 BO/ 6 BW.
 5/68 Tag @ 3863'. Dump acid 750 gal 15% NeA. Tst: 7 BO/10 BW. B/4 - 0 BO/ 11EW.
 2/71 Dump acid 750 gal 28% NeA. Tst 14 BO/17 BW. B/4- 8 BO/16 BW.
 9/76 C/O 12' fill to TD. Acdz OH w/ 2000 gal 20% retuned acid in 2 stages. Put on prod. Tst: 19 BO/31 BW/18 MCFG. B/4 - 1 BO/6 BWPD.
 7/86 XO WH. CO & deepen to 3919'. Ran Logs. Perf 3709-11, 3697-99, 3685-87, 3670-72' w/ 2 JHPF. Acdz perms w/ 1500 gal 15% NeFeA & 24 RCNB's. Swb 18 BW & dry. Acdz OH w/4000 gal 15% NeFeA. Swb 40 BW & dry. GIH w/ 7" Baker TSN on 2-3/8" IPC tbg. Circ p/u fld, set pkr @ 3620' Tst ann to 500 - OK. PWOI. Tst: 612 BWIPD @ 0 psig.
 8/96 Acdz w/ 6000 gals 15% Resisol.

Additional Data:
 T/Queen Formation @ 3328'
 T/Penrose Formation @ 3468'
 T/Grayburg Zone 1 @ 3624'
 T/Grayburg Zone 2 @ 3670'
 T/Grayburg Zone 2A @ 3703'
 T/Grayburg Zone 3 @ 3736'
 T/Grayburg Zone 4 @ 3773'
 T/Grayburg Zone 5 @ 3840'
 T/Grayburg Zone 6 @ 3883'
 T/San Andres Formation @ 3927'
 KB @ 3561'



WELL DATA SHEET

LEASE: EMSU WELL: 197W
 LOC: 1965' F N L & 1980' F W L SEC: 5
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: F ST: N.M.

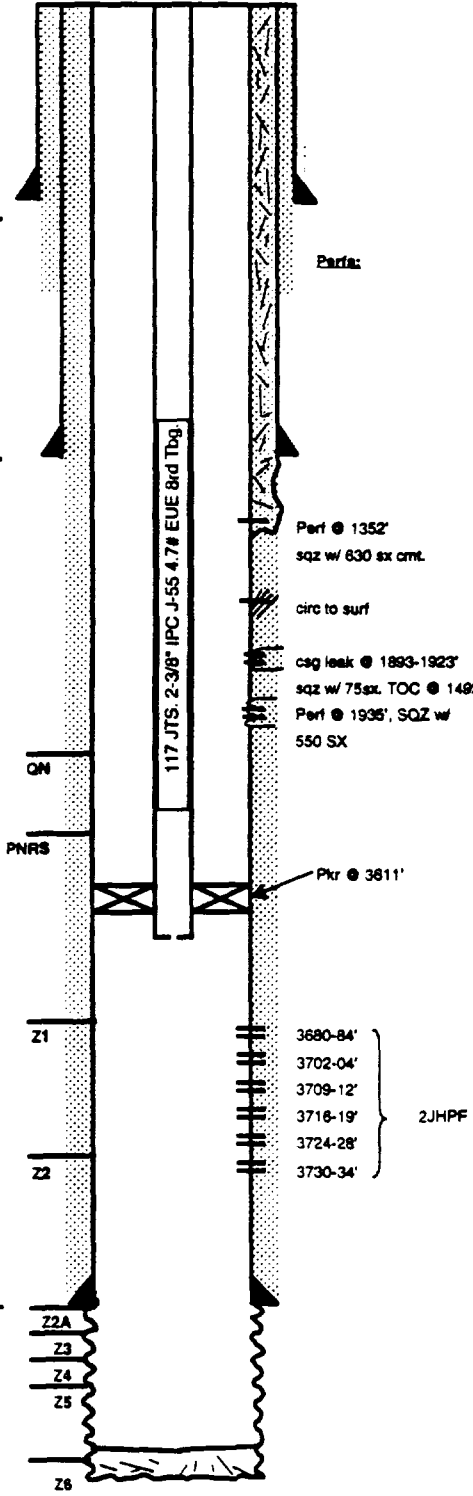
FORM: Gbg/SA DATE: _____
 GL: 3567 STATUS: Injector
 KB: 3578 API NO: 30-025-04511
 DF: 11 CHEVNO: FA 56530:01

Date Completed: ##### Initial Prod.: 637 BOPD
 Initial Formation: Grayburg
 FROM: 3754' to 3882'

15-1/2" OD
 70 # CSG
 Set @ 275' W/ 200' SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (17-1/2" hole)

10" OD 40# 8 Thd
 # CSG
 Set @ 1170' W/ 655' SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (12" hole)

Tubing Detail:
 KBTH: 11.00'
 117 Jts. 2-3/8" 4.7# J-55 IPC:
 Guberson G-6 Pkr
 Landed @



Completion Data
 OHZ Grayburg. 3754-3882.
 Initial prod F 425 BO in 16hrs. On 1/4" choke w/ 800cpg

Subsequent Workover or Reconditioning:
 4/1/40 - Acadz w/300 gal
 6/13/40 - Acadz w/500 gal 20%
 11/5/40 - Acadz w/1000 gals 15%
 7/8/58 - PB w/Hydromite to 3865'. Frac OH 3760-3865' w/16000 gals oil in 1 bog sand A/w 25 BO/21 BW GOR 15000 B/4 - none
 4/25/62 - Acadz w/1000 gals 15% + 1000 gals GYPaid A/w 19 BO/33 BW B/4: 11BO/31BW
 2/3/69 - Acadz w/500 gals 15%. Pump 500 gal 20% NaA. Swab test - No FE. Cl.
 2/25/69 - Acadz w/500 gals 20%
 6/27/69 - CO to TD. PB w/Hydromite to 3873. RIH w/ prod. equip.
 9/15/81 - Acadz w/750 gals 15%
 7/21/82 - Acadz w/ 1000 gals 15%. a/w 14 BO/28 BW B/4: 0 BO/0 BW
 7/84 - Chemical treat
 8/10/86 - CO from 3852 - 3873'. COW-4. Deepen to 4005'. Run CNL-GR-CCL Perf. 3702-04' w/ 2 JHPF. Acadz 3702-04' w/200 gals. acadz OH w/4000 gals 15% w/1500# GRS in GBW. Swab acid water. RIH w/119jts 2-3/8" J-55 IPC tbg. Pkr @ 3650'. TOP PWOI 11/17/96 @ 6508PP
 11/1/88 - POOH pkr due to CDH. CO @ jts 2-3/8" tbg pitted. XO pkr. set pkr @ 3627'. Test csg to 500 psi. Bled to 400 psi in 30 min. PWOI 11/1/88.
 4/89 - POH w/inj string. Sqz csg leak 1893-1923' w/75 SX. Perf w/ 2 holes @ 1935. sqz w/ 550 SX. Perf 7" csg w/ 2 hole @ 1352'. Sqz w/ 630 SX & circ. to surf. CO to 3992'. Perf 3680-3734' w/ 2 JHPF. Acadz w/ 900 gals 15%. CO to 3992'. Ran 117 jts 2-3/8" J-55 4.7# EUE Brd IPC tbg. Set pkr @ 3611'. Test tbg to 5000 psi. Test csg/pkr 600 psi.
 1/98 - ACDZ 3750-3960' w/ 3000 gal 15% 90/10 Resoil II w/ 70Q foamed brine wtr. down ann. Well was dead. RTI.

Additional Data:
 T/Queen Formation @ 3368'
 T/Penrose Formation @ 3508'
 T/Grayburg Zone 1 @ 3679'
 T/Grayburg Zone 2 @ 3725'
 T/Grayburg Zone 2A @ 3758'
 T/Grayburg Zone 3 @ 3798'
 T/Grayburg Zone 4 @ 3855'
 T/Grayburg Zone 5 @ 3942'
 T/Grayburg Zone 6 @ 3999'
 T/San Andres Formation @ 4044'
 KB @ 3578'

7" OD 24 & 26# 10 Thd
 # CSG
 Set @ 3754' W/ 350' SX
 Cmt circ.? No
 TOC @ 2330' by CBL
 (8-3/4" hole)

PBD: 3992'
 TD: 4005'

Current
 Inj. _____ bwpd @ _____ psi Date: _____
 Prod. _____ bopd _____ bwpd Date: _____
 Gas _____ mctpd



WELL DATA SHEET

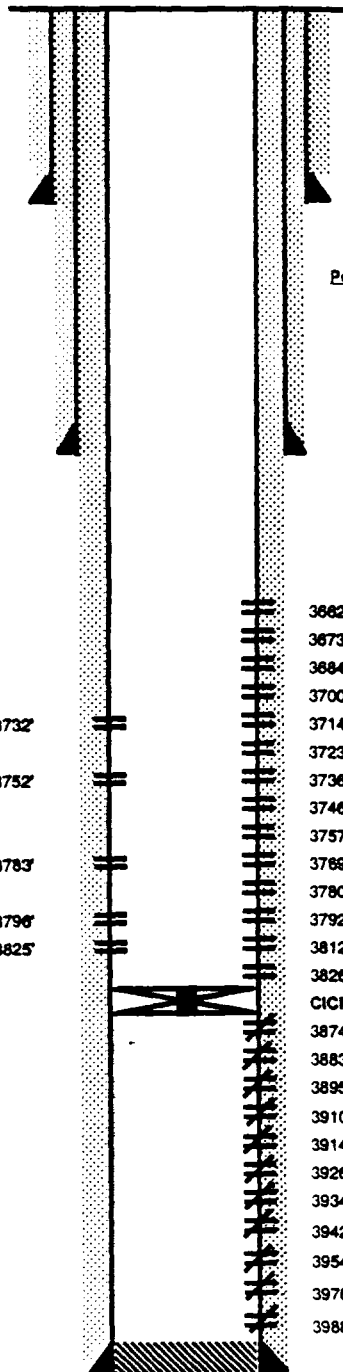
LEASE: EMSU WELL: 198
 LOC: 1791' F N L & 1980' F E L SEC: 5
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: G ST: N.M.

FORM: Grayburg/San Andrea DATE: _____
 GL: 3559.5' STATUS: Producer
 KB: 3572' API NO: 30-025-29682
 DF: _____ CHEVNO: FZ 66940:01

Date Completed: 6/1/1986
 Initial Production: OBOPD 215BWPD
 Initial Formation: Grayburg zone 415
 FROM: 3874' to 3990'

11 3/4 OD
42 # CSG
 Set @ 368' W/ 425 SX
 Cmt circ.? yes
 TOC @ surf by calc
 (14-3/4" hole)

8 5/8 OD 24#
 ST&C # CSG Gr. K-55
 Set @ 2560' W/ 700 SX
 Cmt circ.? yes
 TOC @ 16' by calc
 (11" hole)



Perfs:

Completion Data

Perfs 5 1/2" csg @ 3988-90', 3876-78', 3954-56', 3942-44', 3934-36', 3926-28', 3914-16', 3910-12', 3895-97', 3883-85', 3874-76' (2JHPF).

Subsequent Workover or Reconditioning:

7/86 Set CIBP @ 3905, well produced 0Bo/225Bw.
 7/86 DO CIBP @ 3905. Sqz perfs 3874-3990 w/300 sx CL "C".
 Test to 1000 psi - OK. Reperf 3983-3944'. Acdz w/1500 gal 15% HCL. Swab SFL 300 FS FFL 3000 FS Bec 4Bo/72BLW. Perf 3700-3828(zones 2 & 4). Acdz w/3000 gal. Swab dry. Rec 22 BAW.
 5/87 Sqz perf 3874-3956' w/ 200 SX. Left 166sx below RTNR @ 3852'. CO to RTNR @ 3852' (359') Perf r/3714-3828 - 1JSPF. PBD w/WL 3841'. Acdz w/5000 gals 15% NeFe HCL. ISIP-vac. Swab dry. Rec 3Bw. RIH w/PE. TOP.
 8/88 Chem treat.
 6/89 Acdz 3700-3828 w/1375 gals 15% NeFe HCL. Perf 3662-70, 3673-76, 3684-88 w/2JHPF. Acdz w/7750 gals. 15%. CO fill to 3835. A/W 0Bo/15Bw/2mcdgpd B/4 - 0 BO/23 BW/12 MCFPD.

Additional Data:

T/Queen Formation @ 3346'
 T/Penrose Formation @ 3485'
 T/Grayburg Zone 1 @ 3650'
 T/Grayburg Zone 2 @ 3689'
 T/Grayburg Zone 2A @ 3728'
 T/Grayburg Zone 3 @ 3761'
 T/Grayburg Zone 4 @ 3798'
 T/Grayburg Zone 5 @ 3857'
 T/Grayburg Zone 6 @ 3903'
 T/San Andrea Formation @ 3952'
 KB @ 3572'

Tubing Detail: 5/23/87	
KBTH:	12.50'
121 Jls. 2-3/8" 4.7# J-55 EUE 8rd	
lbg.:	3782.99'
4' X 2-3/8" Perf Sub	4.05'
MA w BP	31.80'
Landed @	3831.34'

5 1/2 OD 15.5# 8rd Thd
CSG Gr. K-55
 Set @ 4074' W/ 575 SX
 Cmt circ.? No
 TOC @ 575' by TS
 (7-7/8" hole)

PBD: 3835'
 TD: 4074'

FILE: EMSU198WB.XLS

pnnted: 10/28/1999



WELL DATA SHEET

LEASE: EMSU
 WELL: 199WIC
 LOC: 1980 'F N L & 660 'F E L
 TOWNSHIP: 21S
 RANGE: 36E UNIT: H
 SEC: 5
 CNTY: Lea
 ST: N.M.

FORM: Grayburg / SA
 DATE: _____
 GL: 3564'
 KB: 3564'
 DF: _____
 STATUS: Injector
 API NO: 30-025-04510
 CHEVNO: FA 56520:01

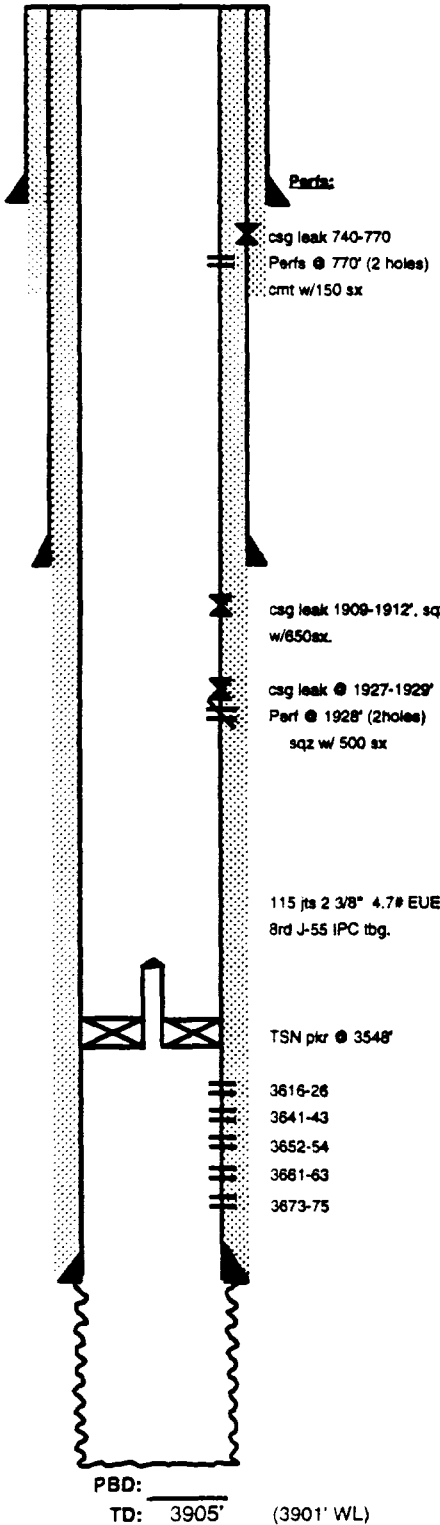
Date Completed: 4/28/1936
 Initial Production: 510 BOPD 0 BWPD
 Initial Formation: Grayburg
 FROM: 3716' to 3864' GOR 1961

10-3/4" OD 32.75#
 # CSG (13-3/4" hole)
 Set @ 315 W/ 250 SX.
 Cmt circ.? yes
 TOC @ surf. by calc.

7-5/8" OD 26.4# 8 Thd
 # CSG
 Set @ 1205' W/ 300 SX
 Cmt circ.? no
 TOC @ surf. by calc.
 (9-7/8" hole)

Tubing Detail: 12/13/97	
KBTH:	0.0'
115 Jts. 2-3/8" 4.7# J-55 IPC:	3569.57
XL On/Off Tool w/ 1.78 F Nipple	1.97
Gulberson G-6 Plr	3.74'
Nickel Plated Pump-out Plug	0.55'
Landed @	3575.80'

5-1/2" OD 17# 10 Thd
 # CSG
 Set @ 3716' W/ 300 SX
 Cmt circ.? no
 TOC @ 397' by calc
 (6-3/4" hole)



Completion Data
 Accdz w/1000 gals

Subsequent Workover or Reconditioning:

4/29/40 - Accdz w/2000 gals.
 4/22/55 - Install pmg equip.
 5/5/65 - Accdz w/750 gals 15% A/W 12BQ/4E/W
 5/6/68 - Accdz w/500 gals 15% A/W 20BQ/7E/W B/4 - 9BQ/3B/W
 5/22/70 - Accdz w/500 gals 20% A/W 12BQ/16B/W B/45BQ/7B/W
 8/6/86 - COWH to 7-1/16 3M. Deepen to 3435'. Ran GR, CCL, CNL, WLTD 3901' (8/4/86). Perf 3673-75, 3661-63, 3652-54 (2CJPF). Accdz perfs 3652-75 w/1500 gals 15% NaFe HCl. Accdz OH 3716-3905 w/4000 gal 15% NaFe HCl + 1500 #GRS. Ran 5 1/2" plr on 2 3/8" new PC tbq. P/U would not test.
 7/14/88 - Isolate 5 1/2" csg leak 740-770, circ up 7 5/8". Perf 2 holes @ 770'. Circ 150sx up 7 5/8" csg. DOC. Tat csg to 500# - OK. Run TSN II Baker plr. Hydrotreat tbq to 3000#. Set plr @ 3575'. TOTP.
 4/89 - Isolate 5 1/2" csg leak 1927-1929'. Perf @ 1928' (2 holes) Sqz perfs + leaks 1927-1929' w/500 sx. DOC. Isolate csg leaks 1909'-1912'. Sqz w/150 sx. Resqz through perfs @ 1912' w/500 sx. DOC. Swab - no FE. Perf zone 1 @ 3616-26' + 3641-43' (2JHPF) Accdz OH 3716-3905 w/2500 gals 15% NaFe HCl in 3 stgs. Swab 3 hr SFL - 2100' FFL @ 3800'. Rec 51 BW. Accdz perfs w/1750 gals 15% NaFe HCl. Swab dry. SFL - 3300' FFL @ 3500'. RIH w/TSN plr on 2-3/8" IPC tbq. Set plr @ 3548'. PWOI: 936 BWPD @ 22 psi.
 10/1/94 - Accdz w/2500 gals 15% NaFeA w/Pentol solution. A - 1625 BWIPD @ 340 psi. B - 537 BWIPD @ 729 psi.
 5/27/98 - CO w/ CTU to 3840' w/ KCl wr & N2: ACDCZ perfs 3715-3840' w/ 1800 gal HCl w/ 2 gal /1000 A1-150, 30 gal /1000 S-3000XI, 3 gal /1000 FENO, 10 gal /1000 Fe Green w/ 70Q foam down annulus.
 Additional Data:
 T/Queen Formation @ 3310'
 T/Penrose Formation @ 3445'
 T/Grayburg Zone 1 @ 3609'
 T/Grayburg Zone 2 @ 3647'
 T/Grayburg Zone 2A @ 3675'
 T/Grayburg Zone 3 @ 3708'
 T/Grayburg Zone 4 @ 3744'
 T/Grayburg Zone 5 @ 3796'
 T/Grayburg Zone 6 @ 3845'
 T/San Andres Formation @ 3891'
 KB @ 3564'

Current
 Inj. _____ bwpd @ _____ psi Date: _____
 Prod. _____ bopd _____ bwpd Date: _____
 Gas _____ mc/psd

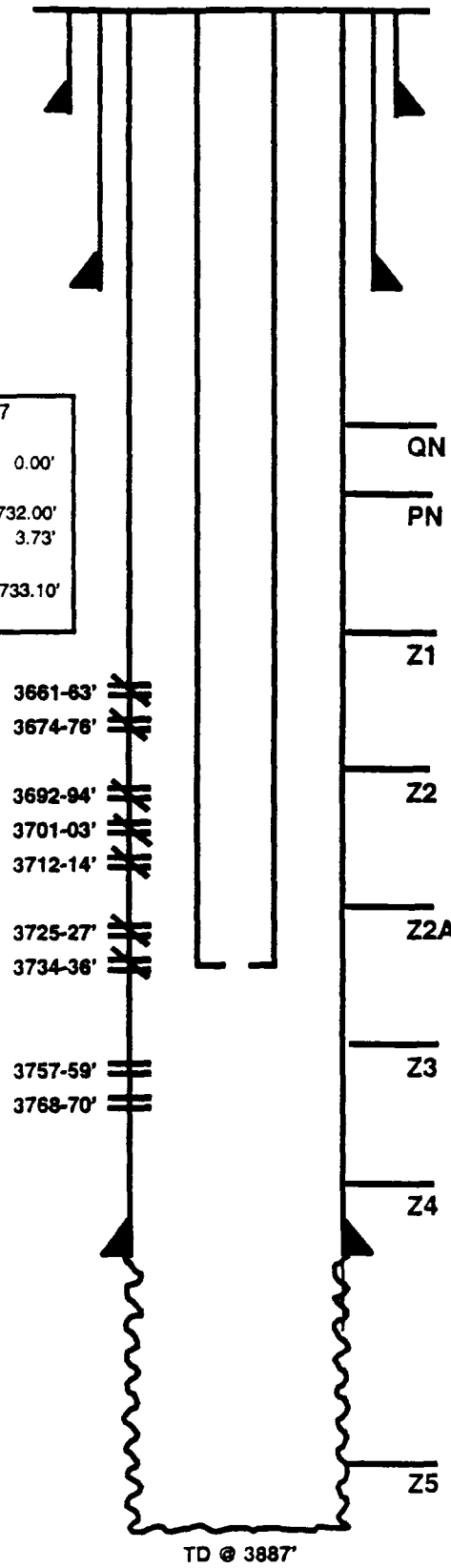
CURRENT WELLBORE DIAGRAM

LEASE: EMSU **WELL:** 212 **FIELD:** Eunice-Monument **API:** 30-025-04504
LOC: 3258 FNL & 660 FEL, Unit I **SEC:** 5 **BLK:** T21S, R36E **REF NO:** FA5646:01
SVY: N.M.P.M. **GL:** 3569 **CTY/ST:** Lea Co., NM **SPUD:** _____
CURRENT STATUS: Producer **KB:** 3577 **DF:** _____ **TD DATE:** _____

12-1/2" OD Surface
 Pipe set @ 252' w/
 200 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.

8-5/8", 26.4# Csg.
 set @ 1358' w/ 400 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 11/14/97	
KBTH:	0.00'
114 Jts. 2-3/8" J-55 EUE:	3732.00'
API SN	3.73'
Landed @	3733.10'



Date Completed: 12-24-35
Initial Production: NA
Initial Formation: Grayburg Fr: 3798' To: 3887'
Completion Data:
 12/35 Natural OH completion.
Workover History:
 3/43 ACDZ w/ 2000 gals 15% Acid (3837-3887).
 4/48 ACDZ 3840-3887' w/ 500 gals 20%.
 3/51 ACDZ 3840-3887' w/ 500 gals 20%.
 1/56 ACDZ w/ 3000 gals Acid.
 1/57 FRAC 3800-3887' w/ 10,000 gals lease oil & 10,000 # 20/40 sand. CO fill to 3873'.
 12/28/86 Perf 3681-3770' w/ 1/2" hole (2 JHPF), or 36 holes. ACDZ w/ 3000 gals NeFe. ACDZ OH w/ 4000 gal 15% NeFe.
 8/89 Chemical treatment.
 11/3/97 CO well to 3890'. ACDZ perms 3757-3770' & OH w/ 3000 gals 15% Resisol II w/ 500 gal 700 GBW. Swb, 13 runs. PB w/ 3500# 20/40 sd to 3752'. Set CIBP @ 3740, pkr @ 3640. Wash sd to 3750'. RIH CIBP, set @ 3604'. SQZD perms 3661-3736 w/ 300 SX Cl C (47 SX in form.) - D/O cmt to 3740'. CO CIBP, wash sd and ream to 3890'. Swb. RIH tag @ 3890'. No fill. Run prod. equipment.

Additional Data:
 T/Queen Formation @ 3344'
 T/Penrose Formation @ 3481'
 T/Grayburg Zone 1 @ 3648'
 T/Grayburg Zone 2 @ 3685'
 T/Grayburg Zone 2A @ 3721'
 T/Grayburg Zone 3 @ 3751'
 T/Grayburg Zone 4 @ 3792'
 T/Grayburg Zone 5 @ 3849'
 T/Grayburg Zone 6 @ 3911'
 T/San Andres Formation @ 3945'
 KB @ 3577'

5-1/2", 17#/ft Csg.
 set @ 3798' w/ 100 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

TD @ 3887'

FILE: EMSU212W3.xls
 DKTS: 11/10/98

CURRENT WELLBORE DIAGRAM

LEASE: EMSU **WELL:** 213W **FIELD:** Eunice-Monument **API:** 30-025-04503
LOC: 3258 FNL & 1980 FEL, Unit J **SEC:** 5 **BLK:** T21S, R36E **REF NO:** FA56450:01
SVY: N.M.P.M. **GL:** 3584 **CTY/ST:** Lea Co., NM **SPUD:** _____
CURRENT STATUS: Injector **KB:** 3584 **DF:** _____ **TD DATE:** _____

12-1/2", #/ft
 Surf. Pipe set @ 270'
 w/ 200 SX cement
 Cmt Circ.? Yes
 TOC @ 44' by calc.
 (17-1/2" hole)

8-5/8" OD, 26#/ft Csg.
 set @ 1384' w/ 800 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.
 (11" hole)

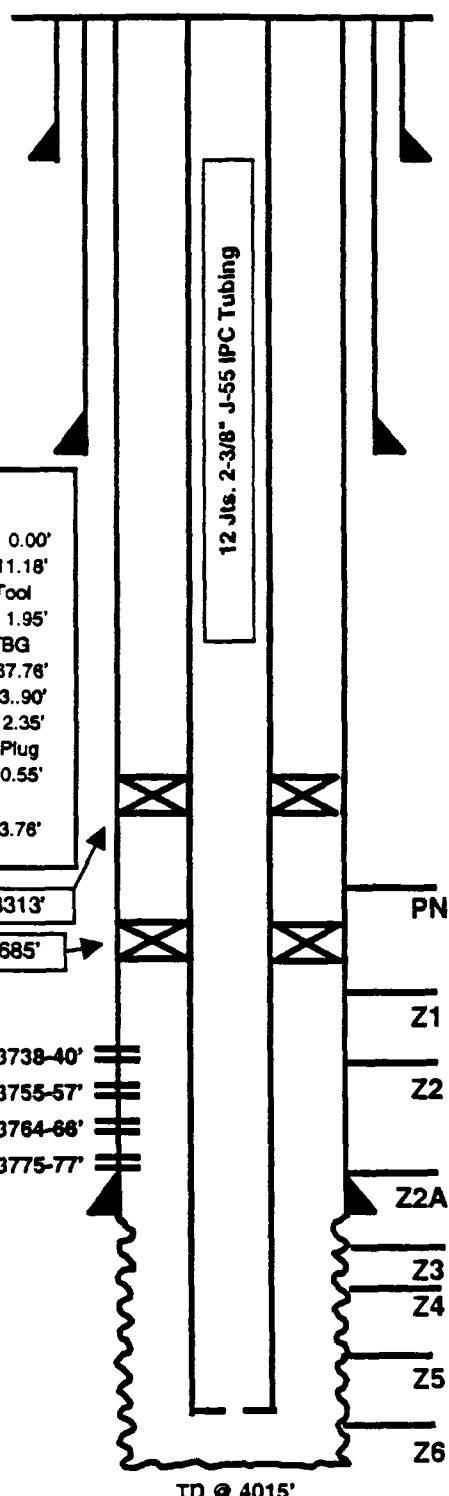
Tubing Detail: 10/31/96

KBTH:	0.00'
107 Jts. 2-7/8" 4.7# IPC:	3311.18'
1 5-1/2" x 2-3/8" PC XL O/O Tool	1.95'
12 Jts. 2-7/8" 4.7# J-55 IPC TBG	367.76'
1 5-1/2" x 2-3/8" PC G-6 pkr	3..90'
1 Hydraulic Isolation pkr	2.35'
2-3/8" Nickel Plated Pmp out Plug	0.55'
Landed @	4003.76'

Guiberson G-VI pkr @ 3313'
 Hydraulic Isolation pkr @ 3685'

5-1/2" OD, #/ft Csg.
 set @ 3796' with 800 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.
 (7-5/8" hole)

FILE: EMSU213WB.xls
DKTS: 11/11/98



Date Completed: 1-19-36
Initial Prod: 288 BOPD
Initial Formation: Grayburg From: 3796' To: 3894'
GOR 1042
Completion Data:
 1-36 Natural Open Hole completion.

Workover History:
 4/48 ACDZ 3825-3894' w/ 500 gal 20% Acid.
 5/48 ACDZ 3825-3894' w/ 500 gal Kerosene.
 9/48 ACDZ 3810-3894' w/ 3000 gal 15% Acid.
 7/61 ACDZ OH w/ 500 gals acid. Frac w/ 20,000 gals oil & 20,000# sand.
 4/64 Drill to 3971' w/ 4-3/4" bit. ACDZ OH w/ 2000 gals 15% LSTNeA.
 8/71 Temporarily Abandon.
 6/74 CIBP @ 3750' cap w/ 5 SX. New PBD @ 3715'. Perf Eumont 3410-3588'. ACDZ w/ 1500 gals. Frac w/ 16,000 gals. KCl wtr & 25,000# sand.
 7/22/88 SQZD Eumont perms 3410-3588 w/ 200 SX. Test csg to 500#. CO to TD @ 3975'. SI.
 9/8/86 COWH. DO junk CIBP & fill w/ 3956-3975'. Deepen to 4015'. Log w/ Cal, CNL, CCL, GR. Perf 3738-40, 3755-57, 3764-66 & 3775-77. ACDZ perms w/ 1500 gals 15% NeFe HCl. Swb. ACDZ OH w/ 4000 gals 15% NeFe HCl. RIH w/ Baker TSN on 2-3/8" IPC tbg to 3695'. Set pkr @ 3695', PWOI: 650 BWIPD @ 0 psi.
 10/28/96 Attempt to repair csg. leak. Leak in sqzd perms w/ 3410-3588'. ACDZ perms 3738-77' & OH w/ 5000 gal Resisol II & 2000# Trimix salt. Test 2-3/8" tbg. in hole. Set Hydraulic Isolation pkr @ 3685' & G-VI pkr @ 3313'.

Additional Data:
 T/Queen Formation @ 3380'
 T/Penrose Formation @ 3532'
 T/Grayburg Zone 1 @ 3706'
 T/Grayburg Zone 2 @ 3747'
 T/Grayburg Zone 2A @ 3784'
 T/Grayburg Zone 3 @ 3812'
 T/Grayburg Zone 4 @ 3862'
 T/Grayburg Zone 5 @ 3943'
 T/Grayburg Zone 6 @ 3997'
 T/San Andres Formation @ 4034'
 KB @ 3584'

10/28/1999

CURRENT WELLBORE DIAGRAM

LEASE: EMSU **WELL:** 214 **FIELD:** Eunice-Monument **API:** 30-025-04507
LOC: 1980 FSL & 1980 FWL, Unit K **SEC:** 5 **BLK:** T21S, R36E **REF NO:** FA56490:01
SVY: N.M.P.M. **GL:** 3587 **CTY/ST:** Lea Co., NM **SPUD:** _____
CURRENT STATUS: Producer **KB:** 3587 **DF:** _____ **TD DATE:** _____

10-3/4", 40#/ft
 Surf. Pipe set @ 297'
 w/ 250 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.
 (13-3/4" hole)

7-5/8" OD, 26#/ft Csg.
 set @ 1208' w/ 325 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.
 (9-7/8" hole)

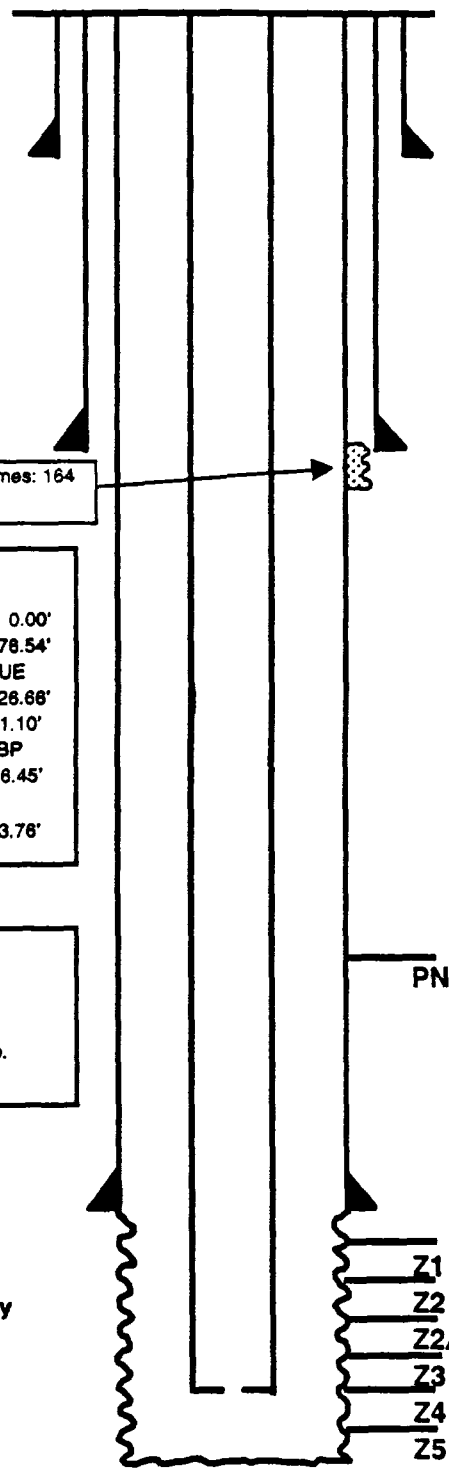
Csg lk @ 1210-41'. SQZD 2 times: 164 SX & 300 SX. Circ. to surf.

Tubing Detail: 1/7/87	
KBTH:	0.00'
118 Jts. 2-7/8" 4.7# 10V:	3578.54'
17 Jts. 2-7/8" 4.7# J-55 8rd EUE	
TBG	526.66'
1 API SN	1.10'
1 Mud Anchor w/ Perf Sub & BP	
	16.45'
Landed @	4003.78'

Rod Detail: 1/7/87	
90 5/8" Rods	
66 3/4" Rods	
2" X 1-1/2" X 12' RWT-C pmp.	

5-1/2" OD, 17#/ft Csg.
 set @ 3722' with 300 SX
 Cmt Circ.? No
 TOC @ +/-1200' by history

FILE: EMSU214WB.xls
 DKTS: 11/11/98



Date Completed: 3-12-36
Initial Prod: NA
Initial Formation: Grayburg From: 3722' To: 3894'
Completion Data:
 Natural Open Hole completion.

Workover History:
 2/39 Set Gas Pkr @ 3825'. Press. in tbg & csg equalized. zone in vert. comm. Set pkr @ 3823'. ACDZ OH w/ 1000 gal. Tst // 135 BO, 0 BW/ 248 MCF /GOR 1837. B/4 = 1/53 BO/ 1.8 MMCF GOR=33962.
 3/55 Find csg leak @ 518-714'. Perf @ 1220' (2 JHPF). Set retr @ 1174' & sqzd w/ 164 SX. Cmt circ. out 7-5/8" X 5-1/2" ann. (50 SX). D/O, test OK. C/O to 3894'. Ran GRN log. Treated OH w/ 3000 gal lease oil w/ 1% ATPET.
 9/56 Treated OH w/ 10000 gal gel lse oil & 1 ppg sand. Put well on rod pump. Test: 36 BO/ 3 BW/ 228.8 MCF. GOR=6355. Well CI before.
 5/65 Dump acid job 750 gal 15% NeA down csg. Tst: 9 BO/ 3 BW/ B/4=9 BO/ 6 BW.
 10/81 Returned TAd well to prod. Tst 19 BO/ 19 BW/ 3 MCFGPD.
 12/86 Deepened to 4013' // GL. Find csg lk @ 1210'. Btm @ 1241', set RBP @ 3485'. Set rate @ 1170'. Sqzd leak w/ 300 SX. D/O cmt & test to 500 psi. OK. ACDZ OH w/ 4000 gal 15% NeFeA. Put on prod. Tst 0 BO/ 23 BW/ 35 MCF. B/4 = 17 BO/ 0 BW/ 12 MCF.
 9/90 Chemical squeezed OH.

Additional Data:
 T/Penrose Formation @ 3549'
 T/Grayburg Zone 1 @ 3737'
 T/Grayburg Zone 2 @ 3784'
 T/Grayburg Zone 2A @ 3832'
 T/Grayburg Zone 3 @ 3877'
 T/Grayburg Zone 4 @ 3936'
 T/Grayburg Zone 5 @ 3997'
 T/Grayburg Zone 6 @ 4057'
 T/San Andres Formation @ 4109'
 KB @ 3587'

10/28/1999

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 215WIC	FIELD: Eunice-Monument	API: 30-025-04508
LOC: 3258 FNL & 660 FWL, Unit L	SEC: 5	BLK: T21S, R36E	REF NO: FA5650:01
SVY: N.M.P.M.	GL: 3594	CTY/ST: Lea Co., NM	SPUD: _____
CURRENT STATUS: Injector	KB: 3587	DF: _____	TD DATE: _____

16", 70#/ft Surface

Pipe set @ 36' w/
50 SX cement

Cmt Circ.? Yes

(20" hole)

100 SX cement down 7-5/8" csg.

7-5/8", 22# Csg.

set @ 1184' w/ 620 SX

Cmt Circ.? Yes

TOC @ surf. by calc.

(9-7/8" hole)

Csg leak @ 1976-2010'. Sqzd w/
400 SX cement.

Tubing Detail: 10/28/96	
KBTH:	7.00'
117 Jts. 2-3/8" 4.7# J-55 IPC:	3638.15'
XL On/Off Tool w/ 1.78 F Nipple	1.95'
Guiberson GV-1 PC Pkr	3.90'
2-3/8" Nickel Plated Pmp Out Plug	0.55'
Landed @	3651.55'

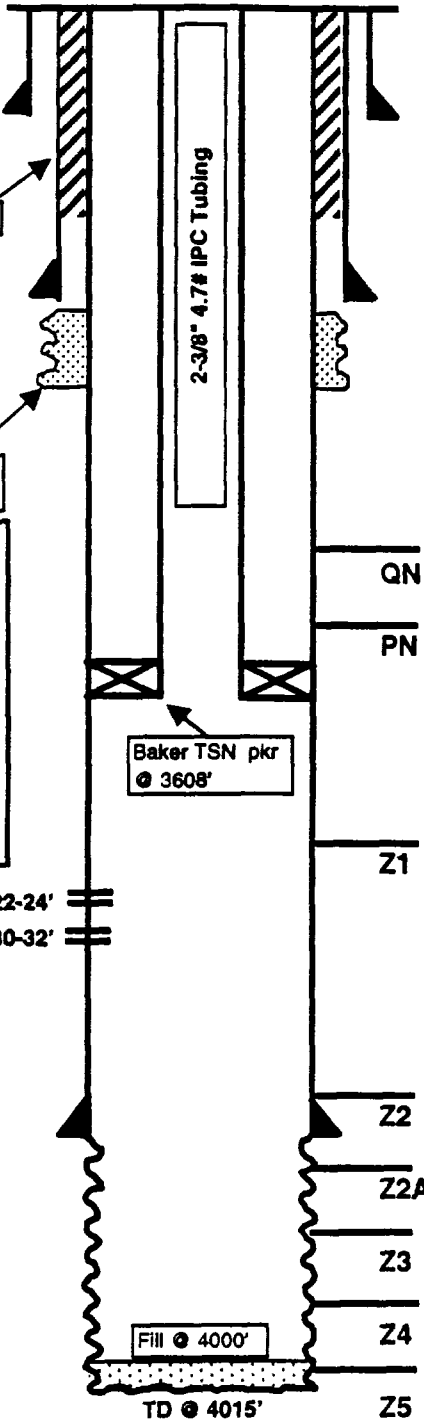
5-1/2", 17#/ft K-55 Csg.

set @ 3767' w/ 300 SX

Cmt Circ.? No

TOC @ 448' by calc.

(6-3/4" hole)



Date Completed: 9-15-36
Initial Prod: N/A
Initial Formation: Grayburg Fr: 3767' To: 3890'
Completion Data:
ACDZ OH 3767-3890' w/ 2000 gal 14% acid.
Workover History:
12/42 Retrieve & reset pkr. Tst F/81.5 BO/ 0 BW/ GOR 5414 in 24 hrs.
6/56 Installed Pumping equip. Tst 39 BO/ 0 BW/ GOR 1356.
12/72 500 gal dump acid 15% NaA. Tst 16 BO/ 3 BW. B/4: 16 BO/ 3 BWPD.
2/81 750 gal dump acid 15% NaA. Tst: 13 BO/ 1 BW. B/4: 15 BO/ 1 BWPD.
8/86 XO WH. CO & deepen to 4015'. Ran logs. Perf 3730-32 & 3722-24 (2 JHPF). ACDZ new parts w/ 1000 gal 15% NaFeA & 12 RCNBs. Swb 0 BO/ 10 BW. Swb dry 3 runs. Tried to acdZ OH but comm. w/ parts. ACDZ entire interval w/ 4500 gal & GRS block. Swb 8 BW 5 runs & dry. Backside wouldn't load w/ inj packer. Fnd csg lk @ 1980-2010'. SQZD lk w/ 50 SX cmt. D/O cmt. Test csg OK. GIH w/ Baker TSN pkr on 2-3/8" J55 4.7# IPC tbg; backside wouldn't test. Fnd csg lk @ 1976-2010' & sqzd w/ 200 SX cmt. Tie onto intermediate 7-5/8" pump 100 SX cmt. GIH, D/O cmt. Test csg OK. GIH w/ Baker TSN & 2-3/8" IPC tbg. Circ. pkr. fluid. Set pkr @ 3608'. Put on inj. 11/7/86 @ 723 BWIPD @ 0 psi.
5/92 Injection profile logger TD @ 4000' indicating 15' fill.
11/93 ACDZ w/ 4000 gal 15% NaFe. Inj: 936 BWIPD @ 496 psi (12/93) B - 216 BWD @ 676 psi.
10/96 Repair csg leak & ACDZ w/ 5000 Resisol II.

Additional Data:
T/Queen Formation @ 3384'
T/Penrose Formation @ 3534'
T/Grayburg Zone 1 @ 3716'
T/Grayburg Zone 2 @ 3764'
T/Grayburg Zone 2A @ 3819'
T/Grayburg Zone 3 @ 3882'
T/Grayburg Zone 4 @ 3907'
T/Grayburg Zone 5 @ 4007'
T/Grayburg Zone 6 @ 4057'
T/San Andres Formation @ 4090'
KB @ 3587'

FILE: EMSU215WB.xls
DKTS: 11/10/98

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 224	FIELD: Eunice-Monument	API: 30-025-04506
LOC: 3300 FSL & 660 FWL, Unit M	SEC: 5	BLK: T21S, R36E	REF NO: FA5648:01
SVY: N.M.P.M.	GL: 3597	CTY/ST: Lea Co., NM	SPUD:
CURRENT STATUS: Producer	KB: 3597	DF:	TD DATE:

10-3/4", 40#/ft Surface
Pipe set @ 344' w/
250 SX cement
Cmt Circ.? Yes
TOC @ surf. by calc.
(13-3/4" hole)

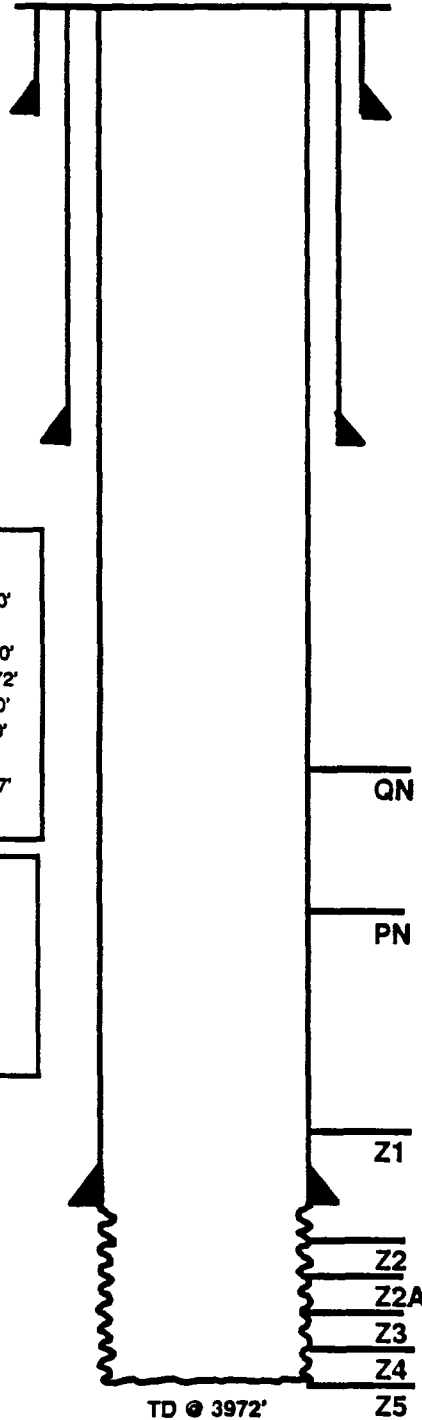
7-5/8", 26# K-55 Csg.
set @ 1215' w/ 350 SX
Cmt Circ.? Yes
TOC @ surf. by calc.
(13-3/4" hole)

Tubing Detail: 8/9/96	
KBTH:	0.00'
113 Jts. 2-3/8" 6.5# J-55 Tbg:	3676.70'
8 Jts. J-55 Tbg	255.72'
2-7/8" API SN	1.10'
2-7/8" Slotted MAJ	15.30'
Landed @	3951.57'

Rod Detail: 8/9/96	
25' Polished Rod	
1-6' & 4' 7/8 SUB	
66 7/8" "D" Rods	
90 3/4" "D" Rods	
2-1/2 X 2 X 24' Pump	

5.5", 17#/ft K-55 Csg.
set @ 3771' w/ 350 SX
Cmt Circ.? Yes
TOC @ surf. by calc.
(13-3/4" hole)

FILE: EMSU224WB.xls
DKTS: 11/10/98



Date Completed: 1-15-36
Initial Prod: 616 BOPD / 0 BWPD / GOR 1136
Initial Formation: Grayburg Fr: 3771' To: 3895'
Completion Data:
1/8/36 Acidized w/ 2000 gal 60% Acid
1/13/36 Acidized w/ 3000 gal 80% Acid
Workover History:
8/26/56 Install prod. equipment.
2/7/66 ACDZ w/ 500 gal 15% NE. Tst: 24 BO/ 8 BW B/4-13 BO / 3 BW.
2/19/69 ACDZ via csg w/ 500 gals 15% NE.
3/11/69 Chem squeeze w/ 60 gals.
3/23/71 Chem sqz w/ 60 gals.
2/8/73 Chem sqz w/ 120 gals.
3/27/74 Chem sqz w/ 120 gals.
5/9/74 ACDZ w/ 4000 gal 15% NE w/ GRS & BAF to divert ISIP - vac test 17 BO/ 15 BW B/4 - 8 BO/ 1 BW.
10/15/75 Chem sqz w/ 175 gals.
5/13/77 Chem sqz w/ 165 gals.
3/22/79 Chem sqz w/ 120 gals.
10/15/80 ACDZ w/ 750 gals 15% NE. Tst: 17 BO/ 13 BW/ B/4 - 8 BO/ 6 BW
9/15/81 ACDZ w/ 750 gals 15% NE. Tst: 8 BO/ 5 BW/ B/4 - 6 BO/ 4 BW
2/12/82 ACDZ w/ 1000 gals 15% NE.
11/2/86 Deepen w/ 4-3/4" bit to 3972'. Log w/ GFI, CNL, CCI, caliper. ACDZ OH- 3771-3972 w/ 4000 gals 15%. Swb - rec 5 BW SFL-3000, EFL-3700. Chem Sqz, RTP. Test: 1 BO/ 3 BW/ 4 MCF.
10/90 ACDZ w/ 1000 gals NeFe, tst: 1 BO/ 2 BW/ 1 MCF. B/4 work: 1 BO/ 4 BW/ 1 MCFG
8/96 CO and ACDZ w/ 6000 gals Resisol II + 750# Trimix salt.

Additional Data:
T/Queen Formation @ 3386'
T/Penrose Formation @ 3538'
T/Grayburg Zone 1 @ 3727'
T/Grayburg Zone 2 @ 3782'
T/Grayburg Zone 2A @ 3824'
T/Grayburg Zone 3 @ 3865'
T/Grayburg Zone 4 @ 3927'
T/Grayburg Zone 5 @ 4004'
T/Grayburg Zone 6 @ 4062'
T/San Andres Formation @ 4095'
KB @ 3597'

TD @ 3972'

10/28/1999

CURRENT WELLBORE DIAGRAM

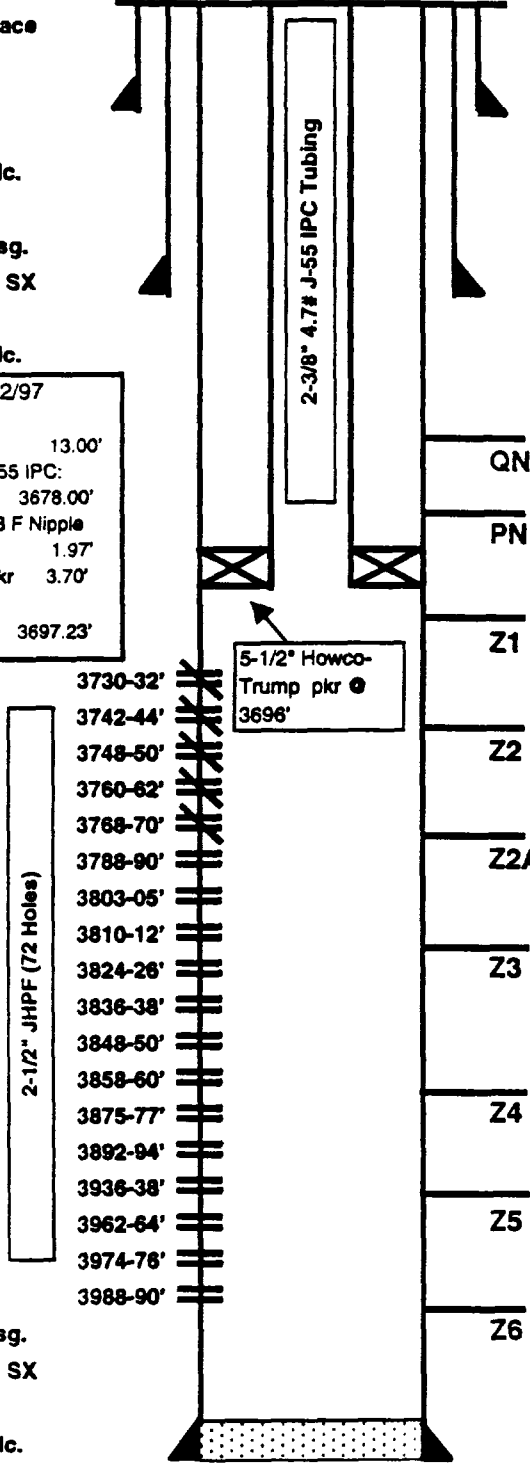
LEASE: EMSU	WELL: 225WIC	FIELD: Eunice-Monument	API: 30-025-29683
LOC: 3300 FSL & 1980 FEL, Unit R	SEC: 5	BLK: T21S, R36E	REF NO: FZ5693:01
SVY: N.M.P.M.	GL: 3597	CTY/ST: Lea Co., NM	SPUD: _____
CURRENT STATUS: Injector	KB: 3597	DF: _____	TD DATE: _____

11-3/4", 42#/ft Surface
 Pipe set @ 355' w/
 325 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.

8.63", 24# & 32# Csg.
 set @ 2640' w/ 700 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 12/2/97

KBTH: 13.00'
 120 Jts. 2-3/8" 4.7# J-55 IPC:
 3678.00'
 XL On/Off Tool w/ 1.78 F Nipple
 1.97'
 5.5 X 2-3/8 IPC G-6 Pkr 3.70'
 Landed @ 3697.23'



3730-32'
 3742-44'
 3748-50'
 3760-62'
 3768-70'
 3788-90'
 3803-05'
 3810-12'
 3824-28'
 3836-38'
 3848-50'
 3858-60'
 3875-77'
 3892-94'
 3936-38'
 3962-64'
 3974-76'
 3988-90'

5.5", 17#/ft K-55 Csg.
 set @ 4170' w/ 575 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.
 (7-7/8" hole)

Date Completed: 7-6-86
 Initial Prod: N/A
 Initial Formation: Grayburg Fr: 3730' To: 3990'
 Completion Data:
 Perf 3730-3990' w/ 2-1/2" JHPF (72 holes). ACDZ perms w/ 4200 gals
 15% NeFe HCl.
 Workover History:
 4/94 ACDZ w/ 4000 gals 15% HCl NeFe + Unisol solution. A: 2016
 BWIPD @ 0 psi. B: 91 BWIPD @ 659 psi.
 12/97 ACZD w/ 1500 gal Resisol II w/ 70Q foam diverter stages. SQZ
 perms 3730-3770' w/ 165 SX Cl C w/ 2% CaCl (5/10% BA-10, 3/10% CD-
 32).
 5/26/98 With coiled tubing unit, CO and acidize: wash thru perms 3788-
 3990'. CO to 4140' w/ KCl water & N2. ACDZ perms w/ 1800 gal 15%
 HCl & 70Q as diverter. RTI.

Additional Data:
 T/Queen Formation @ 3395'
 T/Penrose Formation @ 3528'
 T/Grayburg Zone 1 @ 3704'
 T/Grayburg Zone 2 @ 3748'
 T/Grayburg Zone 2A @ 3788'
 T/Grayburg Zone 3 @ 3819'
 T/Grayburg Zone 4 @ 3868'
 T/Grayburg Zone 5 @ 3939'
 T/Grayburg Zone 6 @ 3990'
 T/San Andres Formation @ 4005'
 KB @ 3597'

FILE: EMSU225WB.xls
 DKTS: 11/10/98

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 226WIC	FIELD: Eunice-Monument	API: 30-025-04501
LOC: 3300 FSL & 1980 FEL, Unit R	SEC: 5	BLK: T21S, R36E	REF NO: FA5643:01
SVY: N.M.P.M.	GL: 3597	CTY/ST: Lea Co., NM	SPUD: _____
CURRENT STATUS: Injector	KB: 3597	DF: _____	TD DATE: _____

12-1/2", 50#/ft Surface
Pipe set @ 250' w/
200 SX cement
Cmt Circ.? Yes
TOC @ surf. by calc.

8.63", 32# K-55 Csg.
set @ 1348' w/ 800 SX
Cmt Circ.? Yes
TOC @ surf. by calc.

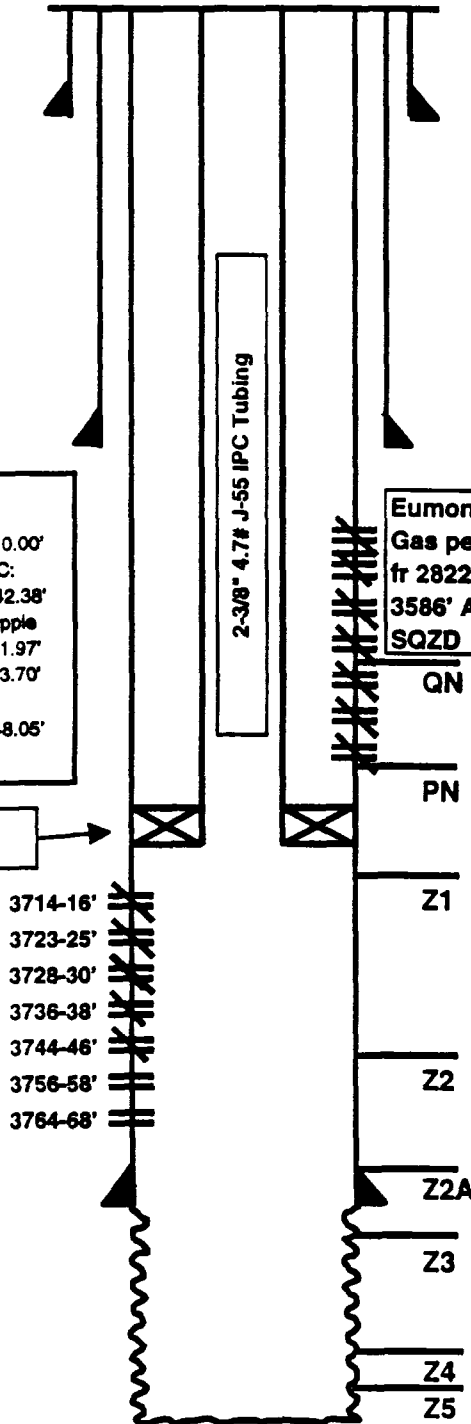
Tubing Detail: 8/7/97

KBTH:	0.00'
118 Jts. 2-3/8" 4.7# J-55 IPC:	3642.38'
XL On/Off Tool w/ 1.78 F Nipple	1.97'
Guiberson G-6 Pkr	3.70'
Landed @	3648.05'

Guiberson G-6 Inj pkr @
3643'

5.5", 17#/ft K-55 Csg.
set @ 3789' w/ 750 SX
Cmt Circ.? No
TOC @ surf. by calc.

FILE: EMSU226WB.xls
DKTS: 11/10/98



Date Completed: 10-9-35
Initial Prod: N/A
Initial Formation: Grayburg Fr: 3739' To: 3910'
Completion Data:
Natural OH completion.
Workover History:
8/45 Acidized w/ 3000 gal 15% Acid. Tst 62 BO/ 16 BAW.
1/52 ACDZ OH w/ 1000 gal 20% LSTNe. Tst f/ 22 BO/ 0.1 BW/ GOR = 18859.
11/53 Perf 2822-42, 2858-78, 2890-2900, 2906-18, 2930-46, 2984-3004, 3010-30, 3034-38, 3050-54, 3070-90, 3094-3104, 3140-50, 3152-72, 3178-86, 3398-3438, 3446-66, 3494-3534 & 3566-86 (2 JHPF). ACDZ perms w/ 6000 gal 15% regular acid. Eumont gas zone CAOF = 2028 mcf. Grayburg oil zone test f/ 9 BO. Dual complet. Gas/Oil.
8/54 Set blanking plug in oil string pkr. Prod as single gas well.
9/54 ACDZ gas zone w/ 10,000 gal 15% LSTNeA.
4/59 ACDZ OH (oil zone) w/ 10,000 gal 15% regular acid. Test 3 BO/ 1 BWPD.
1/73 Set DR plug in 415-D pkr @ 3731'. Dump 14' sd & 36' cmt on top of pkr (PBD 3681). TAd Grayburg. Producing Eumont gas. ACDZ Eumont gas zone w/ 500 gal 15% HCl. Test 310 MCFPD.
7/86 SQZD Eumont gas perms w/ 267 SX cmt. D/O cmt. Test csg okay. D/O & C/O to 3910' TD. Well turned over to Chevron by Arco.
1/87 XO WH. CO/deepen to 3972'. Log. Perf 3714-16, 3723-25, 3728-30, 3736-38, 3744-46, 3756-58 & 3764-68 (2 JHPF). ACDZ perms w/ 3200 gal 15% NeFeA & 42 RCNBs. ACDZ OH w/ 4000 gal 15% NeFeA in 4 stages. Swb entire perf & OH interval. Rec 11 BW & dry. ONFe=0, swb 0. Put on prod. Test: 5 BO/ 15 BW/ 10 MCF.
1/92 Test csg OK. ACDZ perms & OH w/ 3750 gal 15% NeFeA in stages. Swb 11 BW & dry, GIH w/ bit & CO salt. GIH w/ Guiberson. G6 pkr on 2-3/8" IPC tbg. Set pkr @ 3643'. Put well on inj. Test 969 BWIPD @ 0 psig.
6/97 Tag @ 3900. Dump 3000# sd, tag @ 3746'. ACDZ w/ 1500 gals 15% HCl. Set CIGR @ 3072'. Cmt sqz w/ 125 SX Cl C, then D/O CIGR & cmt to 3746'. CO 3746-3756 (sand). CO 3756-3779 (cmt & sd). CO 3779-3968 (sand). ACDZ w/ 3000 gals Acid.
5/28/98 CO w/ CTU to 3973' w/ KCl & N2. ACDZ perms & OH fr 3756-3973' w/ 2000 gal 15% HCl & 70Q foam as diverter. RTI.

Additional Data:
T/Queen Formation @ 3395'
T/Penrose Formation @ 3528'
T/Grayburg Zone 1 @ 3704'
T/Grayburg Zone 2 @ 3748'
T/Grayburg Zone 2A @ 3786'
T/Grayburg Zone 3 @ 3819'
T/Grayburg Zone 4 @ 3868'
T/Grayburg Zone 5 @ 3939'
T/Grayburg Zone 6 @ 3990'
T/San Andres Formation @ 4005'
KB @ 3597'

10/28/1999

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 227WIC	FIELD: Eunice-Monument	API: 30-025-04502
LOC: 3300 FSL & 660 FEL, Unit P	SEC: 5	BLK: T21S, R36E	REF NO: FA5644:01
SVY: N.M.P.M.	GL:	CTY/ST: Lea Co., NM	SPUD:
CURRENT STATUS: Injector	KB: 3596	DF:	TD DATE:

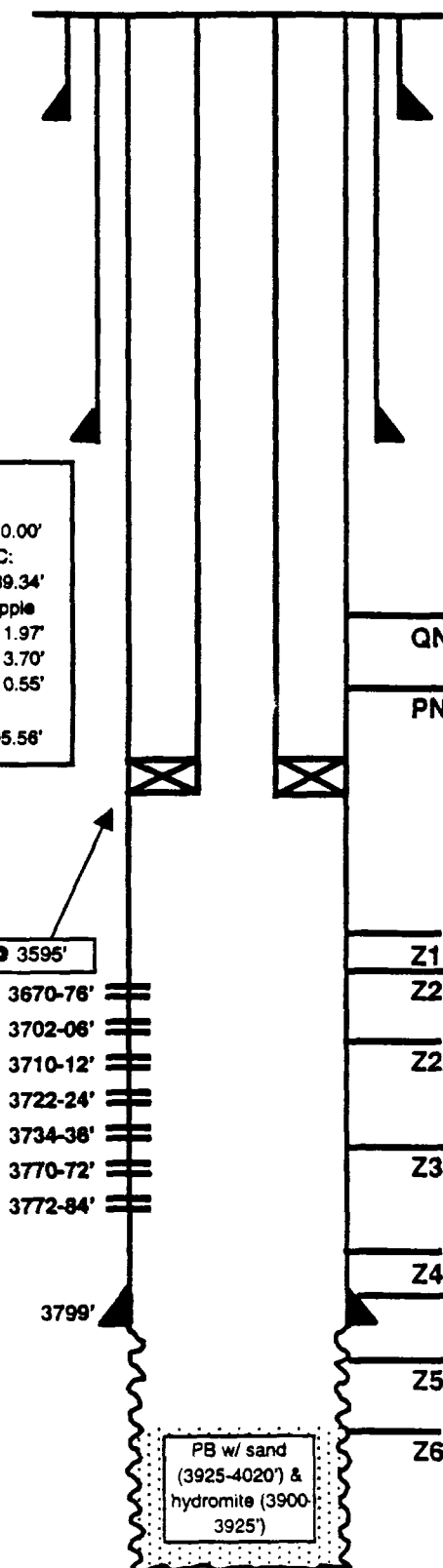
12-1/2", OD Surface
 Pipe set @ 270'
 w/ 200 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.

8-5/8" OD Casing set
 @ 1384' w/ 800 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 10/7/97	
KBTH:	0.00'
116 Jts. 2-3/8" 4.7# J-55 IPC:	3589.34'
XL On/Off Tool w/ 1.78 F Nipple	1.97'
Guiberson G-6 Pkr	3.70'
Wireline Entry Guide	0.55'
Landed @	3595.56'

5-1/2", 17#/ft K-55 Csg.
 set @ 3799' w/ 800 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Baker TSN pkr @ 3595'



Date Completed: 6-11-36
Initial Prod: N/A
Initial Formation: Grayburg Fr: 3799' To: 3900'
Completion Data:

Workover History:
 8/51 ACDZ w/ 500 gal 20% LSTNe.
 1/38 ACDZ OH w/ 3000 gal 15% LSTNe. Tst 39 BO/ 33 BWPD
 8/86 XO WH. CO & deepened to 4020'. Ran logs. Perf 3710-12, 3722-24, 3734-38 & 3770-72 (2 JHPF). ACDZ OH fr 3799-4020' w/ 4000 gal 15% NeFeA & 1500# GRS. Swb 70 bbl iron sulfide wtr. IFL=1000'. EFL=1800'. Swb 30 bbls iron sulfide wtr. EFL=1500'. ACDZ new perfs w/ 1000 gal 15% NeFeA & 26 RCNBs. Swb 5 BW. GIH w/ TSN pkr on 2-3/8" IPC tbg. Set pkr @ 3662'. Put on inj. Test 650 BWIPD @ 0 psig.
 9/89 Perf 3670-76 & 3702-06 (2 JHPF). Dump sd & gravel to 3925'. Cop'd w/ 25' Hydromite (PBD 3900'). ACDZ perf 3670-3706' w/ 2400 gal 15% NeFeA & 40 RCNBs. GIH w/ inj. pkr. on 2-3/8" IPC tbg. Set pkr @ 3637'. Inj. tst 907 BWIPD @ 0 psig.
 9/91 POH w/ inj. equip. Tbg was severely corroded. GIH w/ new TSN pkr on 2-3/8" IPC. Set pkr @ 3594' (installed new string of tbg). Test 504 BWIPD @ 648 psig. Something damaged perfs / OH.
 8/96 ACDZ w/ 5000 gals 15% Resisol II.
 6/97 Tag fill @ 3841'. Spot 1200# sd. tag @ 3757'. Set CIBP @ 3755'. ACDZ w/ 500 gal 15% HCl. Set CICR @ 3688'. Cmt sqz w/ 17 bbls cmt in formation. D/O cmt, CIBP & CICR to 3784'. CO fill to 3900. Perf // 3772-3784' (3 JHPF). Spot w/ 500 gals Resisol II. ACDZ w/ 3000 gals Resisol II.

Additional Data:
 T/Queen Formation @ 3358'
 T/Penrose Formation @ 3492'
 T/Grayburg Zone 1 @ 3653'
 T/Grayburg Zone 2 @ 3685'
 T/Grayburg Zone 2A @ 3718'
 T/Grayburg Zone 3 @ 3753'
 T/Grayburg Zone 4 @ 3794'
 T/Grayburg Zone 5 @ 3848'
 T/Grayburg Zone 6 @ 3906'
 T/San Andres Formation @ 3907'
 KB @ 3596'

FILE: EMSU227WB.xls
 DKTS: 11/10/98

PBTD @ 3900'
 TD @ 4020'

10/28/1999

CURRENT WELLBORE DIAGRAM

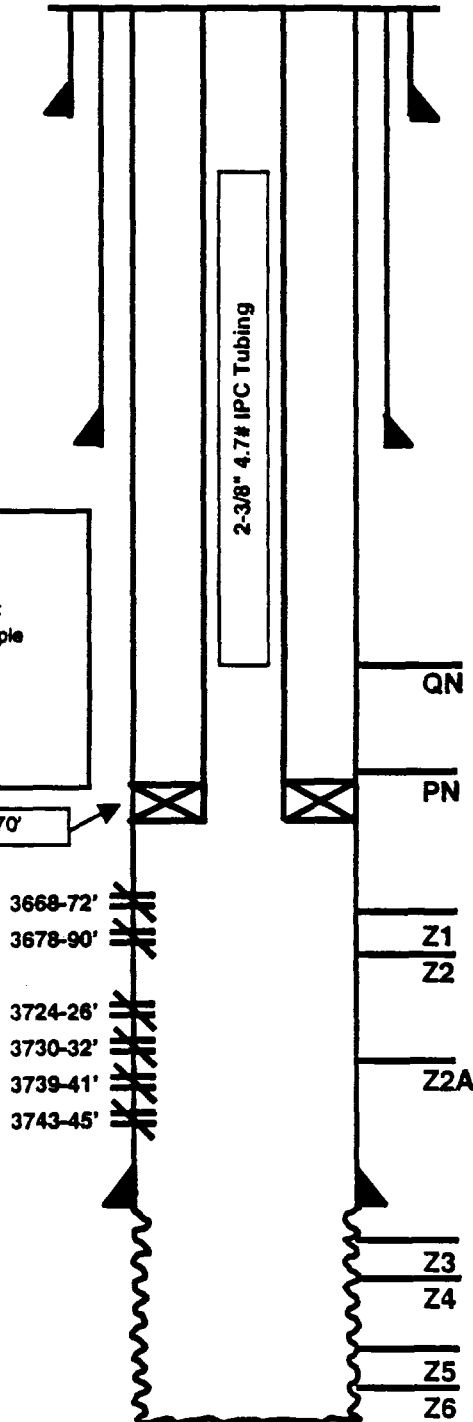
LEASE: EMSU	WELL: 242WIC	FIELD: Eunice-Monument	API: 30-025-04519
LOC: 1980 FSL & 660 FEL, Unit R	SEC: 5	BLK: T21S, R36E	REF NO: FA5661:01
SVY: N.M.P.M.	GL:	CTY/ST: Lea Co., NM	SPUD:
CURRENT STATUS: Injector	KB: 3567	DF:	TD DATE:

12-1/2", 40# K-55 ST&C
Surf. Pipe set @ 83' w/
100 SX cement
Cmt Circ.? Yes
TOC @ surf. by calc.

8.63", 32# K-55 Csg.
set @ 1350' w/ 600 SX
Cmt Circ.? Yes
TOC @ surf. by calc.

Tubing Detail: 7/15/97
KBTH:
116 Jts. 2-3/8" 4.7# J-55 IPC:
XL On/Off Tool w/ 1.78 F Nipple
Guiberson G-8 Pkr
Pump Out Plug
Landed @

Guiberson G6 inj pkr @ 3570'



3668-72'
3678-90'

3724-26'
3730-32'
3739-41'
3743-45'

5.5", 17#/ft K-55 Csg.
set @ 3765' w/ 600 SX
Cmt Circ.? No
TOC @ surf. by calc.

FILE: EMSU242WB.xls
DKTS: 11/10/98

Date Completed: 10-2-35
Initial Prod: N/A
Initial Formation: Grayburg Fr: 3765' To: 3890'
Completion Data:
Natural OH completion.
Workover History:
8/66 Acidize w/ 2000 gal.
3/67 500 gal dump acid (15% HCl).
5/68 500 gal dump acid job (15% HCl).
6/69 500 gal dump acid job (15% HCl).
1/78 500 gal dump acid job (20% Ne). Tes: 22 BOPD.
3/78 CO to 3890' (TD). ACDZ OH w/ 1000 gal 15% NeA. Test 2.5 BO/ 14 BWPD.
12/86 XO WH. CO to 3893'. Run logs, logger's TD @ 3894'. Csg shoe @ 3763'. perf 3724-26, 3730-32, 3739-41 & 3743-45 (2 JHPF). ACDZ perms w/ 1000 gal 15% NeFeA & 24 RCNBs. Swb 8 BW to SN. ACDZ OH w/ 4000 gal 15% NeFeA in 4 stages w/ GRS as block. Swb 12 BW to SN. No Fe. Move pkr to 3680'. Swb 6 BW & dry. No Fe. Put well on prod. Test: 5 BO/ 44 BW/ 1 MCF. B14 - 3 BO/ 70 BW/ 11 MCF.
6/90 Deepened to 3894-3950. Perf 3668-72 and 3678-90 (1 JHPF). ACDZ new perms 3668-90 w/ 1250 gal 15% NeFeA & 24 RCNBs. Swb 8 BW to SN. Wait 1 hr. No Fe. Put on prod. Test 0 BO/ 137 BW/ 14 MCF - FL=400'. B14 tst 4 BO/ 42 BW/ 45 MCFPD.
8/90 Scale sqzd.
12/91 Tag @ 3950' & ran GRVDPND logs. ACDZ perms & OH w/ 3000 gal 15% NeFeA in 4 stages w/ GRS on block. Swb 31 BW & dry. ONFE=0. GIH w/ Guiberson pkr on 2-3/8" IPC tbg. Set pkr @ 3569'. Put on inj. Test: 973 BWIPD @ 0 psi.
7/8/97 SQZD perms fr 3668-3787 w/ 100 SX ZCI C - 60 SX in form, 11 SX in csg. Drill cmt fr 3479' to 3782', CO sand to 3952', circ. hole clean. ACDZ OH w/ 3000 gal 15% 90/10 Resisol II w/ 500 gal 70Q foamed gelled brine. GIH w/ Guiberson pkr on 2-3/8" IPC tbg. RTI.

Additional Data:
T/Queen Formation @ 3378'
T/Penrose Formation @ 3506'
T/Grayburg Zone 1 @ 3671'
T/Grayburg Zone 2 @ 3708'
T/Grayburg Zone 2A @ 3741'
T/Grayburg Zone 3 @ 3778'
T/Grayburg Zone 4 @ 3818'
T/Grayburg Zone 5 @ 3882'
T/Grayburg Zone 6 @ 3939'
T/San Andres Formation @ 3966'
KB @ 3567'

TD @ 3950'
10/28/1999

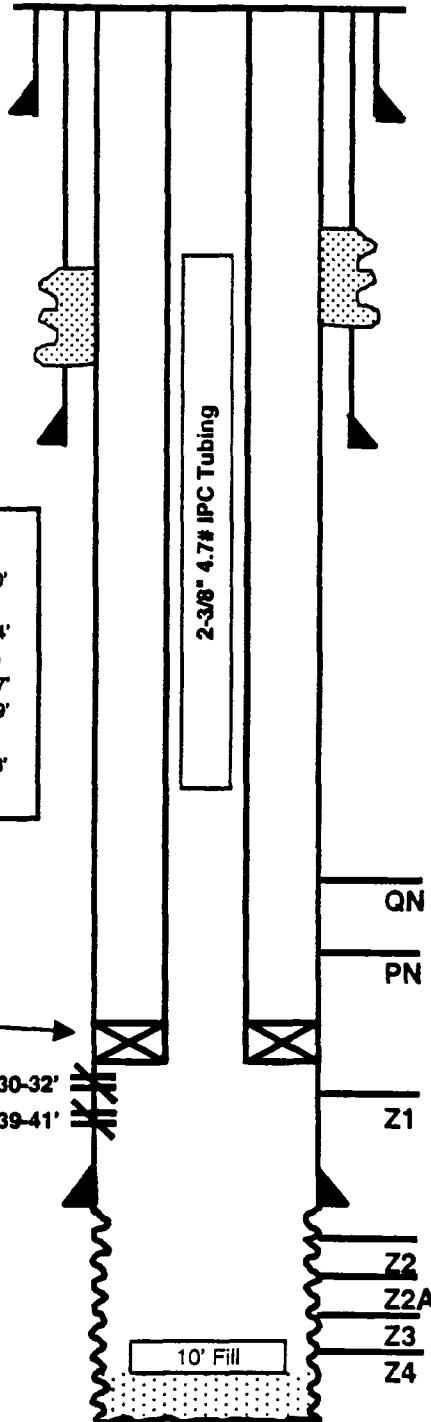
CURRENT WELLBORE DIAGRAM

LEASE: EMSU **WELL:** 243WIC **FIELD:** Eunice-Monument **API:** 30-025-04518
LOC: 1980 FSL & 1980 FEL, Unit R **SEC:** 5 **BLK:** T21S, R36E **REF NO:** FA5660:01
SVY: N.M.P.M. **GL:** 3587 **CTY/ST:** Lea Co., NM **SPUD:** _____
CURRENT STATUS: Injector **KB:** 3593 **DF:** _____ **TD DATE:** _____

12-1/2", 40# K-55 ST&C
 Surf. Pipe set @ 83' w/
 100 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.

8.63", 32# K-55 Csg.
 set @ 1350' w/ 600 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 9/9/97	
KBTH:	8.00'
118 Jts. 2-3/8" 4.7# J-55 IPC:	3576.54'
XL On/Off Tool w/ 1.78 F Nipple	1.97'
Guiberson G-6 Pkr	4.29'
Landed @	3673.28'



Otis Interlok pkr @ 3678'

3730-32'
3739-41'

5.5", 17#/ft K-55 Csg.
 set @ 3772' w/ 600 SX
 Cmt Circ.? No
 TOC @ 427' by calc.

FILE: EMSU243WB.xls
DKTS: 11/10/98

Date Completed: 1-36
Initial Prod: N/A
Initial Formation: Grayburg Fr: 3772' To: 3873'
Completion Data:
 ACDZ OH w/ 4000 gal Acid
Workover History:
 1/76 Dump acid 500 gal 20% NeA. Tst 22 BO. B: 4-9 BOPD.
 8/86 XO WH. CO & deepen to 4040'. Ran logs. Found csg leak @ 122-427'. Pump 100 SX & circ. cmt. out 5-1/2 X 8-5/8" ann. Closed rams & pump 200 SX cmt. Co, D/O cmt. Tst csg OK. Perf 3730-32, 3739-41 w/ 2 JHPF. ACDZ w/ 1000 gal 15% NeFeA & 12 RCNBs. Swb 12 BW & dry. ACDZ perms & OH w/ 4000 gal 15% NeFeA & GRS in 4 steps. Swb 11 BW & dry. GIH w/ Otis interlock pkr on 2-3/8" IPC tbg. Set pkr @ 3678'. Put on inj. Injecting 629 BWIPD @ 0 psig.
 11/94 Tag @ 4029'. ACDZ OH & perms w/ 4000 gals 15% NeFeA w/ 10% Pentol. A: 1647 BWIPD @ 385 psi B: 243 BWIPD @ 783 psi.
 8/27/97 Brk circ., rotate & wash to 4030'. ACDZ OH & perms f/ 3784-4030' w/ 1500 gals 15% 90/10 Resisol II w/ N2. Pmp 3000# 20/40 sd. tag @ 3802'. Spot 200# 100 mesh sd 3785', set CIRC @ 3605'. Pmp 175 SX lead CI C & tail w/ 125 SX CI C. Pmp 125 SX CI C w/ N2. Tag @ 3603'. DO CIRC & cmt to 3780'. Tst sqz. DO cmt to 3800' and fell through. Wash sd & PBD.
 5/28/98 Coiled Tbg CO to 4036' w/ 1% KCl water & N2, then ACDZ OH f/ 3772-4030' w/ 2000 gal 15% HCl & iron additives (70Q foam). POOH w/ CT, RTI.

Additional Data:
 T/Queen Formation @ 3400'
 T/Panrose Formation @ 3534'
 T/Grayburg Zone 1 @ 3727'
 T/Grayburg Zone 2 @ 3775'
 T/Grayburg Zone 2A @ 3821'
 T/Grayburg Zone 3 @ 3867'
 T/Grayburg Zone 4 @ 3914'
 T/Grayburg Zone 5 @ 4007'
 T/Grayburg Zone 6 @ 4081'
 T/San Andres Formation @ 4113'
 KB @ 3593'

PBDT @ 4030'
TD @ 4040'

11/1/1999



WELL DATA SHEET

LEASE: EMSU WELL: 245WIC
 LOC: 1980 'F S L & 660 'F W L SEC: 5
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: T ST: N.M.

FORM: Grayburg / San Andres DATE: _____

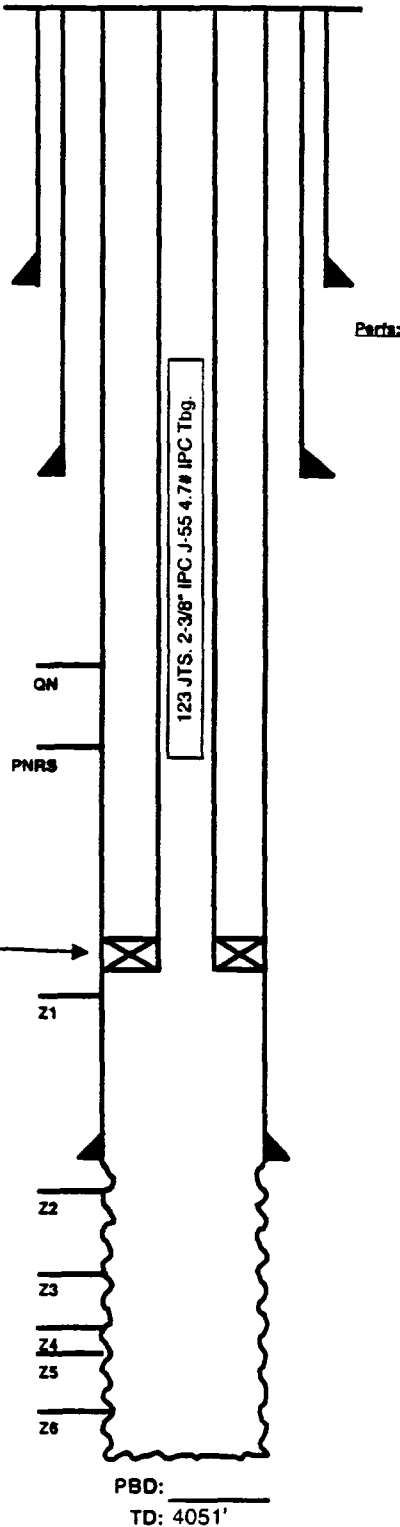
GL: 3584 STATUS: Injector
 KB: 3584 API NO: 30-025-04498
 DP: 10 CHEVNO: FA5640:01

Date Completed: 11/9/1935 Initial Prod.: 2304 BO/0 BW
 Initial Formation: Grayburg
 FROM: 3769' to 3855'

12-1/2" OD # Thd _____
 # CSG _____
 Set @ 254' W/ 200 SX
 Cmt circ.? Yes _____
 TOC @ 28' by calc
 (17-1/2" hole)

8-5/8" OD # Thd _____
 # CSG _____
 Set @ 1377' W/ 700 SX
 Cmt circ.? Yes _____
 TOC @ surf 'by calc
 (11" hole)

Tubing Detail: 1/16/88	
KBTH:	0.00'
122 Jts. 2-3/8" 4.7# J-55 EUE:	3728.08'
1 Jt. 2-3/8" 4.7# J-55 EUE:	31.53'
Baker TSN Pkr	5.57'
Landed @	3733.65'



5-1/2" OD # Thd _____
 # CSG _____
 Set @ 3769' W/ 800 SX
 Cmt circ.? Yes _____
 TOC @ surf 'by calc
 (6-3/4" hole)

Completion Data
11/35 - Natural OH completion.

Subsequent Workover or Reconditioning:
6/48 - Acdz 3815-3856' w/ 500 gals.
2/51 - Deepen to 3899'. ACDZ CH w/ 5000 gals.
4/52 - ACDZ Grayburg 3770-3880' w/ 500 gals Dowell 20% acid.
3/86 - Chemical treat.
3/86 - Acid dump job. 1000 gals 15% NeFe.
1/88 - CO WH. Deepen to 4051'. Log w/ GR, CCL, CNL, Cal. RIF
w/ pkr on 2-3/8" IPC tbg. Set pkr @ 3734'. Test to 600 psi f/30
min - OK. PWOI : 710 BWPD @ vac.
1/29/98 - ACDZ 3820-40' w/ 500 gal 15% 90/10 Resisol II & 3870-
4050' w/ 2000 gal 15% 90/10 Resisol II w/ 70Q foamed 10# brine
down ann. Well was dead - RTI.

Additional Data:
 T/Queen Formation @ 3394'
 T/Penrose Formation @ 3562'
 T/Grayburg Zone 1 @ 3765'
 T/Grayburg Zone 2 @ 3815'
 T/Grayburg Zone 2A @ 3872'
 T/Grayburg Zone 3 @ 3941'
 T/Grayburg Zone 4 @ 4015'
 T/Grayburg Zone 5 @ 4085'
 T/Grayburg Zone 6 @ 4150'
 T/San Andres Formation @ 4213'
 KB @ 3584'

Baker TSN @ 3734'

PBD: _____
 TD: 4051'

Current
 Inj. _____ bwpd @ _____ psi Date: _____
 Prod. _____ bopd _____ bwpd Date: _____
 Gas _____ mcfpd



WELL DATA SHEET

LEASE: EMSU **WELL:** 254
LOC: 660' F S L & 660' F W L **SEC:** 5
TOWNSHIP: 21S **CNTY:** Lea
RANGE: 36E **UNIT:** U **ST:** N.M.
 (formerly: State "G" #2)

FORM: Grayburg / San Andres **DATE:** _____
GL: 3588' **STATUS:** Producer
KB: 3588' **API NO:** 30-025-04500
DF: _____ **CHEVNO:** FA 5642:01

Date Completed: 9/12/1935
Initial Production: 374 BOPD
Initial Formation: Grayburg
FROM: 3788' to 3904' / GOR 3000

12-1/2" OD
50# CSG
Set @ 79' W/ 200 SX
Cmt circ.? Yes
TOC @ surf. by calc.
 (17-1/4" hole)

8-5/8" OD
32# CSG
Set @ 1378' W/ 800 SX
Cmt circ.? Yes
TOC @ surf. by calc.

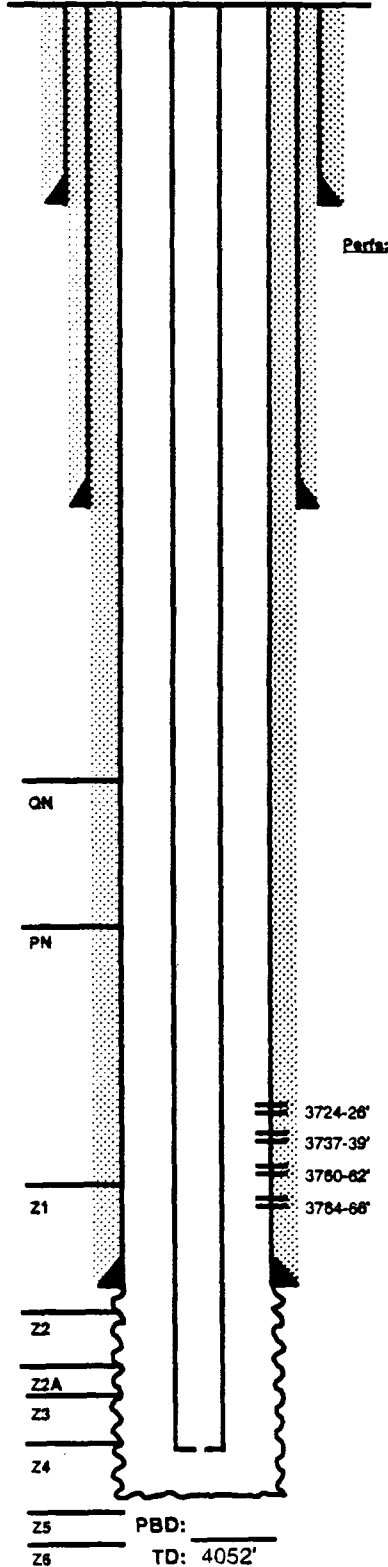
Tubing Detail: 7/10/96

Original KBTH:	0.00'
125 Jts. 2-7/8" 10V tbg:	3985.89'
Landed @:	3985.89'

Rod Detail: 7/10/96

1-1/2" X 22' Polished Rod
2 - 7/8" X 6' Subs
7/8" X 4' Sub
2 - 7/8" X 2' Sub
157- 7/8" N-97 Rods

5-1/2" OD
17# CSG 10rd
Set @ 3788' W/ 800 SX
Cmt circ.? Yes
TOC @ surf. by calc.
 (7-3/4" hole)



Completion Data

9/35 Natural OH completion.

Subsequent Workover or Reconditioning:

3/44 ACDZ OH w/ 3000 gals 15% acid.
 4/48 ACDZ OH w/ 500 gals 20% ac.d. Tst: 46 BOPD. B/4 - Tst: 29 BOPD Flwg.
 8/49 ACDZ OH w/ 1000 gals 20% acid. Tst: 40 BOPD. B/4 - Tst: 28 BOPD Flwg.
 4/50 ACDZ w/ 500 gals. 20% acid. Tst: 53 BO / 9 BWPD / GOR 5066 Flwg.
 9/50 ACDZ w/ 3000 gals Acid. Tst: 41 BO / 17 BW. GOR = 10102 Flwg.
 10/53 install ppg. equipment. Tst: 53 BO / 14 BW / GOR 3000.
 8/86 Production log: 4% - 3737-39', 83% - 3760-66', 13% - 3854-4000'.
 10/86 CO & deepened to 4052'. ACDZ OH w/ 5000 gals 15% NeFeA in 4 stages. Swb dry 8 bbls in 6 runs. Tr oil. Perf 3724-26, 3737-39, 3760-62, 3764-66. ACDZ selectively as set perfs w/ 125 gals 15% NeFeA. Swb dry 8 runs 7 BW. Chemical sqzd. Put on prod. Tst: 19 BO / 52 BW / 8 MCFGPD. FL = 187' ASN. B/4 - Tst: 6 BO / 4 BW / 5 MCFGPD.
 7/96 Pickle tbg w/ 3000 gals 15% NeA. ACDZ w/ 7500 gals Resisol II in 6 stages. Swb. RIH w/ PE. TOTP.

Additional Data:

T/Queen Formation @ 3403'
 T/Penrose Formation @ 3551'
 T/Grayburg Zone 1 @ 3739'
 T/Grayburg Zone 2 @ 3785'
 T/Grayburg Zone 2A @ 3849'
 T/Grayburg Zone 3 @ 3931'
 T/Grayburg Zone 4 @ 3984'
 T/Grayburg Zone 5 @ 4064'
 T/Grayburg Zone 6 @ 4135'
 T/San Andres Formation @ 4198'
 KB @ 3588'

CURRENT WELLBORE DIAGRAM

LEASE: EMSU **WELL:** 257WIC **FIELD:** Eunice-Monument **API:** 30-025-04496
LOC: 660 FSL & 660 FEL, Unit X **SEC:** 5 **BLK:** T21S, R36E **REF NO:** FA5638:01
SVY: N.M.P.M. **GL:** 3585 **CTY/ST:** Lea Co., NM **SPUD:** _____
CURRENT STATUS: Injector **KB:** 3585 **DF:** _____ **TD DATE:** _____

12-1/2", 50#/ft Surface
 Pipe set @ 80' w/
 150 SX cement
 Cmt Circ.? Yes
 TOC @ surf. by calc.

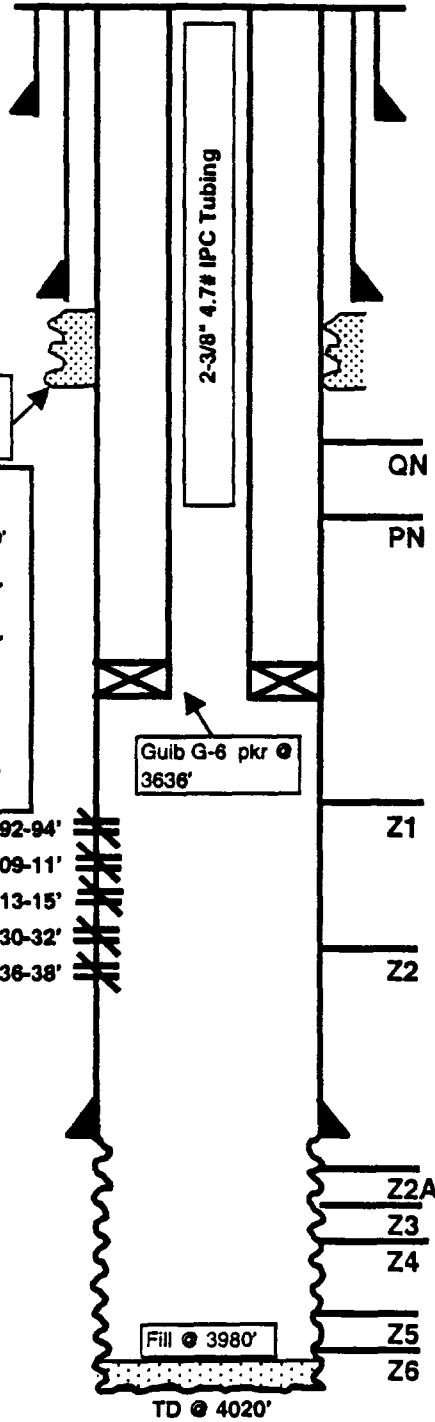
9-5/8", 36# Csg.
 set @ 1384' w/ 500 SX
 Cmt Circ.? Yes
 TOC @ surf. by calc.

Leak @ 1435-40', Perf @ 1448'.
 Cmt w/ 400 SX & circ. 25 SX to
 surf.

Tubing Detail: 10/13/97

KBTH:	0.00'
118 Jts. 2-3/8" 4.7# J-55 EUE:	3629.33'
XL On/Off Tool w/ 1.78 F Nipple	1.97'
Guiberson G-6 Pkr	4.55'
2-3/8 Wireline Re-Entry guide	0.55'
Landed @	3697.23'

7", 24#/ft K-55 Csg.
 set @ 3754' w/ 800 SX
 Cmt Circ.? No
 TOC @ 1440' by Lk data



Date Completed: 8-9-36
Initial Prod: N/A
Initial Formation: Grayburg Fr: 3775' To: 3885'
Completion Data:
 Natural OH completion.
Workover History:
 3/44 ACDZ OH w/ 2000 gals Acid. Test: 130 BOPD.
 8/49 Parted tbg. Cut tbg and pull just above pkr. Fish & recovered all of pkr. except packing element (pushed to bottom). Put on pump, test @ 45 BOPD.
 11/86 XO WH. Cut over & recover fish. Deepened to 4020'.
 Ran logs. Perf 3692-94, 3709-11, 3713-15, 3730-32 & 3736-38 (2 JHPF). ACDZ OH w/ 4000 gal 15% NeFeA in 3 stages w/ GRS as block. Swb to SN 7 BW. ACDZ perms w/ 1250 gal 15% NeFeA & 30 RCNBs. Swb 4.5 BW & dry. GIH w/ Baker TSN pkr on 2-3/8" IPC tbg. Set pkr, test annulus. Leaked. Find L @ 1435-1440'. Attempt to brk down Lk w/ 500 gal acid. Perf @ 1448' w/ 2 JHPF. Circ wtr out 9-5/8" 7" annul. Set retr @ 1378'. Cmt w/ 400 SX & circ. 25 SX to surf. D/C cmt & test OK. GIH w/ Baker TSN pkr on 2-3/8" IPC. Set pkr @ 3629'. Put on inj. Inj @ 700 BWPD @ 0 psig.
 11/95 Tag @ 3924'. ACDZ w/ 4000 gal 15% NeFe Resisol 100.
 9/17/97 Log indicates csg shoe @ 3754'. Set Baker Loc-Set pkr @ 3771'. ACDZ w/ 1000 gal 90/10 RSII & 1500 gal 70Q GBW. Ref pkr & POH. Drop 3500# 20/40 sd. Tag @ 3707' and wash sd to 3784. Pmp 2 SX CaCO3 @ 3784', set CICR @ 3559'. Sqz w/ 909 bbls Marcit (poly sqz). Tag @ 3553'. DO cmt & CICR. DO hard cmt to 3805' & fell thru. Wash sand to 3964'. DO hard scale to 3980. Run MIT & TOTP.

Additional Data:
 T/Queen Formation @ 3377'
 T/Penrose Formation @ 3518'
 T/Grayburg Zone 1 @ 3689'
 T/Grayburg Zone 2 @ 3727'
 T/Grayburg Zone 2A @ 3772'
 T/Grayburg Zone 3 @ 3805'
 T/Grayburg Zone 4 @ 3850'
 T/Grayburg Zone 5 @ 3923'
 T/Grayburg Zone 6 @ 3966'
 T/San Andres Formation @ 4018'
 KB @ 3585'

FILE: EMSU257WB.xls
DKTS: 11/10/98

WELL DATA SHEET

FIELD: Eunice Monument South Unit

WELL NAME: EMSU No. 457-WSW

FORMATION: Grayburg

LOC: 1500' FNL & 1280' FEL
TOWNSHIP: 21-S
RANGE: 36-E

SEC: 6
COUNTY: Lea
STATE: NM

GL: 3578'
KB to GL: 18'
DF to GL: 17'

CURRENT STATUS: Water Supply
API NO: 30-025-28148
CHEVNO: FR-0470

16" OD, 65#/ft., H-40
Surf. pipe set @ 417'
w/ 500 exs omt.
TOC @ 65' by TS.

Electric Submersible pump

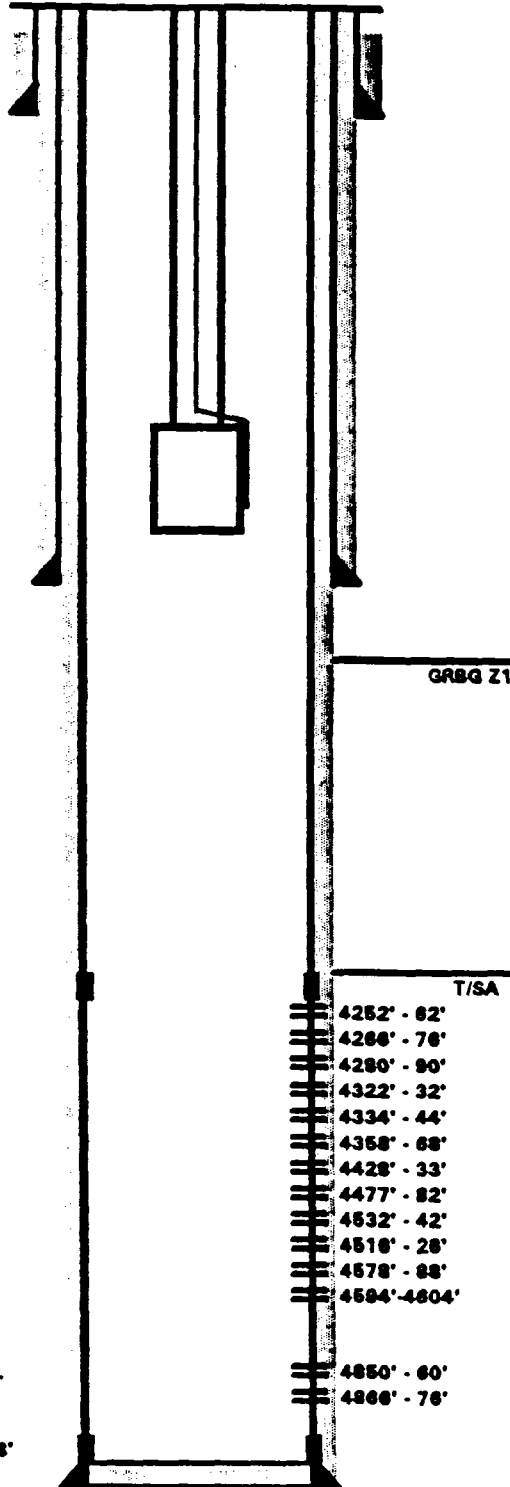
11-3/4" OD, 54#/ft., K-55
Intermed. csg set @ 2837'
w/ 1050 exs. Cbr 135 ex TS

DV Tool @ 4035'

8-5/8" OD, 32#/ft., K-55
csg set @ 5000' w/ 1800 exs.
In two stages:
Stg 1: 400 exs;
Stg 2: 1200 ex, 168 ex to surf.

FC @ 4858'

PBTD @ 4957'
TD @ 5000'



Data Completed: 10/11/86
Initial Production: 10,906 BWPD
Initial Formation: San Andres From: 4482' To: 4578'
Completion Data:
09-15-86 Drill to 3648'. Core 3648'-3954' w/ 8 core barrels. Ream 3500'-3954' & drill to 5000'. Log SCHL LDT-NGT-ENL-GR, DLL, EMP, BHC-SONIC & DIPMETER (logr TD 4997'). Run 8-5/8" csg. DO cmt. & DV tool. Selectively perf 4850'-76' (SA) w/ 1 SPF. ACDZ w/ 6000 gals 15% NEFE. Selectively perf 4252' - 4850' (SA) w/ 1 SPF. ACDZ 4768'-4878' w/ 4000 gals 15% NEFE HCL. Tbg went on vac. ACDZ 4428' - 4604' w/ 6000 gals 15% NEFE HCL. Tbg on vac. ACDZ 4252' - 4368' w/ 6000 gals 15% NEFE HCL. Tbg on vac. Swb all perfs Rec 203 BW / 5 runs in 25 hrs in 5 hrs.; IFL @ 1000', FER 4-5 BPH, FFL @ 1800'. Swb Rec 276 BW / 61 runs in 5.5 hrs.; SFL @ 1200', FER 8 BPH. KCL block. RIM w/ prod tbg & submersible pump. Test pump 16,640 BW/hr. TO to production.

Workover History:

Additional Data:
T/Queen @ 3417'
T/Penrose @ 3562'
T/EMSU Unit @ 3687'
T/Grayburg Zone 1 @ 3738'
T/Grayburg Zone 2 @ 3779'
T/Grayburg Zone 3 @ 3872'
T/Grayburg Zone 4 @ 3914'
T/Grayburg Zone 5 @ 3998'
T/Grayburg Zone 6 @ 4087'
T/San Andres @ 4087'

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 610	FIELD: Eunice-Monument	API: 30-025-31407
LOC: 180 FEL & 3820 FSL, Unit P	SEC: 5	BLK: T21S, R36E	REF NO: KZ3277:01
SVY: N.M.P.M.	GL: 3575	CTY/ST: Lea Co., NM	SPUD: 12/5/1991
CURRENT STATUS: <u>Producer</u>	KB: 3586	DF:	TD DATE:

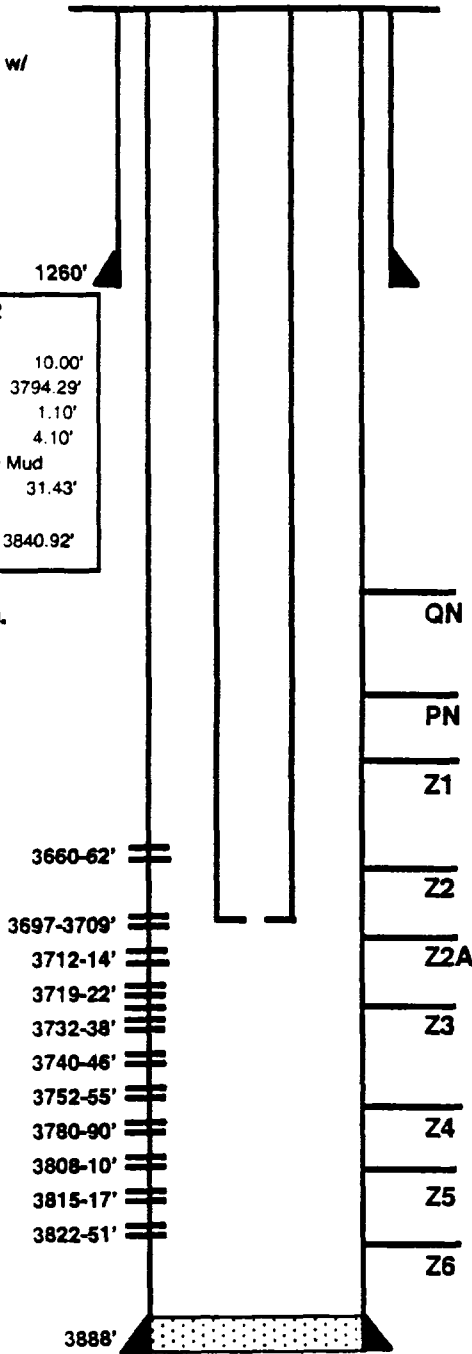
8-5/8", 23#/ft M-50
Surf. Pipe set @ 1260' w/
800 SX cement
Cmt Circ.? Yes
TOC @ surf. by circ.
(12-1/4" hole)

Tubing Detail: 1/6/92

KBTH: 10.00'
123 Jts. 2-7/8" 6.5# J-55: 3794.29'
2-7/8" API SN: 1.10'
2-7/8" Perfed Sub: 4.10'
1 Jt. 2-7/8" 6.5# J-55 8RD Mud
Anchor w/ Bull Plug 31.43'

Landed @ 3840.92'

5.5", 15.5#/ft K-55 Csg.
set @ 3888' w/ 750 SX
Cmt Circ.? Yes
TOC @ surf. by circ.
(7-7/8" hole)



Date Completed: 1-25-92
Initial Prod: 8 BOPD/ 148 BWPD/ GOR 500
Initial Formation: Grayburg From: 3660' To: 3851'
Completion Data:
 Drill out to 3873' (PBTD). Perf 3780-90, 3808-10, 3815-17 & 3822-51 (1 JHPF).
 ACDZ w/ 3000 gal 15% NeFeA & 80 RCNBs. Swb 55 BW & 87 BF. IFC=2% oil, FFC=1% oil.
 Perf 3660-62, 3697-3709, 3712-14, 3719-22, 3732-38, 3740-46 & 3752-55 (2 JHPF).
 ACDZ w/ 3750 gal 15% NeFeA & 110 RCNBs. Swb 55 BW & 96 BF. IFC=50% oil FFC=1% oil.
 Swb 1 BO/ 1 BW. Isolate 3697-3755'. Swb 60 BF, IFC=2% oil, FFC=1% oil. Put well on prod.

Workover History:
 3/95 9 BO/ 510 BW/ 5 MCF, FL=62' ASN

Additional Data:
 T/Queen Formation @ 3338'
 T/Penrose Formation @ 3471'
 T/Grayburg Zone 1 @ 3625'
 T/Grayburg Zone 2 @ 3664'
 T/Grayburg Zone 2A @ 3698'
 T/Grayburg Zone 3 @ 3728'
 T/Grayburg Zone 4 @ 3782'
 T/Grayburg Zone 5 @ 3809'
 T/Grayburg Zone 6 @ 3858'
 T/San Andres Formation @ 3858'
 KB @ 3586'

Tubing Detail:
 NO ROD DETAIL

FILE: EMSU625WB.xls
DKTS: 10/31/98

PBTD @ 3873'
TD @ 3888'

10/28/1999

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 624	FIELD: Eunice-Monument	API: 30-025-31085
LOC: 1410 FEL & 2580 FSL, Unit R	SEC: 5	BLK: T21S, R36E	REF NO: KZ3274:01
SVY: N.M.P.M.	GL: 3583	CTY/ST: Lea Co., NM	SPUD: 11/14/1991
CURRENT STATUS: Producer	KB: 3594	DF:	TD DATE:

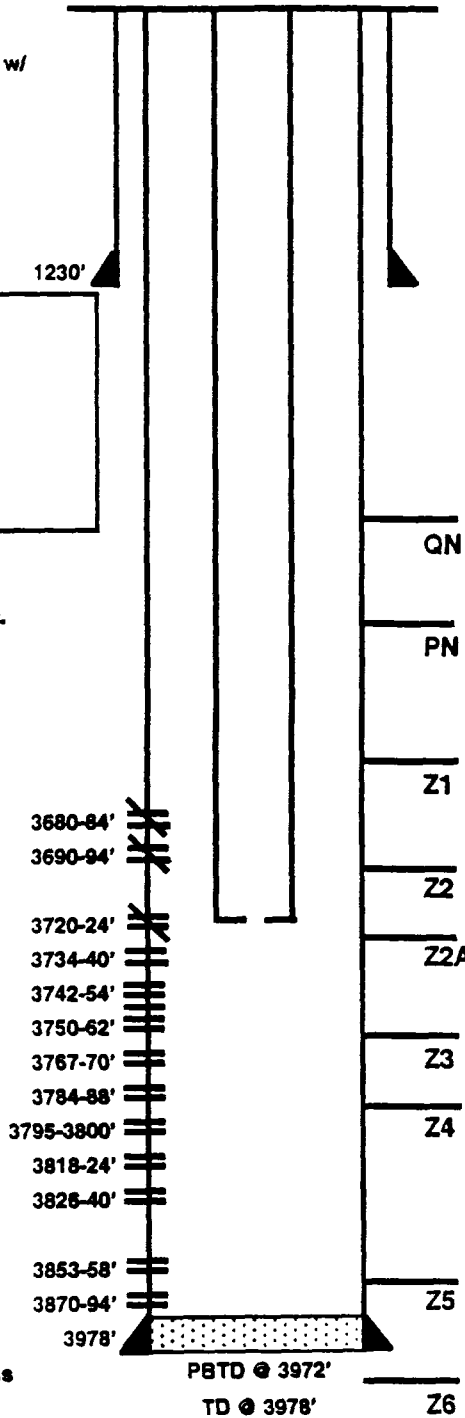
8-5/8", 23#/ft M-50
Surf. Pipe set @ 1230' w/
775 SX cement
Cmt Circ.? Yes
TOC @ surf. by circ.
(12-1/4" hole)

Tubing Detail:

KBTH:

Landed @

5.5", 15.5#/ft K-55 Csg.
set @ 3978' w/ 775 SX
Cmt Circ.? Yes
TOC @ surf. by circ.
(7-7/8" hole)



Date Completed: 12-30-91
Initial Prod: 3 BOPD/ 153 BWPD/ GOR 1664
Initial Formation: Grayburg From: 3724' To: 3967'
Completion Data:
Drill out to 3972' (PBD). Perf 3820-28, 3838-46, 3850-56, 3872-82, 3900-05, 3930-32 & 3960-67 (1 JHPF). ACDZ w/ 2000 gal 15% NeFeA & 80 RCNBs. Swb to SN. Rec 13 BBL. REACDZ w/ 3000 gal NeFeA & 100 RCNBs. Swb 46 BBL. FFC=70% oil/ 30 % water. FeR=3 BPH. Swb 1.5 BBL. 80% oil. Perf 3724-28, 3738-44, 3780-86, 3790-97 & 3800-3806 (1 JHPF). ACDZ w/ 2000 gal 15% NeFeA & 65 RCNBs. Swb 46.5 BF - 30% oil. F3R=4 BPH. ONFE=1.7 BBL - 60% oil. Put on production.

Workover History:

Additional Data:
T/Queen Formation @ 3403'
T/Penrose Formation @ 3540'
T/Grayburg Zone 1 @ 3721'
T/Grayburg Zone 2 @ 3767'
T/Grayburg Zone 2A @ 3812'
T/Grayburg Zone 3 @ 3857'
T/Grayburg Zone 4 @ 3898'
T/Grayburg Zone 5 @ 3975'
T/Grayburg Zone 6 @ 4048'
T/San Andres Formation @ 4087'
KB @ 3594'

FILE: EMSU625WB.xls
DKTS: 11/2/98

10/28/1999

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 638	FIELD: Eunice-Monument	API: 30-025-31426
LOC: 10 FEL & 1310 FSL, Unit Q	SEC: 5	BLK: T21S, R36E	REF NO: KZ3280:01
SVY: N.M.P.M.	GL: 3581	CTY/ST: Lea Co., NM	SPUD: 11/17/1991
CURRENT STATUS: Producer	KB: 3592	DF:	TD DATE: 12/11/1991

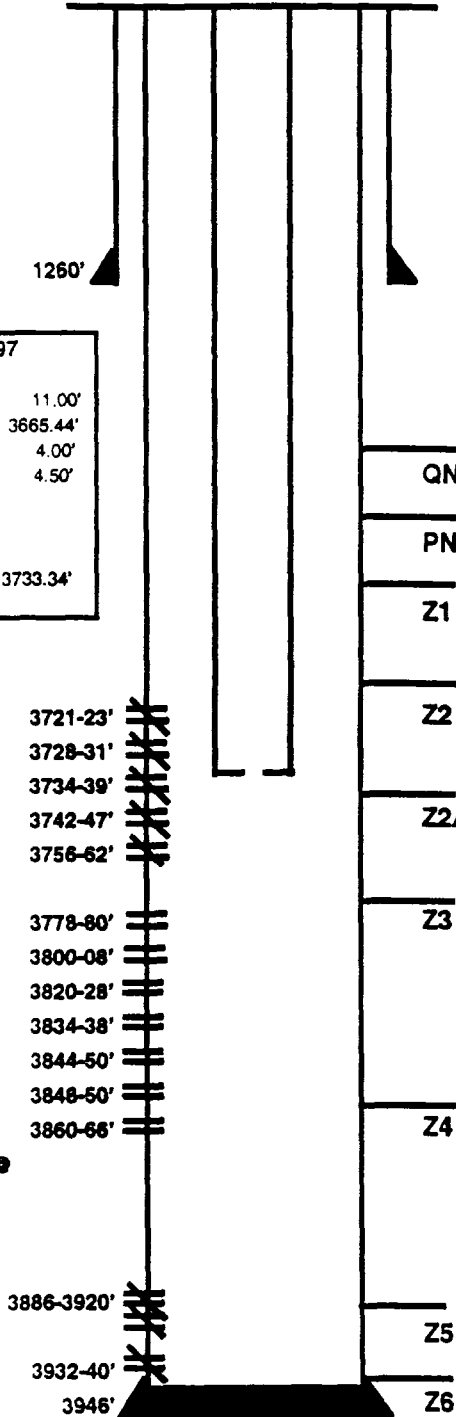
8-5/8", 23#/ft M-50
Surf. Pipe set @ 1260'
with 780 SX cement
Cmt Circ.? Yes
77 SX to surface

Tubing Detail: 12/20/97

KBTH:	11.00'
117 Jts. 2-7/8" 8.5# J-55:	3665.44'
1 - 4" Tubing Sub	4.00'
1 ESP Sub Pump	4.50'

NOTE: Motor 4.56" OD

Landed @ 3733.34'



Date Completed: 12-16-91
Initial Prod: 24 BOPD/ 60 BWPD/ 9 MCFGPD
Initial Formation: Grayburg From: 3721' To: 3850'
Completion Data:
Drill out to 3676'. Core 3676-3946 w/ 4 core barrels. Log HLS, CNL-LDT-GR-CAL, DLL-MSFL-GR & SFT (29 attempts, 13 recoveries). Circ hole clean & spot 6300 gal (150 bbl) LCM pill. Run 92 jts. 5-1/2" csg. NU WH & test to 3000 psi. DO cmt 3870-3745' & circ hole clean. Selectively perf 3886-3920 & 3932-40 (1 JHPF). Pkr set @ 3847'. Swb rec tll 27 BW / 8 runs in 2 hrs. FER 1.1 BPH. Set pkr @ 3790' and ACDZ w/ 2000 gal 15% NeFe HCl. Good ball action. Swb rec 12 BW/ 2 runs in 1/2 hr. FER=24 BPH. Swb 51 BF (15% OC, gassy after each run)/ 19 runs in 4.75 hrs. IFL=1200', FER 10 BPH. Had to circ. balls out of tbg. Set RBP @ 3926', pkr @ 3759'. Swb rec 94 BW/ 13 runs in 3.25 hrs. IFL=1600'. FER 25 BPH. Est. inj. rate of 2 BPM @ 350 psi thru perfs 3886-3920'. Set CIRC @ 3872', sqz 3886-3940' w/ 100 SX cmt in 4 stages. Perf 3721-23, 3728-31, 3734-39, 3742-47, 3756-62, 3778-80, 3800-08, 3834-38 & 3848-50 (1 JHPF). Set pkr @ 3667' & swb rec 19 BW/ 7 runs in 7 hrs. Swb 14 BW, dry. ACDZ 3721-3950' w/ 2000 gal 15% NeFeA & 75 RCNBs. Some ball action resulted. Swb rec 17.5 FW/ 6 runs in 1.5 hrs; IFL=900', FER 9 BPH. SION. Swb rec 5 BF (60% OC)/ 10 runs in 5 hrs.; IFL=3400', FER 1/2 BPH. ACDZ w/ 2000 gal 15% HCl w/ slight ball action. Swb rec 4 BF (20% OC & gassy after each run)/ 11 runs in 5.5 hrs; FER 4 BPH. SION. Swb 4 BO/ 8 runs in 2 hrs. IFL=3400', FER 1 BPH. RIH w/ PE. Put on prod.

Workover History:
5/92 1000 gal dump acid job. Test 23 BO/ 133 BW/ 19 MCF. 14-19 BO/ 65 BW/ 39 MCF.
12/95 Tag @ 3822'. Pickle tbg. ACDZ w/ 5000 gal viscosified mutual solvent & acid. RIH w/ PE. Test A - 76 BO/ 1075 BW/ 13 MCF Test B - 38 BO/ 509 BW/ 9 MCF.
12/3/97 Perf 3860-66', 3844-50' & 3820-28' (3 JSPF). Set RBP @ 3870, pkr @ 3856. ACDZ well w/ 2000 gal 15% RS II w/ 70Q foamed GBW. Spot 1500# 20/40 sd, CO to 3774' and set CIBP @ 3770'. SQZD Zn 2 w/ 1220SX CI C. Tag up @ 3585, drill cmt 3585-3600 and drill CR @ 3600'. Drill cmt 3610-3764, drill CIBP @ 3770. Circ. hole clean, finish drilling CIBP & CO to 3870'. Run sub pump, set @ 3733'. TOTP.

Additional Data:
T/Queen Formation @ 3368'
T/Penrose Formation @ 3505'
T/Grayburg Zone 1 @ 3678'
T/Grayburg Zone 2 @ 3708'
T/Grayburg Zone 2A @ 3739'
T/Grayburg Zone 3 @ 3772'
T/Grayburg Zone 4 @ 3813'
T/Grayburg Zone 5 @ 3876'
T/Grayburg Zone 6 @ 3917'
T/San Andres Formation @ 3955'
KB @ 3592'

FILE: EMSU638WB.xls
DKTS: 10/31/98

PBTD @ 3872'
TD @ 3946'

10/28/1999

CURRENT WELLBORE DIAGRAM

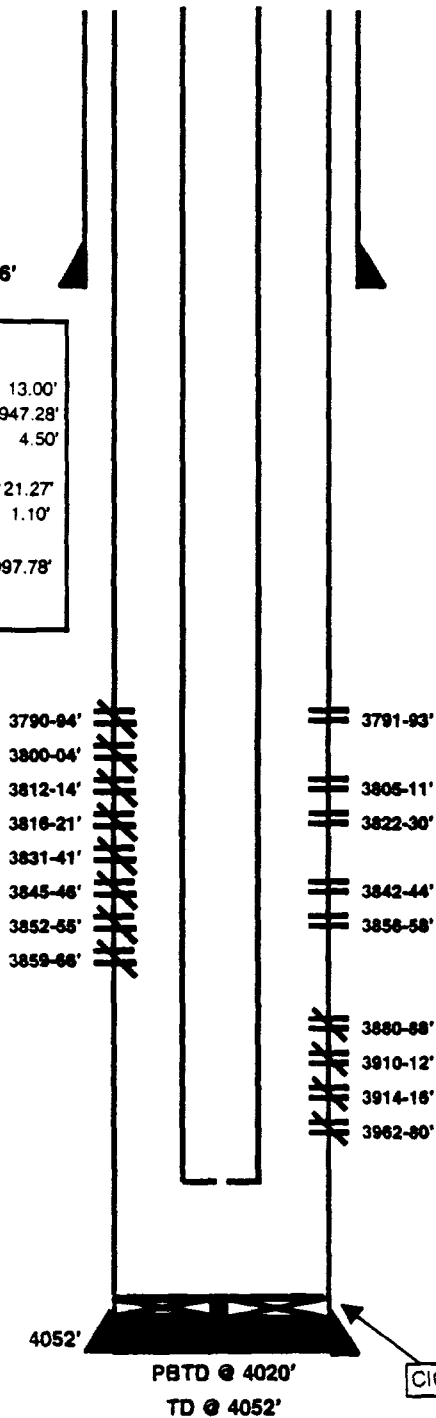
LEASE: EMSU	WELL: 639	FIELD: Eunice-Monument	API: 30-025-31409
LOC: 1280 FEL & 1330 FSL, Unit Q	SEC: 5	BLK: T21S, R36E	REF NO: KZ3278:01
SVY: N.M.P.M.	GL: 3576	CTY/ST: Lea Co., NM	SPUD: 12/3/1991
CURRENT STATUS: Producer	KB: 3590	DF:	TD DATE: 12/11/1991

8-5/8", 23#/ft K-55
Surf. Pipe set @ 1226'
with 790 SX cement
Cmt Circ.? Yes
TOC @ Surface

1226'

Tubing Detail: 12/29/91	
KBTH:	13.00'
127 Jts. 2-7/8" 6.5# J-55:	3947.28'
1 Perf Sub:	4.50'
1 Jt. Mud Anchor w/ B-Plug	121.27'
1 2-7/8" API SN	1.10'
Landed @	3997.78'

5.5", 15.5#/ft Csg set @
4052' w/ 775 SX cmt.
Cmt Circ.? Yes
TOC @ Surface



Date Completed: 1-10-92
Initial Prod: 2 BOPD/ 361 BWPD/ 0 MCFPD
Initial Formation: Grayburg From: 3790' To: 3980'
Completion Data:
Drill out to 4020' TD. Perf 3880-88, 3910-12, 3914-16, 3962-80 (2 JHPF). Swb 33 BW & dry. ACDZ w/ 3500 gal & RCNBs. Swb 16 BW & dry. ONFE=0. Perf 3790-94, 3800-07, 3809-14, 3816-46, 3852-66 (1 JHPF). ACDZ w/ 3500 gal 15% NeFeA & RCNBs. Swb 5.5 BW & dry. ONFE=0. Ran bailer & rec'd 101 balls, 9 left. REACDZ perfs 3790-3866 w/ 3500 gal 15% NeFeA & RCNBs. Swb 45 BW. ONSFL=3000' 10 BPH FeR. FFL=3100' 100% water, tr. oil. Put on prod. Test 0 BO/ 359 BW/ 24 MCF. GIH & set RBP @ 3873'. Put on pump. Test 1 BO/ 350 BW/ 20 MCFPD.

Workover History:
4/92 POH w/ RBP. Set CICR @ 3713'. SQZD perfs 3790-3980 w/ 70 SX cmt, D/O & push CICR to 4007'. No cmt below CICR. GIH w/ 2nd CICR. Set @ 3713'. Resqz w/ 75 SX. Drill, push C. CR to 3798'. Drill CICR, cmt 3798-3856'. Void 3856-3960; perf 3856-58, 3842-44, 3822-30, 3805-11, 3791-93 (2 JHPF). ACDZ each new set w/ 3-10 BBL 15% NeFeA using PIP tool. Swb rec 0 BO/4.5 BW. Put on prod. Test 1 BO/ 382 BW/ 16 MCF. FL=468' ASN.

Additional Data:
T/Queen Formation @ 3414'
T/Penrose Formation @ 3554'
T/Grayburg Zone 1 @ 3737'
T/Grayburg Zone 2 @ 3774'
T/Grayburg Zone 2A @ 3833'
T/Grayburg Zone 3 @ 3875'
T/Grayburg Zone 4 @ 3925'
T/Grayburg Zone 5 @ 4023'
T/Grayburg Zone 6 @ 4075'
T/San Andres Formation @ 4110'
KB @ 3590'

Rod Detail:

FILE: EMSU639WB.xls
DKTS: 10/31/98

PBTD @ 4020'
TD @ 4052'

CICR pushed to PBT

10/28/1999

WELL DATA SHEET

FIELD: EMSU

WELL NAME: EMSU 641

FORMATION: Grayburg

LOC: 1505' FSL & 1155' FWL
TOWNSHIP: 21S
RANGE: 36E Unit L

SEC: 5
COUNTY: Lea
STATE: NM

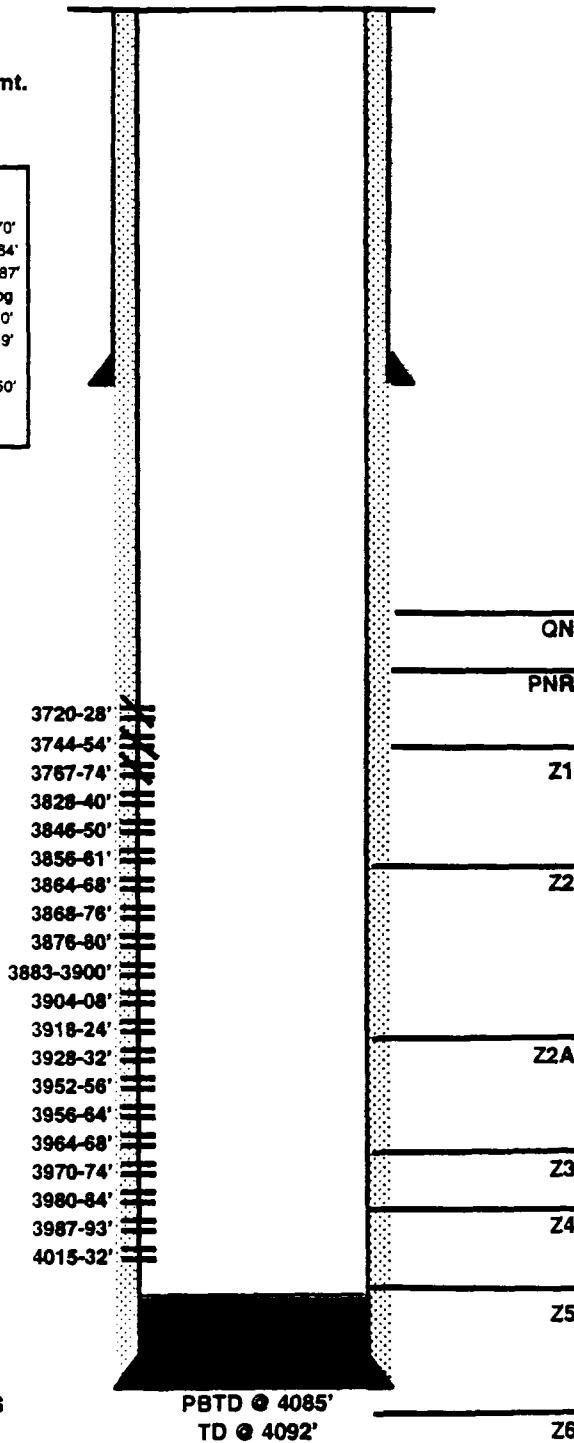
GL: 3579'
KDB to GL: 12.7'
DF to GL:

CURRENT STATUS: Producer
API NO: 30-025-33189
CHEVNO: BD6711:01

8-5/8", 23#/ft, Surf. Pipe
 set @ 1198' w/ 675 SX cmt.
 Cmt Circ.? Yes
 TOC @ Surf' by circ.

Tubing Detail: 12/12/96	
KBTH:	12.70'
116 Jts. 2-7/8" 6.5#:	3645.64'
5-1/2" X 2-7/8" TAC:	2.87'
11 Jts. 2-7/8" Tbg 6.5# J-55 BRD Tbg	347.10'
1 Pump Barrel	25.19'
Landed @	4033.50'

Rod Detail: 12-12-96	
1 1-1/2 X 26' Polish Rod	
1 " X 4' KD Sub	
48 1" X 25' KD Rods	
100 7/8" X 25' KD Rods	
1 51" Plunger	



Date Completed: 12-95
Initial Prod: 19 BOPD/ 96 BWPD/ 28 MCFPD
Initial Formation: Grayburg From: To:
Completion Data:
 D/O cmt to 4085'. Swb & blow casing dry. Ran computalog.

12/15/95 Run GR/CCL Perf 3927-56, 3966-80 (4 JHPF). Picklt tbg. ACDCZ w/ 4000 gal Pentol 200 + 225 RCNBs. Swb 40 BBL (15% OC) EFL=3450'. Treat perfs w/ sonic hammer & 100 BW, 60 BBL 15% HCl w/ iron control. Swb 65 AW, tr oil - EFL=3400'. Put oil prod. Last test = 9 BO/ 65 BW/ 18 MCFPD.

Workover History:
 1/10/96 Perf 3840-42, 3859-63, 3867-70, 3889-92 & 3916-18 (3 JHPF). Set RBP @ 3926'. Attempt to load hole on vac, comm. w/ perfs 3927-3956'. Pickle tbg. Straddle each set.
 1/11/96 ACDCZ all perfs 3840-3918' w/ 3000 gals 15% HCl & iron control in 4 stages w/ GRS & 75 RCHBC. Swb 21 BW. Swb 52 BW (1% OC) - EFL @ 3200'. POH w/ RBP. 1/12/96 - POP & test 11 BO/1898 BW/ 17 MCF.
 2/6/96 Perf 3788-94', 3802-13' (3 JHPF). Set RBP @ 3832'. Pickle tbg. ACDCZ perfs w/ 1500 gals 15% NEA w/ iron control & 70 RCNBC & GRS. Put on prod. Test 11 BO/ 253 BW/ 3 MCF. FL-0.
 4/4/96 Rise & POH w/ RBP @ 3832'. 4/8/96 - Perf 3720-28, 3744-54, 3767-74, 3834-48, 3882-88, 3903-15, & 3984-94. ACDCZ perfs 3720-3774' w/ 1200 gals 15% HCl & iron control in 5 stages. ACDCZ perfs 3720-3994' w/ 7900 gals 15% HCl & iron control in 11 stages. 4/10/96 - RIH w/ prod equip. TOP for test.
 12/2/96 Spot 5650# sand to 3779. Set CICR @ 3654. SQZ perfs 3720-28, 3744-54 & 3767-74 w/ 300 SX cmt (28 SX in form.) - tag cmt @ 3646. D/O CICR & cmt to 3778. Tag sd @ 3773. C/O to 3777. Spot 75 SX cmt. Tst sqz. CO to 4085.

Additional Data:
 T/Queen Formation @ 3400'
 T/Penrose Formation @ 3546'
 T/Grayburg Zone 1 @ 3737'
 T/Grayburg Zone 2 @ 3784'
 T/Grayburg Zone 2A @ 3847'
 T/Grayburg Zone 3 @ 3940'
 T/Grayburg Zone 4 @ 3995'
 T/Grayburg Zone 5 @ 4071'
 T/Grayburg Zone 6 @ 4143'
 T/San Andres Formation @ 4200'
 KB @ 3589'

5-1/2", 15.5#/ft, csg set @
 4092' w/ 725 SX cmt.
 Cmt Circ.? No
 TOC @ 500' by TS

FILE: EMSU641WB.XLS
 RLM: 8/24/98

CURRENT WELLBORE DIAGRAM

LEASE: <u>EMSU</u>	WELL: <u>652</u>	FIELD: <u>EMSU</u>	API: <u>30-025-34140</u>
LOC: <u>84' FSL & 1445' FEL</u>	SEC: <u>5</u>	BLK: <u>T21S, R36E</u>	REF NO: <u>BO6936</u>
SVY: _____	GL: <u>3577</u>	CTY/ST: <u>LEA CO., N.M.</u>	SPUD: <u>11/19/1997</u>
CURRENT STATUS: <u>Producer</u>	KB: <u>3583</u>	DF: <u>3582</u>	TD DATE: <u>12/10/1997</u>

9-5/8", 36#/ft, Surf.
Pipe set @ 589' w/ 300
SX cmt. TOC @ Surf by
circ. (12-1/4" hole)

Date Completed: 3-5-98
Initial Prod: 1 BOPD/365 BWPD/5 MCFPD
Initial Formation: Grayburg From: 3797' To: 3979'
Completion Data:
 12/1/97 - CMT 1st stage w/ 110 SX, opened DV tool w/ 750
 PSI. Circ. out 36 SX. CMT 2nd stage w/ 625 SX. Could not tell
 if circ. Tag cmt @ 3230', DO cmt & DV tool @ 3245'. Circ. hole
 clean @ 3802'.

 3/5/98 - ACDZ zn 4 w/ 2500 gals RS II. ACDZ zn 2 & 2A w/
 4100 gals 15% RS II. Swb, acdz zn 2 & 2A w/ 4000 gal 7 1/2%
 NEFE HCL & swb. RIH w/ prod tbg. & TOTP.

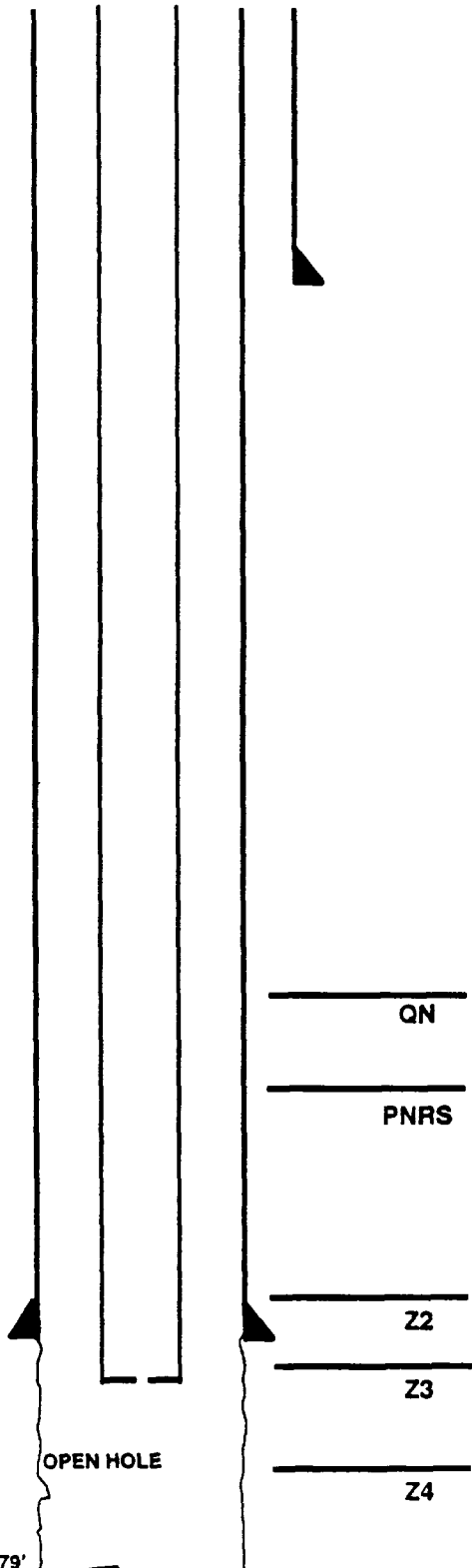
Workover History:

Additional Data:
 T/Queen @ 3433'
 T/Penrose @ 3545'
 T/AGU @ N/A
 T/Grayburg Zone 1 @ 3752'
 T/Grayburg Zone 2 @ 3797'
 T/Grayburg Zone 3 @ 3882'
 T/Grayburg Zone 4 @ 3928'
 KB @ 3583'

Tubing Detail: 03/17/98

KBTH:	6.00'
121 Jts. 2-7/8" 6.5#:	3713.39'
2-7/8" X 7 TAC:	2.72'
2-7/8" Tbg 6.5# J-55 8RD Tbg	185.94'
2-7/8" Plastic Coated 8RD Tbg	31.50'
2-7/8" API SN	1.10'
2-7/8" Slotted MAJ	16.10'
Landed @	3956.75'

7", 23#/ft, csg set @
3797' w/ 100 sxs cmt.
TOC @ Surf by circ.
(8-3/4" hole)



Rod Detail: 03-17-98

1	1-1/2" x 26' Polish Rod
7/8"	X 2' N97 Sub
156	7/8" N97 Rods
2	1/2 X 2 X 20 RHBC PMP



WELL DATA SHEET

LEASE: EMSU WELL: 193WIC

FORM: Grayburg / San Andres DATE: _____

LOC: 1902' F N L & 1822' F W L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: F ST: N.M.

GL: 3557 STATUS: Injector
 KB: 3557 API NO: 30-025-04535
 DF: _____ CHEVNO: FA 5677:01

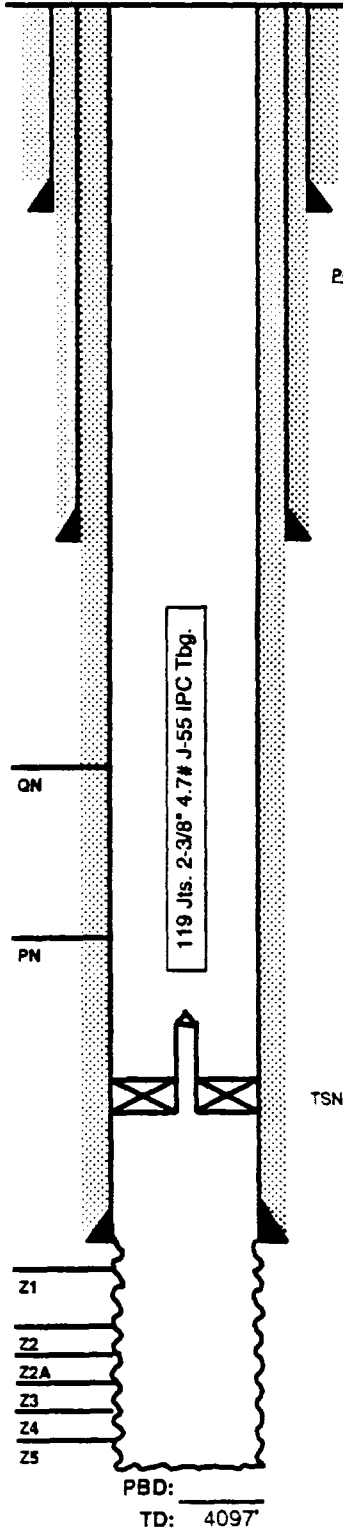
(formerly: H.T. Orcutt NCT-C #4)

Date Completed: 1/5/1937
 Initial Production: F 600 BOPD
 Initial Formation: Grayburg
 FROM: 3752' to 3860' GOR 1420

10-3/4" OD
 # CSG
 Set @ 290' W/ 250' SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (13-3/4" hole)

7-5/8" OD 22# 8Thd
 # CSG
 Set @ 1141' W/ 250' SX
 Cmt circ.? yes
 TOC @ 65' by calc.
 (9-7/8" hole)

Tubing Detail: 1/5/88	
KBT#:	0.00'
118 Jts. 2-3/8" 4.7# J-55 EUE 8rd	
tbg.:	3638.75'
Baker 5.5" TSN II RCP	5.45'
1 Jt. 2-3/8" 4.7# J-55 IPC	31.72'
Landed @	3675.92'



Parts:

Completion Data
 1/6/37 Acdz w/1000 gals

Subsequent Workover or Reconditioning:
 3/51 Install gas lift
 3/24/53 Install pmp equip
 6/22/59 SS OH 3752-3826. Spot 95 gals 15% Ne.
 8/7/70 Acdz w/750 gals 15% A/W 23Bo/51Bw B/4 14Bo/24Bw
 10/31/72 Acdz w/500 gals 15% A/W 6Bo/35Bw B/4 0Bo/38Bw
 3/1/73 Frac OH w/20,000 gals GIS + 20,000# snd A/W 41 BW B/435 BW
 4/24/74 Pull prod equip. TA'd
 11/87 Recut + CO to 3864' (TD). Tst csg to 600 psi. nuWH (9 5/8" hydromite) Turn over to EMSU unit.
 1/88 CO WH. Deepen to 4097'. Log w/GR, CAIL, CCL, cal. Run 5 1/2" Baker TSN II pkr on 119 jts. 2 3/8" IPC. Set pkr @ 3675'. PWOI: 715BWPd @ vac.

Additional Data:
 T/Queen Formation @ 3435'
 T/Penrose Formation @ 3599'
 T/Grayburg Zone 1 @ 3773'
 T/Grayburg Zone 2 @ 3822'
 T/Grayburg Zone 2A @ 3896'
 T/Grayburg Zone 3 @ 3938'
 T/Grayburg Zone 4 @ 3988'
 T/Grayburg Zone 5 @ 4075'
 T/Grayburg Zone 6 @ 4133'
 T/San Andres Formation @ 4208'
 KB @ 3557'

5-1/2" OD 17# 10Thd
 # CSG
 Set @ 3752' W/ 150' SX
 Cmt circ.? no
 TOC @ 2092' by calc.
 (6-3/4" hole)

TSN pkr @ 3675'

FILE: EMSU193WB.XLS

pnnted: 11/1/1999

PBD: _____
 TD: 4097'

Current
 Inj. _____ bwpd @ _____ psi Date: _____
 Prod. _____ bopd _____ bwpd Date: _____
 Gas _____ mcfpd



WELL DATA SHEET

LEASE: EMSU WELL: 194 Horizontal
 LOC: 2254' F N L & 2080' F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: G ST: N.M.

FORM: Grayburg/San Andrea DATE: _____
 GL: 3557.8' STATUS: Producer
 KB: 3570.3' API NO: 30-025-29599
 DF: _____ CHEVNO: FW6020:01

Date Completed: _____
 Initial Production: 23BOPD 27BWPD
 Initial Formation: Grayburg
 FROM: 3891' to 4020'

Completion Data
 SEE 194 VERTICAL WELL SKETCH

Subsequent Workover or Reconditioning:
 1/97 Set pkr @ 3529'. SQZD parts fr 3774-3864 w/ 125 SX. C/C PUM w/ pkr to 2982', sqz 54 SX. POH w/ pkr, TOC @ 3529. D/O cmt to 4020', fill to 4050'. Set CIBP @ 3733.5'.
 3/97 RIH w/ whipstock, set @ 3726'. Mill window 1/3712-3714'. Drill horizontal to 5698'.
 4/97 RIH w/ isolation pkr, top @ 3662'. Btm @ 4570'.
 5/97 PUM, set isolation pkr top @ 3668'. Btm @ 3895'.
 6/97 Treat w/ 2278 Bbls. 0.5% Marcol polymer.
 7/97 POH w/ isolation assembly. Set inf. pkr @ 4123'. ACDZ w/ 22,500 gals 15% NaFe w/ 85Q N2. POH w/ inf. pkr.

Additional Data:
 T/Queen Formation @ 3375'
 T/Panrose Formation @ 3578'
 T/Grayburg Zone 1 @ 3770'
 T/Grayburg Zone 2 @ 3816'
 T/Grayburg Zone 2A @ 3878'
 T/Grayburg Zone 3 @ 3931'
 T/Grayburg Zone 4 @ 3974'
 T/Grayburg Zone 5 @ 4085'
 T/Grayburg Zone 6 @ 4145'
 T/San Andrea Formation @ 4197'
 KB @ 3570'

11 3/4 OD
 42 # CSG
 Set @ 358' w/ 325 SX
 Cmt circ.? yes
 TOC @ surf by _____

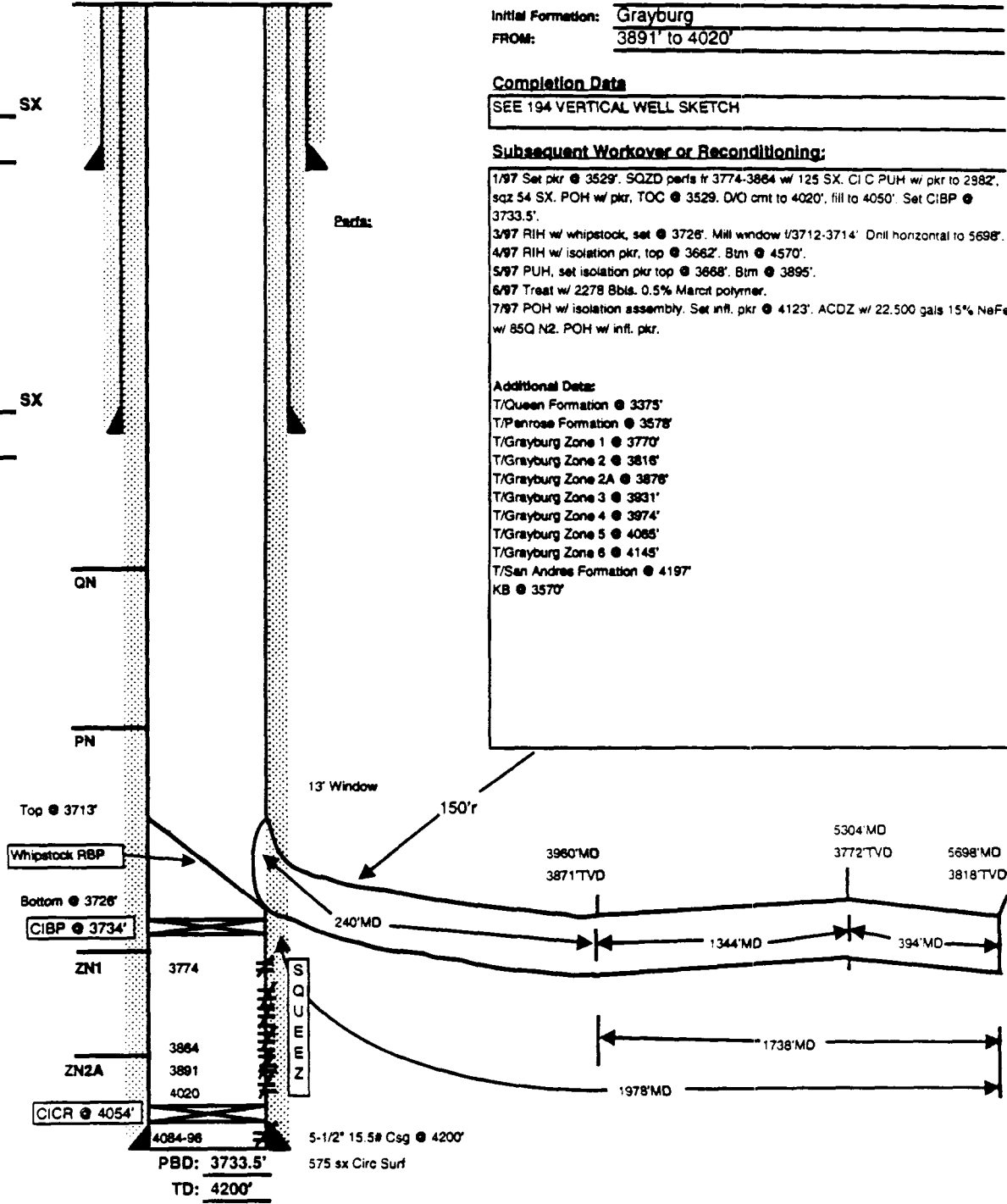
8 5/8 OD 24&32#
 # CSG
 Set @ 2598' w/ 650 SX
 Cmt circ.? yes
 TOC @ surf by _____

Tubing Detail: 5/29/97

KBTH:	11.18'
115 Jts. 2-7/8" 6.7# J-55 EUE 8rd	
bpg.:	3617.80'
2-7/8" EUE 8rd Tbg Sub	10.10'
2-7/8" X 4" Tbg Sub	4.03'
2-7/8" X 5" Tbg Sub	5.92'
2-7/8" X 2" EUE 8rd Tbg Sub	2.16'
2-3/8" X 2-7/8" XO	0.41'
2-3/8" X 3-3/4" OnOff Tool	1.87'
5.5" X 2-3/8" Baker FH pkr	8.15'
8" X 2-3/8" EUE 8rd Tbg Sub	8.10'
2-3/8" Sliding Sleeve	3.84'
2-3/8" X 8" EUE Tbg Sub	8.10'
2-7/8" API SM	1.10'
2-3/8" X 1.81" F Profile Nipple	0.92'
14 jts. 2-3/8" J-55 4.7 bpg.	437.97'
3-3/4" X 2-3/8" OnOff Tool	1.56'
Baker OH Single Set PIP	8.79'
Landed @	4130.00'

Rod Detail: 5/29/97

57 jts. 7/8" X 25' Steel rods	
86 jts. 3/4" X 25' Steel Rods	



FILE: EMSU194H_WB.XLS

printed: 10/28/1999



WELL DATA SHEET

LEASE: EMSU WELL: 195
 LOC: 5940 'F S L & 660 'F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: H ST: N.M.

FORM: Grayburg / San Andrs DATE: _____
 GL: 3568' STATUS: Injector
 KB: 3564' API NO: 30-025-04532
 DP: _____ CHEVNO: FA 56740:01

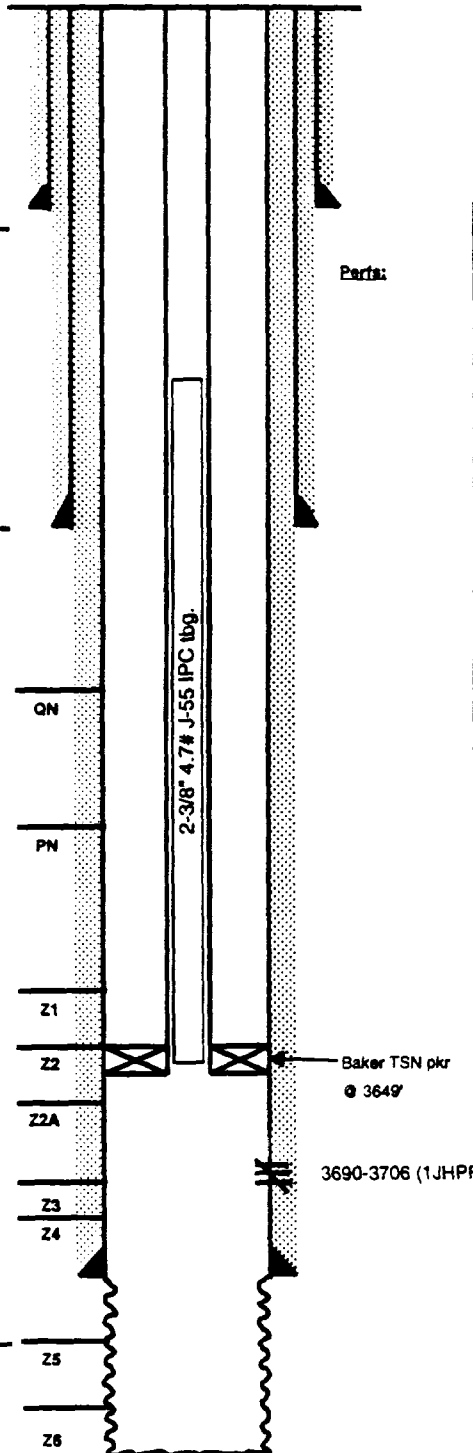
Date Completed: 10/4/1936
 Initial Production: F438BOPD
 Initial Formation: Grayburg
 FROM: 3753' to 3870' GOR 6703

16 "OD
70 # CSG
 Set @ 39.5 'W/ 60 sx.
 Cmt circ.: yes
 TOC @ surf 'by calc
 (20" hole)

7-5/8 "OD 22# 8Thd
 # CSG
 Set @ 1162 'W/ 567 sx.
 Cmt circ.: yes
 TOC @ surf 'by calc
 (9-7/8" hole)

Tubing Details:
 KBTH: 4.00'
 Landed @ _____

5-1/2 "OD 17# 10Thd
 # CSG
 Set @ 3753 'W/ 300 sx.
 Cmt circ.: no
 TOC @ 433 'by calc
 (6-3/4" hole)



Perfs:

Completion Data

Acidz w/2000 gals 50-50 Non-inhibitor solution

Subsequent Workover or Reconditioning:

- 3/53 Install ppg equip
- 3/69 Trt for scale w/60 gals
- 5/69 Trt for scale w/500 gals 15% NeA
- 2/71 Acidz w/1000 gals 28% HCl
- 5/71 Frac 7476 gals Frac Flu 1-3# SPC & 15,500# sd
- 4/73 Acidz w/750 gals 15% NeA & Trt for scale
- 3/74 Trt for scale
- 8/81 Dump acid job - 1000 gals 15% NeA
- 10/81 Chem Sqz w/190 gals
- 4/82 Chem sqz w/180 gals
- 6/87 Deepen to 3930'. Run logs; Perf 3690-3706' w/1JHPF; Acidz perf int w/1500 gals 15%; put on inj; Tst 720 B'WIPD @ 0 PSIG
- 4/94 Acidz w/4000 gals 15% NeFe/unisol mix. A- 1909 BWIPD @ 0 psi B- 276 BWIPD @ 600 psi
- 2/98 SQZD 3690-3706' w/ 300 SX Cl C cmt w/ 2% CaCl, 5/10% BA-10, 3/10% CD-32 (249 SX in form.). ACQZ OH w/ 3000 gal 15% 90/10 Resisol II w/ 70Q GBW as diverter.

Additional Data:

- T/Queen Formation @ 3308'
- T/Penrose Formation @ 3444'
- T/Grayburg Zone 1 @ 3613'
- T/Grayburg Zone 2 @ 3648'
- T/Grayburg Zone 2A @ 3678'
- T/Grayburg Zone 3 @ 3702'
- T/Grayburg Zone 4 @ 3736'
- T/Grayburg Zone 5 @ 3780'
- T/Grayburg Zone 6 @ 3831'
- T/San Andres Formation @ 3840'
- KB @ 3564'

PBD: _____
 TD: 3930'

FILE: EMSU195WB.XLS

Current
 Inj. _____ bwpd @ _____ psi Date: _____
 Prod. _____ bopd _____ bwpd Date: _____
 _____ Gas _____



WELL DATA SHEET

LEASE: EMSU WELL: 216
 LOC: 4620' F N L & 660' F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: I ST: N.M.
 (formerly: State "EE" #1)

FORM: Grayburg / San Andres DATE: _____
 GL: 3576' STATUS: Producer
 KB: 3588' API NO: 30-025-08704
 DF: _____ CHEVNO: FA 9768:01

Date Completed: 5/26/1936
 Initial Production: 1/930 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3767' to 3836'

12-1/2" OD
50# CSG
 Set @ 221' W/ 150 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

9-5/8" OD
36# CSG 8rd
 Set @ 1207' W/ 450 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

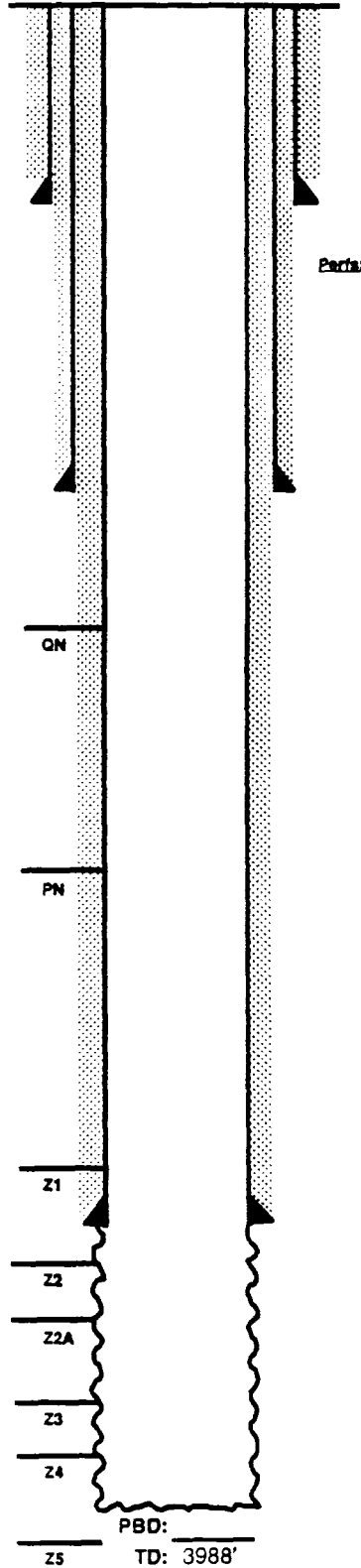
Tubing Detail: 2/11/88

Original KBTH:	12.00'
12 Jts. 2-7/8" J-55 6.5# EUE 8rd tbg:	368.88'
6 Jts. 2-7/8" J-55 6.5# EUE 8rd tbg:	186.24'
104 Jts. 2-7/8" H-40 EUE 10V tbg:	3267.73'
3 Jts. 2-7/8" J-55 6.5# EUE 8rd tbg:	93.25'
2-7/8" API Seating Nipple:	1.10'
Mud Anchor orange peeled & slotted:	27.75'
Landed @:	3861.78'

Rod Detail: 2/11/88

1- Polished Rod
70 - 3/4" Sucker Rods
55 - 7/8" Sucker Rods
1- 4' X 7/8" Rod Sub
2- 1/2" X 16' RWBC Pump w/ Gas Anchor

7" OD
24# CSG 10rd
 Set @ 3767' W/ 225 SX
 Cmt circ.? No
 TOC @ 2186' by calc.



Perfs:

Completion Data

Natural OH completion.

Subsequent Workover or Reconditioning:

7/45 PB w/ plastic & gravel 3796'. D/O to 3792'.
 10/58 CO OH to 3878'. ACDZ 3826-44' w/ 500 gals acid.
 ACDZ 3799-3817' w/ 1000 gals.
 2/60 String shot OH & ACDZ w/ 500 gals.
 11/61 String shot OH & ACDZ w/ 1000 gals.
 8/66 C/O to 3878'. ACDZ w/ 2000 gals.
 2/69 String shot OH & ACDZ w/ 3000 gals.
 4/71 Acdz w/ 1000 gals.
 5/71 Acdz w/ 3000 gals.
 11/71 Acdz w/ 3000 gals.
 12/72 Acdz w/ 3000 gals.
 1/76 Acdz w/ 3000 gals.
 5/77 PB to 3828' w/ sand & 15' Hydromite. Frac w/ 1500 gals.
 2/88 CO & deepen to 3988'. Put on prod. Test: 12 BO/ 214 BW/ 52 MCFGPD. FL = 64' ASN. B/4 test: 11 BO / 155 BW / 25 MCFGPD.
 6/89 Chemical squeezed.
 9/90 Chemical squeezed.

Additional Data:

T/Queen Formation @ 3394'
 T/Penrose Formation @ 3551'
 T/Grayburg Zone 1 @ 3752'
 T/Grayburg Zone 2 @ 3803'
 T/Grayburg Zone 2A @ 3850'
 T/Grayburg Zone 3 @ 3895'
 T/Grayburg Zone 4 @ 3942'
 T/Grayburg Zone 5 @ 4030'
 T/Grayburg Zone 6 @ 4075'
 T/San Andres Formation @ 4115'
 KB @ 3588'

PROD LOG (11/87) - Tst: 12 BO/ 169 BW/ 21 MCFG. Major entry - approx. 80% fr 3770-3791'. approx. 20% fr 3830-2991' mostly water.



WELL DATA SHEET

LEASE: EMSU WELL: 217WI
 LOC: 3197 F N L & 2158' F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: J ST: N.M.

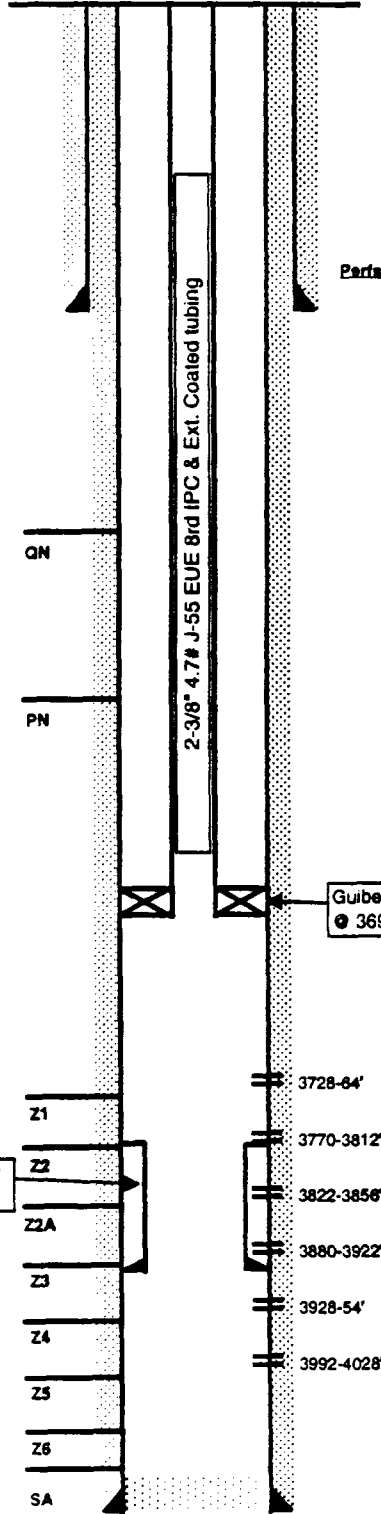
FORM: Grayburg / San Andres DATE: _____
 GL: 3563' STATUS: Injector
 KB: 3580' API NO: 30-025-29911
 DF: _____ CHEVNO: IH 4133:01

Date Completed: 8/1/1987
 Initial Injection: 720 BWIPD @ 0 psig
 Initial Formation: Grayburg zones 1 - 4
 FROM: 3728' to 4028'

8-5/8" OD K-55 LT&C 8rd
32# CSG
 Set @ 1150' W/ 800 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (12-1/4" hole)

Tubing Detail: 12/30/98
 KBTH: 17.00'
 1 Jt. 2-3/8" 4.7# J-55 EUE IPC
 & Ext Coated Tbg: 31.60'
 117 Jts. 2-3/8" 4.7# J-55 EUE IPC
 tbg: 3610.77'
 1 5-1/2" X 2-3/8" P/C On/Off Tool
 w/ 1.78 "F" Nipple: 1.97'
 Guiberson G-6 plastic coated inj
 pkr: 3.73'
 2-3/8" Nickel Plated Pump Out
 Plug: 0.55'
 Landed @ 3695.33'

5-1/2" OD K-55 LT&C 8rd
15.5# CSG
 Set @ 4209' W/ 700 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (7-5/8" hole)



Parts:

Completion Data

Perf 3728-64, 3770-3812, 3822-3856, 3880-3922, 3928-3954 and 3992-4028' (1 JHPF). ACDZ 3880-4028' w/ 75,000 gals 15% NeFe HCl. ACDZ perms 3728-3856' w/ 5600 gals 15% NeFe HCl. Run inj. equipment.

Subsequent Workover or Reconditioning:

12/22/98 Set pkr @ 3767' - pump 2.5 BPM @ 250# psi to chk - NO COMM. RIH w/ drift tool on sand line to 3800'. Run polybore liner fr 3780' to 3890'. Test tbg., set pkr & RTI.

Additional Data:

T/Queen Formation @ 3374'
 T/Penrose Formation @ 3546'
 T/Grayburg Zone 1 @ 3742'
 T/Grayburg Zone 2 @ 3785'
 T/Grayburg Zone 2A @ 3855'
 T/Grayburg Zone 3 @ 3907'
 T/Grayburg Zone 4 @ 3959'
 T/Grayburg Zone 5 @ 4028'
 T/Grayburg Zone 6 @ 4074'
 T/San Andres Formation @ 4112'
 KB @ 3580'

Polybore liner fr 3780' to 3890'

PBD: 4178'
 TD: 4209'



WELL DATA SHEET

LEASE: EMSU WELL: 218
 LOC: 3300' F N L & 1980' F W L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: K ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3558' STATUS: Producer
 KB: 3568' API NO: 30-025-04657
 DF: _____ CHEVNO: FA 5798:01

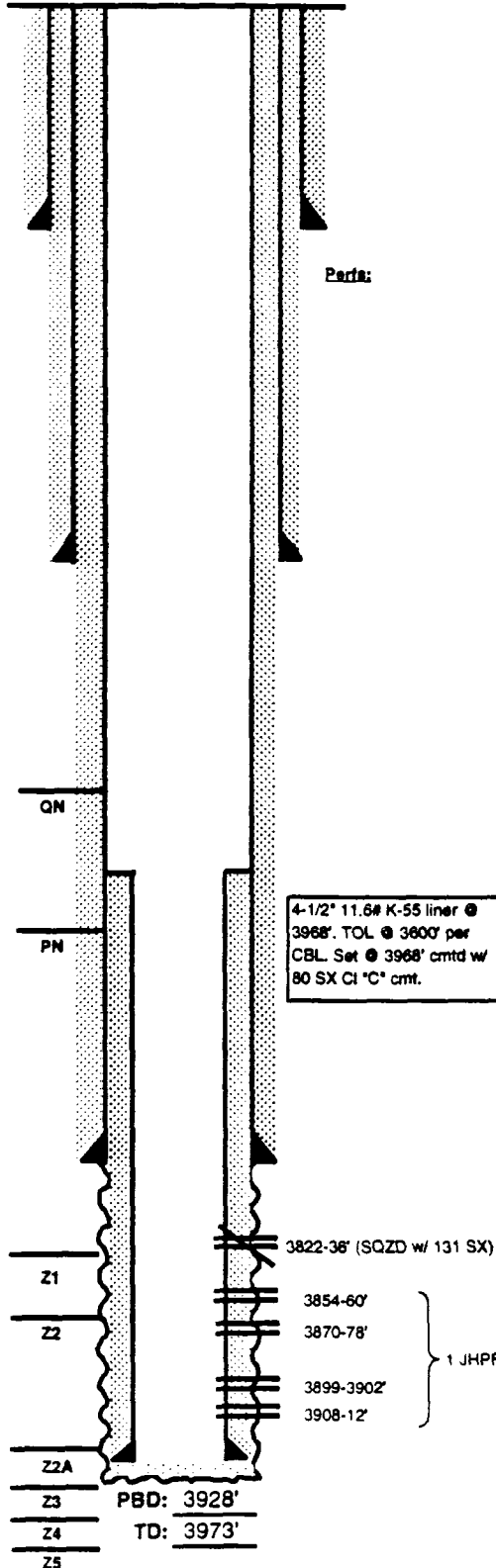
12-1/2" OD
 CSG
 Set @ 230' W/ 150 SX
 Cmt circ.? No
 TOC @ surf. by calc.
 (14-3/4" hole)

Tubing Detail: 12/24/88
 Original KBTH: 10.00'
 108 Jts. 2-7/8" J-55 8.5# EUE 8rd
 lbg: 3415.72'
 2-1/2" API Std SN 8rd: 1.10'
 XO: 2-7/8" 8rd X 2-3/8" RFC-8 FJ: 2.10'
 18 Jts. 2-3/8" 4.7# J-55 RFC-8: 477.20'
 Landed @: 3906.12'

9-5/8" OD
 36# CSG 8rd
 Set @ 1161' W/ 400 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (10-3/4" hole)

Rod Detail: 12/24/88
 1-1/4" X 22' coated Polished Rod
 2' X 3/4" HS
 83 - 25' X 3/4" Gr KD Rods (steel)
 52 - 25' X 7/8" Rods (steel)
 2-1/2" X 1-3/4" X 16 X 16 X 20 RHBC
 w/ 12' X 1-1/4" GA

7" OD
 24# CSG 10rd
 Set @ 3709' W/ 275 SX
 Cmt circ.? No
 TOC @ 2019' by calc.
 (8-3/4" hole)



Date Completed: 10/1/1936
 Initial Production: F 990 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3709' to 3867' GOR 1554

Completion Data
 None Available.

Subsequent Workover or Reconditioning:
 4/45 ACDZ OH 500 gals. PB to 3848'.
 6/60 SS OH & ACDZ w/ 1000 gals.
 4/64 SS OH & ACDZ w/ 1500 gals.
 10/71 Temporarily Abandoned.
 5/85 CO fill 3839-3867'. SQZD csg leak 3508-3665' w/ 45 SX. ACDZ OH w/ 3500 gals 15% HCl. ISIP - 300#. Swb 8 hrs. Chem sqzd. Install PU. A/W 12 BO / 208 BW / 31 MCF. GOR 2583. B/4 - SI.
 9/88 CO w/ air 3847-55'. Deepen w/ 6-1/8" bit to 3973' (logger TD). Log w/ GR, CCL, CNL. RIH w/ PE. A/W - 15 BO / 371 BW / 63 MCF. GOR 4200. B/4 - 8 BO/ 220 BW.
 12/88 POH w/ PE. Ran 4-1/2" liner to 3968'. TOL @ 3446'. CMTD w/ 80 SX. Tagged TOL @ 3446' (no cmt). Test to 500 psig - OK. DOC 3924-3928'. Ran GR, CCL, CBL to 3250'. Perf w/ 3-7/8" gun 3908-12', 3899-3902, 3870-75, 3854-60 (25 holes). ACDZ w/ 750 gals using PPI tool - 4 settings. Bottom two set comm. AVG: 1 BPM @ 2150 psi. Swb SFL - 1600 FS EFL - 2400 FS. Rec 2 BO/ 55 BW/ 12 runs. FeR 20 BPH. RTP. A/W - 5 BO/ 164 BW/ 15 MCF. GOR 3000. B/4 - 15 BO/ 371 BW/ 63 MCF. GOR 4200.
 6/89 Chemical treat.
 9/90 Chemical treat.
 10/14/90 Perfs 3822-36' (2 JHPF). ACDZ perfs 3822-36' w/ 1150 gals 15% NeFe HCl w/ 39 Bs. ISIP - 0. Swb SFL - 1600 FS, EFL - 2600 FS. FeR - 19.2 BPH. Rec 131 BW / trace oil. SQZD perfs 3822-36' w/ 131 SX cmt. DOC to 3928'. Reperf w/ 1 JHPF 3854-60, 3870-78. 3899-3902, 3908-12. Acdz w/ 1000 gals 15% NeFe w/ 39 Bs. ISIP - 400 psig. Swb SFL - 500' FS, EFL - 3400' FS. Rec'd 54 BW/ 10 runs. Run PE. TOTP. A/W - 0 BO/ 127 BW/ 1 MCFG. B/4 - 4 BO/ 241 BW/ 30 MCFG. GOR 7500.

Additional Data:
 T/Queen Formation @ 3412'
 T/Penrose Formation @ 3584'
 T/Grayburg Zone 1 @ 3764'
 T/Grayburg Zone 2 @ 3811'
 T/Grayburg Zone 2A @ 3882'
 T/Grayburg Zone 3 @ 3916'
 T/Grayburg Zone 4 @ 3960'
 T/Grayburg Zone 5 @ 4045'
 T/Grayburg Zone 6 @ 4095'
 T/San Andres Formation @ 4140'
 KB @ 3568'



WELL DATA SHEET

LEASE: EMSU WELL: 219
 LOC: 3222' F N L & 781' F W L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: L ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3554.5' STATUS: Producer
 KB: 3568' API NO: 30-025-30225
 DF: _____ CHEVNO: IK 4274:01

Date Completed: 7/1/1988
 Initial Production: 3 BOPD / 97 BWPD
 Initial Formation: Grayburg
 FROM: 3986' to 4038'

Completion Data

Perf 3996-98, 3946-48, 3938-40, 3916-18, 3909-11, 3898-3900, 3888-90' (2 JHPF). ACDZ w/ 5000 gals 15% NeFeA & 45 RCNBs.
 4/2/86 Swab perfs 3888-3996 // 2.5 hrs - 10 runs. Rec'd 48 BW/ 0 BO. SFL=1500' EFL=2100'. FeR 19 BPH

Subsequent Workover or Reconditioning:

7/88 Perf 3896-3906 &, 3924-34 (1 JHPF). ACDZ w/ 1000 gals 15% NeFe HCl w/ 30 Bs. ISIP - 300 psig. Swab 3924-34'. Rec'd 3 BO/ 154 BW/ 10 hrs. Swab 3896-3906; rec'd 8 BO/ 11 BW/ 9 hrs. Perf 3843-54, 3864-76 (1 JHPF). ACDZ w/ 1200 gals 15% NeFe HCl w/ 35 Bs. ISIP - vacuum. Selectively swab test SQZD 3843-76' w/ 250 SX cmt; DOC. Perf 3738-3754 (1 JHPF). ACDZ w/ 900 gals 15% NeFe HCl. ISIP - 150 psi. Swb test. Rec'd 5 BO/ 56 BW/ 5 hrs. SFL - 2000' EFL - 2800'. RIH w/ PE. TOTP.
 6/88 Chemical treat.

Additional Data:

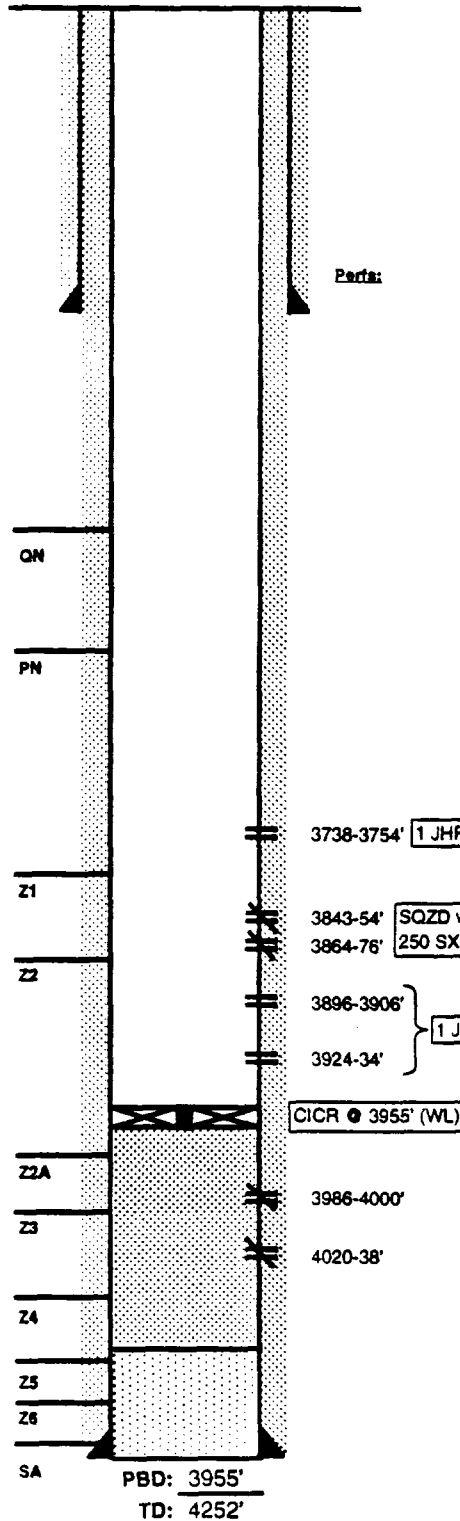
T/Queen Formation @ 3478'
 T/Penrose Formation @ 3653'
 T/Grayburg Zone 1 @ 3832'
 T/Grayburg Zone 2 @ 3879'
 T/Grayburg Zone 2A @ 3976'
 T/Grayburg Zone 3 @ 4008'
 T/Grayburg Zone 4 @ 4043'
 T/Grayburg Zone 5 @ 4133'
 T/Grayburg Zone 6 @ 4197'
 T/San Andres Formation @ 4247'
 KB @ 3568'

8-5/8" OD
 24# CSG 8rd K-55 ST&C
 Set @ 1263' W/ 700 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (12-1/4" hole)

Tubing Detail: 7/29/88
 Original KBTH: 13.00'
 116 Jts. 2-7/8" J-55 6.5# EUE 8rd
 tbg: 3807.67'
 5-1/2" TAC: 2.50'
 9 Jts. 2-7/8" J-55 6.5# EUE 8rd 277.39'
 2-7/8" SSN: 1.10'
 2-7/8" J-55 6.5# EUE 8rd Perf Sub: 4.00'
 2-7/8" J-55 6.5# EUE 8rd BPMAJ: 31.50'
 Landed @: 3905.66'

Rod Detail: 7/28/88
 1-3/4" X 22' Polished Rod
 2 - 7/8" X 4' KD Subs
 2 - 7/8" X 6' KD Subs
 54 - 7/8" X 25' KD Sucker Rods
 99 - 3/4" X 25' KD Sucker Rods
 1 - 3/4" X 2' Sub
 2-1/2" X 1-3/4" X 20' RHBC pump

5-1/2" OD
 15.5# CSG 8rd K-55 LT&C
 Set @ 4252' W/ 800 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (7-7/8" hole)





WELL DATA SHEET

LEASE: EMSU WELL: 220

FORM: Grayburg / San Andres DATE: _____

LOC: 3300' F S L & 600' F W L SEC: 6

GL: 3544' STATUS: Producer

TOWNSHIP: 21S CNTY: Lea

KB: 3554' API NO: 30-025-08705

RANGE: 36E UNIT: M ST: N.M.

DF: _____ CHEVNO: FA 9769:01

(formerly: State "F" #2)

12-1/2" OD
CSG
Set @ 232' W/ 150 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(14-3/4" hole)

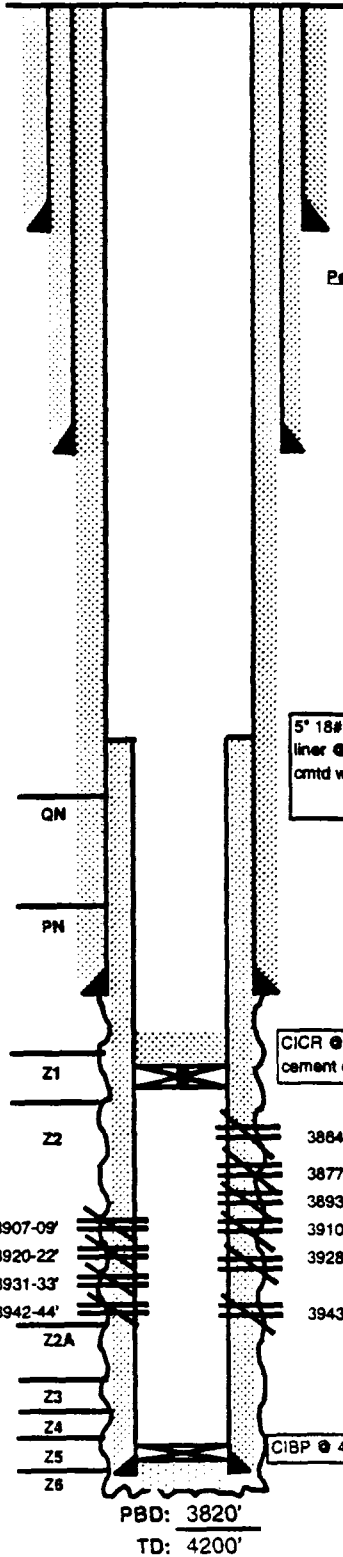
Tubing Detail: 4/17/88	
Original KBTH:	10.00'
97 Jts. 2-7/8" J-55 6.5# EUE 8rd	
lbg:	3052.98'
2-3/8" X 2-7/8" EUE 8rd XO sub:	0.78'
28 Jts. 2-3/8" J-55 4.7# EUE 8rd	
lbg:	859.44'
2-3/8" Handling Sub:	2.45'
Pump Barrel:	15.58'
2-3/8" API Seating Nipple:	0.58'
2-3/8" Perforated Sub:	3.97'
2-3/8" Mud Anchor Jt w/ BPOB:	28.50'
Landed @:	3974.28'

9-5/8" OD CSG
Set @ 1231' W/ 375 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(10-3/4" hole)

Rod Detail: 4/17/88	
1-1/4" X 24' Polished Rod w/ 1.5" liner	
2' X 7/8" Pony Rod	
6' X 7/8" Pony Rod	
8' X 7/8" Pony Rod	
2' X 3/4" HS	
54 - 25' X 7/8" Gr D Steel Rods	
101 - 25' X 3/4" Gr D Steel Rods	
3/4" X 2' Pony Rod	
2-3/8" X 1-3/4" X 18 X 18" Tubing pump	

7" OD
CSG 10rd
Set @ 3725' W/ 225 SX
Cmt circ.? No
TOC @ 2342' by calc.
(8-3/4" hole)

SQZD perms w/ 75 SX cmt.



Perfs:

5' 18# Atlas Bradford FL45 liner @ 4200'. TOL @ 3393' cmtd w/ 125 SX cmt.

CIRC @ 3850' w/ 30' cement on top

3884-66'
3877-79'
3893-95'
3910-12'
3928-30'
3943-45'

CIBP @ 4156'

PBD: 3820'
TD: 4200'

Date Completed: #####
Initial Production: 2280 BOPD / 0 BWPD
Initial Formation: Grayburg
FROM: 3725' to 3851' / GOR 1206

Completion Data
11/36 Natural completion.

Subsequent Workover or Reconditioning:
10/64 Temporarily Abandoned.
5/3/85 CO fill 3770-3790'. ACDZ OH 3725-3851' w/ 3500 gals 15% NeFe HCl w/ 1000# Bs. Swab test 5 BO/ 280 BW/ 10 hrs. Chem treat.
9/26/85 Well test - 0 BO/ 194 BW. TSTM mcfg.
10/85 Well shut-in.
2/86 Deepen to 4200'. Log w/ GR, CNL, LDT. Run 5" liner & set liner @ 4200'. Log 4185-3393' w/ CBL, CCL. Perf 3864-66, 3877-79, 3893-95, 3910-12, 3928-30 & 3943-45 (2 JHPF). ACDZ w/ 5200 gals 15% NeFe HCl. Chem sqz. RTP. Test: 320 BWPD/ 0 BOPD/ 10 MCFG.
3/86 Chemical treat.
4/9/86 320 BWPD / 0 BOPD / 8 MCFGPD.
4/14/86 Knock CIBP to 4156' to test lower perms. SQZD 3864-3945' w/ 150 SX cmt. Perf 3907-3944' (116 holes). ACDZ w/ 1000 gals 15% NeFe. Swb 6.5 hrs. Rec'd 7 BO/ 137 BW. SFL - 3300'. FFL - 2000'. RIH w/ PE.
2/90 Set CIRC @ 3850'. SQZD perms 3907-3944' w/ 75 SX cmt. Well TAd.

Additional Data:
T/Queen Formation @ 3436'
T/Penrose Formation @ 3627'
T/Grayburg Zone 1 @ 3804'
T/Grayburg Zone 2 @ 3854'
T/Grayburg Zone 2A @ 3956'
T/Grayburg Zone 3 @ 4007'
T/Grayburg Zone 4 @ 4046'
T/Grayburg Zone 5 @ 4129'
T/Grayburg Zone 6 @ 4180'
T/San Andres Formation @ 4225'
KB @ 3554'



WELL DATA SHEET

LEASE: EMSU WELL: 221WI
 LOC: 4620' F N L & 1980' F WL SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: _____ ST: N.M.
 formerly State 'F' #1

FORM: Grayburg / San Andres DATE: _____
 GL: 3560' STATUS: Injector
 KB: 3560' API NO: 30-025-08706
 DF: _____ CHEVNO: FA 9770:01

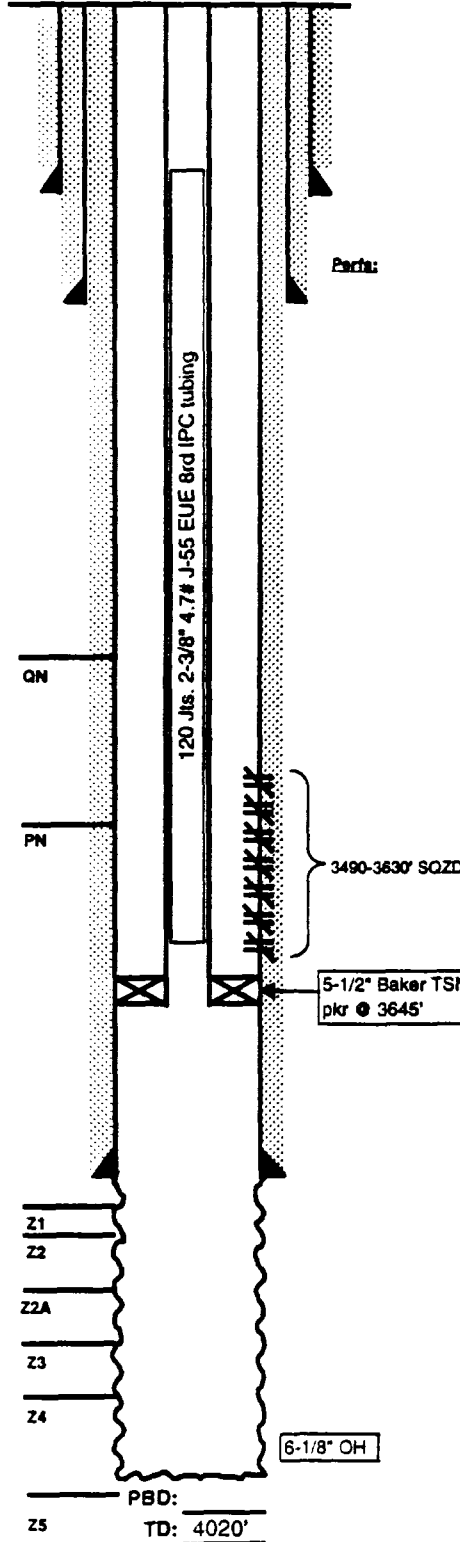
Date Completed: 8/30/1936
 Initial Production: 7 1544 BOPD / 0 BOPD / GOR 6046
 Initial Formation: Grayburg
 FROM: 3708' to 3860'

12-1/2" OD
CSG
 Set @ 232' W/ 150 SX
 Cmt circ.? yes
 TOC @ 63' by calc.
 (17-1/2" hole)

9-5/8" OD
36# CSG 8rd
 Set @ 1204' W/ 375 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (11-1/2" hole)

Tubing Detail: 2/28/88
 KBTH: 0.00'
 1 Jt. 2-3/8" 4.7# J-55 EUE IPC
 tbg w Short Upset: 31.16'
 119 Jts. 2-3/8" 4.7# J-55 EUE IPC
 tbg: 3838.82'
 Baker TSN-II ret. csg. pkr 5.94'
 Landed @ 3644.76'

7" OD
24# CSG 10rd
 Set @ 3708' W/ 250 SX
 Cmt circ.? no
 TOC @ 2171' by calc.
 (8-3/4" hole)



Completion Data

No information.

Subsequent Workover or Reconditioning:

7/45 PB to 3775' w/ plastic. ACDZ w/ 5000 gal acid.
 8/48 D/O plastic plug to 3815'.
 6/47 ACDZ w/ 500 gals 15% acid. A/W 50 BO @ 270 BW.
 10/11/60 SS OH. ACDZ w/ 1500 gals. A/W 5 BO/ 332 BW/ B/S - 3 BO/ 158 BWP.
 6/26/61 D/O to 3860'. ACDZ w/ 500 gals. A/W 2 BO/ 479 BW/ B/4 - 4 BO/ 294 BW
 4/2/62 Temporarily Abandoned.
 5/18/77 Frac perfs 3490-3630' w/ 40,000 gals foam and 1-1.75 #/gal sand (this work from previous diagram. unavailable in file).
 3/86 CO to 3863'. Test csg to 500 psi. Turn well over to unit. SQZD perfs 3490-3630'.
 2/88 CO WH. Deepen to 4020'. Log w/ GR, CCL, CNL, Cal. RIH w/ TSN pkr on 2-3/8" IPC tbg. Set pkr @ 3645'. PWOI: 720 BWP on vac.
 8/98 ACDZ w/ 6000 gals 15% Resiacol.

Additional Data:

T/Queen Formation @ 3333'
 T/Penrose Formation @ 3541'
 T/Grayburg Zone 1 @ 3726'
 T/Grayburg Zone 2 @ 3774'
 T/Grayburg Zone 2A @ 3863'
 T/Grayburg Zone 3 @ 3918'
 T/Grayburg Zone 4 @ 3960'
 T/Grayburg Zone 5 @ 4024'
 T/Grayburg Zone 6 @ 4080'
 T/San Andres Formation @ 4122'
 KB @ 3560'



WELL DATA SHEET

LEASE: EMSU WELL: 222
 LOC: 3300' F S L & 1980' F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: O ST: N.M.
 (formerly: H.T. Orcutt NCT-A #6)

FORM: Grayburg / San Andres DATE: _____
 GL: 3573' STATUS: Producer
 KB: 3573' API NO: 30-025-04531
 DP: _____ CHEVNO: FA 5673:01

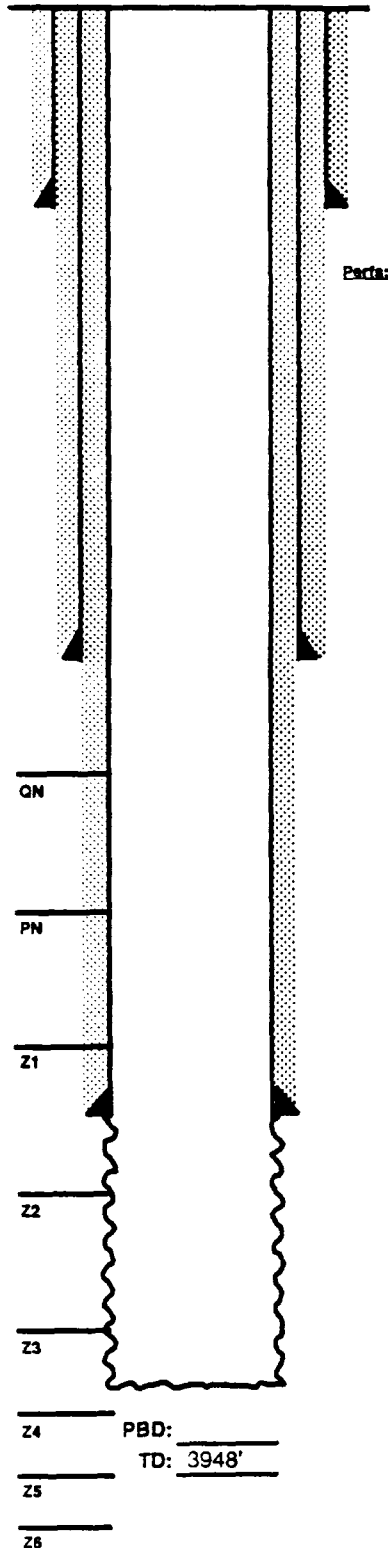
16" OD
70# CSG
 Set @ 34' W/ 30 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (17-1/2" hole)

Tubing & Rod Detail: 1/31/88	
Original KB to THF:	0.00'
4 Jts. 2-3/8" 4.7# J-55 EUE 8rd	
tbgt:	123.31'
2-3/8" 4.7# J-55 EUE 8rd tbgt:	31.28'
126 Jts. 2-3/8" 4.7# H-40 10V	
tbgt:	3738.59'
2-3/8" H-40 SN:	1.10'
2-3/8" H-40 Perf Sub:	4.00'
2-3/8" H-40 10V BPMA:	30.87'
Landed @	3929.15'

7-5/8" OD
22# CSG 8rd
 Set @ 1165' W/ 600 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (9-7/8" hole)

Rod Detail: 1/31/88	
1-1/4" X 16" Polished Rod	
3/4" X 8' SR	
3/4" X 8' SR	
102 - 3/4" KD SRs	
52 - 3/4" Grd D SRs	
3/4" X 2' Sub Rod	
2 X 1-1/2" X 12' RWTC Pump	

5-1/2" OD
17# CSG 10rd
 Set @ 3754' W/ 175 SX
 Cmt circ.? no
 TOC @ 2500' by calc.
 (4-3/4" hole)



Date Completed: #####
 Initial Production: 1/ 600 BOPD / 0 BHPD
 Initial Formation: Grayburg
 FROM: 3767' to 3873' / GOR 6420

Completion Data
 11/12/36 ACDZ w/ 2000 gals. acid.

Subsequent Workover or Reconditioning:
 8/15/56 Install ppg. equipment.
 4/25/74 ACDZ w/ 750 gals. A/W - 56 BO/ 6 BW. B/4 - 39 BO / 3 BHPD.
 7/8/81 ACDZ w/ 750 gals.
 1/88 Pulled PE. CO to 3873'. Deepen to 3948'. Log w/ GR, CCL, CNL, caliper. Ran PE. A/W - 3 BO/ 132 BW/ GOR 7666. B/4 - 5 BO/ 30 BW/ GOR 600.

Additional Data:
 T/Queen Formation @ 3380'
 T/Penrose Formation @ 3535'
 T/Grayburg Zone 1 @ 3730'
 T/Grayburg Zone 2 @ 3805'
 T/Grayburg Zone 3 @ 3919'
 T/Grayburg Zone 4 @ 3963'
 T/Grayburg Zone 5 @ 4026'
 T/Grayburg Zone 6 @ 4090'
 T/San Andres Formation @ 4119'
 KB @ 3573'



WELL DATA SHEET

LEASE: EMSU WELL: 223WIC
 LOC: 3300' F S L & 660' F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: P ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3592' STATUS: Injector
 KB: 3592' API NO: 30-025-04530
 DP: _____ CHEVNO: FA 5672:01

formerly H.T. Orcutt /NCT-A/ #4

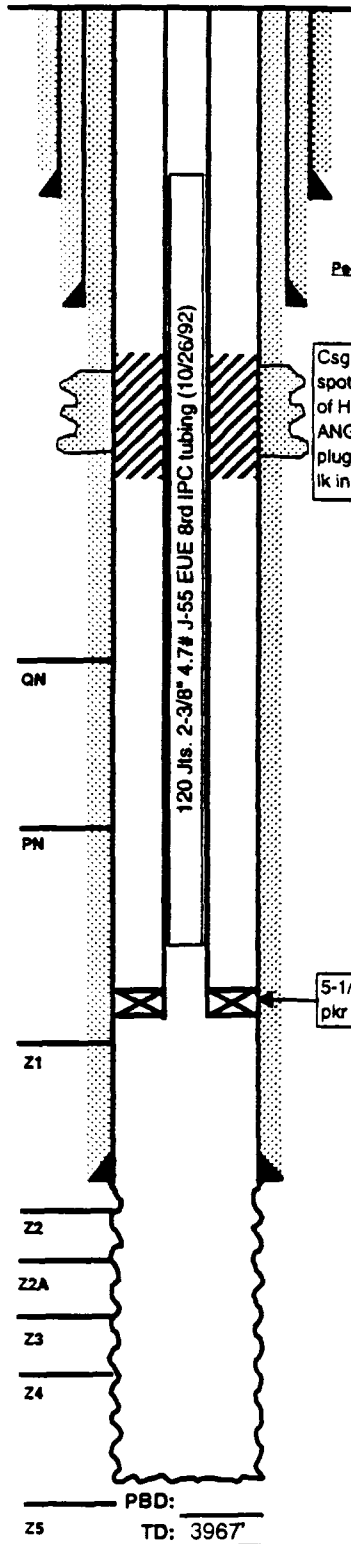
Date Completed: 6/27/1936
 Initial Production: 1/ 300 BOPD / 0 BOPD / GOR 2333
 Initial Formation: Grayburg
 FROM: 3738' to 3902'

10-3/4" OD
 32# CSG
 Set @ 350' W/ 250 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (13-3/4" hole)

7-5/8" OD
 26# CSG 8rd
 Set @ 1205' W/ 300 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (9-7/8" hole)

Tubing Detail: 10/26/92	
KBTH:	6.50'
120 Jts. 2-3/8" 4.7# J-55 EUE IPC	
tbg:	3680.85'
Guiberson XL O/O w/ 1.78	1.98'
Baker TSN -2 w/ 34,000 Shear	
	5.40'
Baker Pump Out Plug	0.50'
Landed @	3695.21'

5-1/2" OD
 17# CSG 10rd
 Set @ 3738' W/ 300 SX
 Cmt circ.? no
 TOC @ 419' by calc.



Csg lk @ 2079-2143' spot 10-12 BBL plug of Halliburton ANGARD (gel plugging mat'l) across lk in tbg/csg annulus.

Completion Data
 ACDZ w/ 1000 gals 14% Dowell X chased w/ 15 BO. ACDZ w/ 3000 gals 14% Dowell X chased w/ 25 BO.

Subsequent Workover or Reconditioning:
 10/55 Install pumping equip. 17 BO/10 BW
 2/64 ACDZ w/ 500 gals 15% NaFe acid.
 4/74 Acid scale treat w/ 1000 gals 15% NEA.
 6/87 Deepen to 3967'. Run OH logs; convert to injection. Dug up cellar & repipe csg valve to surface. Put on inj. @ 720 BWIPD @ 0 psig.
 10/92 Found casing lk @ 2079-2143'. GHII, tag fill @ 3934'. CO to TD. ACDZ OH w/ 3000 gal 15% NaFeA. GIH & set 5-1/2" Baker TSN pkr @ 3689'. RU Halliburton & pump 50 bbls pkr fluid, then 10-12 bbls of ANGARD (GEL SQUEEZETYPE MAT'L). Displace w/ 30.5 bbls pkr fluid. Test ann. to 480 psi. Lost dn to 440 psi in 30 mins. RTI. Tst: 576 BWIPD @ 40 psig.
 10/94 ACDZ w/ 4500 gals 15% NaFe HCl w/ Pentol 100 system. A - 1697 BWIPD @ 145 psi B - 504 BWIPD @ 650 psi.
 1/28/98 Coiled tbg unit to ACDZ OH w/ 2660 gals 15% 90/10 Resisol II w/ 70Q foamed 10# brine down the annulus. TOTPS for inj.

Additional Data:
 T/Queen Formation @ 3362'
 T/Penrose Formation @ 3514'
 T/Grayburg Zone 1 @ 3699'
 T/Grayburg Zone 2 @ 3752'
 T/Grayburg Zone 2A @ 3810'
 T/Grayburg Zone 3 @ 3870'
 T/Grayburg Zone 4 @ 3915'
 T/Grayburg Zone 5 @ 3988'
 T/Grayburg Zone 6 @ 4040'
 T/San Andres Formation @ 4074'
 KB @ 3592'



WELL DATA SHEET

LEASE: EMSU WELL: 246
 LOC: 1980' F S L & 660' F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: Q ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3576' STATUS: Producer
 KB: 3576' API NO: 30-025-04527
 DF: _____ CHEVNO: FA 5669:01

10-3/4" OD
40# CSG
 Set @ 350' W/ 250 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (13-3/4" hole)

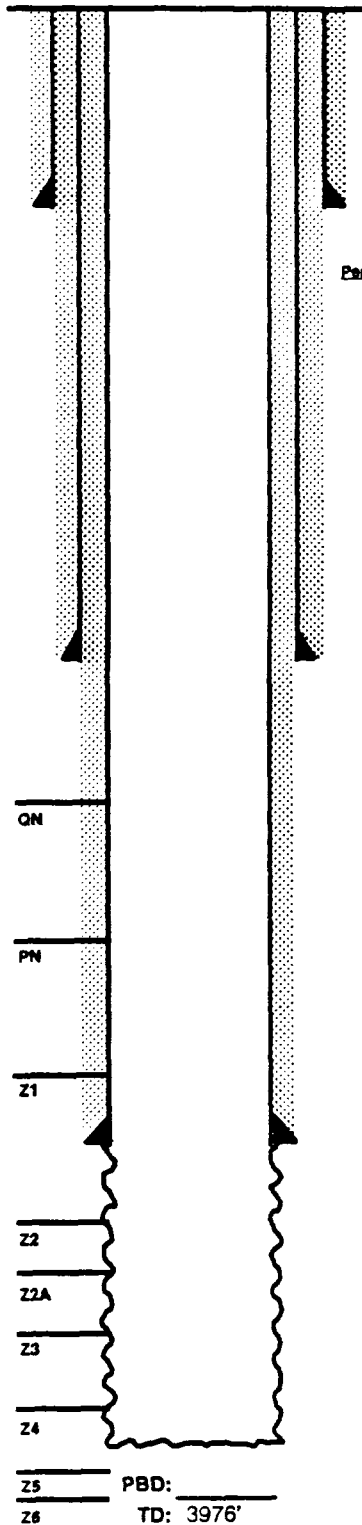
Tubing & Rod Detail: 8/7/96
 Original KB to THF: 6.50'
 113 Jts. 2-7/8" 6.5# J-55 EUE 8rd
 tbg: 3545.79'
 5-1/2" X 2-7/8" TAC: 2.75'
 11 Jts. 2-7/8" 6.5# J-55 EUE 8rd
 tbg: 345.86'
 Pump Barrel 25.20'
 2-7/8" Slotted Mud Anchor: 16.20'
 Landed @ 3926.10'

7-5/8" OD
26# CSG 8rd
 Set @ 1211' W/ 300 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (9-7/8" hole)

Rod Detail: 8/7/96
 Polished Rod
 7/8" X 4' Pony Rod
 7/8" X 8' Pony Rod
 156 - 7/8" Norris-97 Rods
 3/4" X 2' Pony Rod
 2-1/4" X 4' Plunger

5-1/2" OD
17# CSG 10rd
 Set @ 3752' W/ 300 SX
 Cmt circ.? no
 TOC @ 433' by calc.
 (6-3/4" hole)

4-3/4" Open Hole



Date Completed: 1/15/1936
 Initial Production: 1/ 187 BOPD / 0 BOPD
 Initial Formation: Grayburg
 FROM: 3752' to 3885' / GOR 1070

Completion Data
 ACDZ OH w/ 2000 gals 60% HCl solution, then 3000 gals 60% HCl solution.

Subsequent Workover or Reconditioning:
 3/53 Install ppg. equipment. Tst: 141 BO/ 0 BW / GOR 289. B/4 - 75 BO/ 0 BW.
 8/71 Dump acid 500 gals dbl inhib 15% NeA. Tst 107 BO/ 2 BW. B/4 - 58 BO/ 2 BOPD.
 1/88 CO & deepened to 3976'. Test: 26 BO/ 0 BW / 16 MCFG. B/4 test: 60 BO/ 19 BW / 10 MCFG.
 8/89 Chemical squeezed.
 4/91 Upsize pumping equipment. Test - 95 BO/ 132 BW/ 16 MCFGPD. FL = SN. B/4 - 77 BO/ 1 MCFGPD. FL = 471' ASN.
 8/96 ACDZ OH w/ 7500 gals resisol II in 4 stages. Swb. RTP.

Additional Data:
 T/Queen Formation @ 3390'
 T/Penrose Formation @ 3538'
 T/Grayburg Zone 1 @ 3726'
 T/Grayburg Zone 2 @ 3778'
 T/Grayburg Zone 2A @ 3848'
 T/Grayburg Zone 3 @ 3905'
 T/Grayburg Zone 4 @ 3955'
 T/Grayburg Zone 5 @ 4028'
 T/Grayburg Zone 6 @ 4096'
 T/San Andres Formation @ 4131'
 KB @ 3576'



WELL DATA SHEET

LEASE: EMSU WELL: 247WI
 LOC: 1980' F S L & 2120' F E L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: R ST: N.M.

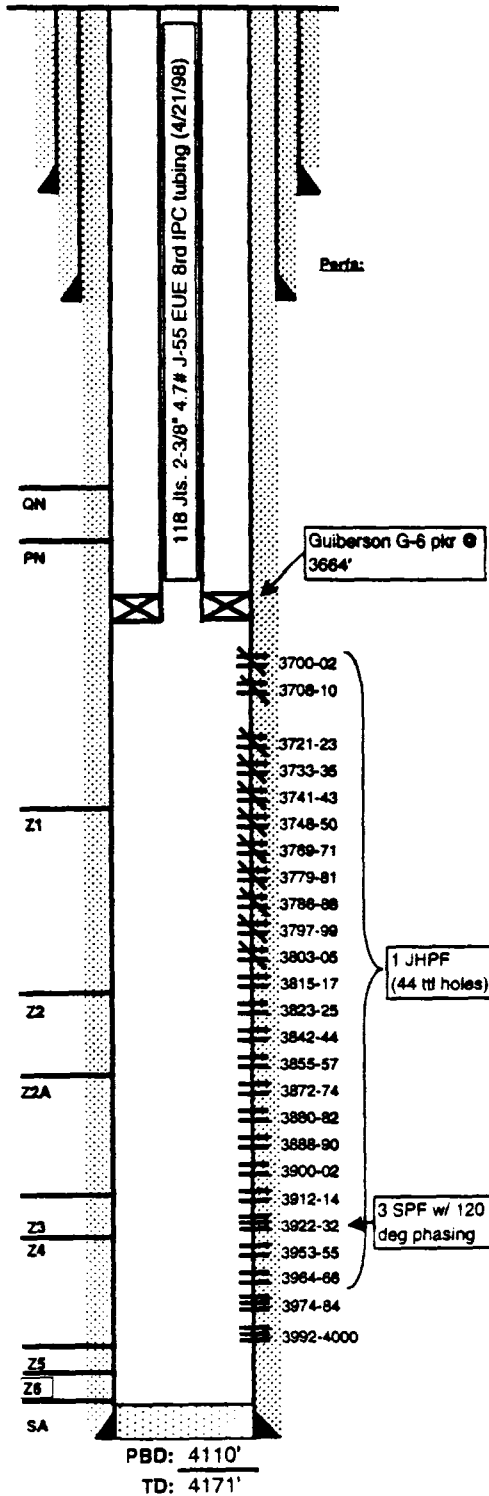
FORM: Grayburg / San Andres DATE: _____
 GL: 3574' STATUS: Injector
 KB: 3587' API NO: 30-025-29575
 DP: _____ 13' CHEVNO: FV 7057:01

Date Completed: #####
 Initial Production: 12 BOPD / 135 BWPD / GOR 1333
 Initial Formation: Grayburg
 FROM: 3700' to 3966'

11-3/4" OD
 42# CSG
 Set @ 348' w/ 325 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (14-3/4" hole)

8-5/8" OD
 24# CSG
 Set @ 2632' w/ 625 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (11" hole)

Tubing Detail: 4/21/98	
KBTH:	13.00'
118 Jts. 2-3/8" 4.7# J-55 EUE IPC	
tbq:	3566.50'
XL O/O Tool w/ 1.781 "F" Nipple	
	1.87'
Guiberson G-6 Packer	3.74'
1 WL Re-Entry Guide	0.55'
Landed @	3668.87'



Completion Data
 12/86 Perf 3953-55 & 3964-66 (1 JHPF). ACDZ w/ 600 gals 15% NeFe HCl.
 Perf 3700-02, 3708-10, 3721-23, 3733-35, 3741-43, 3748-50, 3769-71, 3779-81, 3786-88, 3797-99, 3803-05, 3815-17, 3823-25, 3842-44, 3855-57, 3872-74, 3880-82, 3888-90, 3900-02 & 3912-14 (1 JHPF/40 total holes). ACDZ w/ 3500 gal 15% NeFe HCl.

Subsequent Workover or Reconditioning:
 12/87 Put on injection: 720 BWIPD @ 0 psig.
 5/94 ACDZ w/ 5000 gals 15% NeFe / Unisol mix.
 A - 1490 BWIPD @ 0 psi B - 360 BWIPD @ 552 psi
 1/27/97 POOH w/ pkr. Tag @ 3983. Dump 2600# frac sand.
 1/28/97 Tag @ 3683. Clean out sand to 3810'.
 1/29/97 Set CIBC @ 3630'. M&P 125 SX Cl C + additives. SQZD 97 SX in form. Drill cmt & CIBC to 3809'. Circ. hole clean. SFL @ surf. EFL @ 1200'. CO sand & scale to 4110'.
 2/3/97 ACDZ w/ 1500 gals Resisol II @ 3815-3966'.
 2/4/97 RIH w/ pkr. set @ 3677 (118 jts 2-3/8" IPC tbq). TOTP.
 4/13/98 Perf 3982-4000, 3974-84 & 3922-32 (3 SPF). ACDZ OH w/ 2500 gals 15% 90/10 Resisol II and N2. Dump 4500# 20/40 sand. Wash sd to 3798', circ. clean. Set CIBP @ 3794', ACDZ w/ 1000 gals 15% 90/10 HCl. Set CIBC @ 3636', M&P 200 SX Cl C and SQZD 31 SX in form. D/O CIBC. cmt & CIBP to 3794'. Wash sd to 4110'. Set pkr @ 3664'. Run MIT. RTI 4/21/98.

Additional Data:
 T/Queen Formation @ 3404'
 T/Penrose Formation @ 3558'
 T/Grayburg Zone 1 @ 3747'
 T/Grayburg Zone 2 @ 3809'
 T/Grayburg Zone 2A @ 3868'
 T/Grayburg Zone 3 @ 3911'
 T/Grayburg Zone 4 @ 3941'
 T/Grayburg Zone 5 @ 4009'
 T/Grayburg Zone 6 @ 4047'
 T/San Andres Formation @ 4079'
 KB @ 3587'

5-1/2" OD
 15.5# CSG
 Set @ 4155' w/ 525 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (7-7/8" hole)

FILE: EMSU247WB.XLS



WELL DATA SHEET

LEASE: EMSU WELL: 248

FORM: Grayburg / San Andres DATE: _____

LOC: 1980' F S L & 1822' F W L SEC: 6

GL: 3567' STATUS: Producer

TOWNSHIP: 21S CNTY: Lea

KB: 3578' API NO: 30-025-04521

RANGE: 36E UNIT: S ST: N.M.

DF: _____ CHEVNO: FA 5663:01

(formerly: State "K" Co NCT-A #6)

Date Completed: 7/2/1936

Initial Production: 1/ 528 BOPD / 0 BWPD

Initial Formation: Grayburg

FROM: 3773' to 3867' / GOR 1335

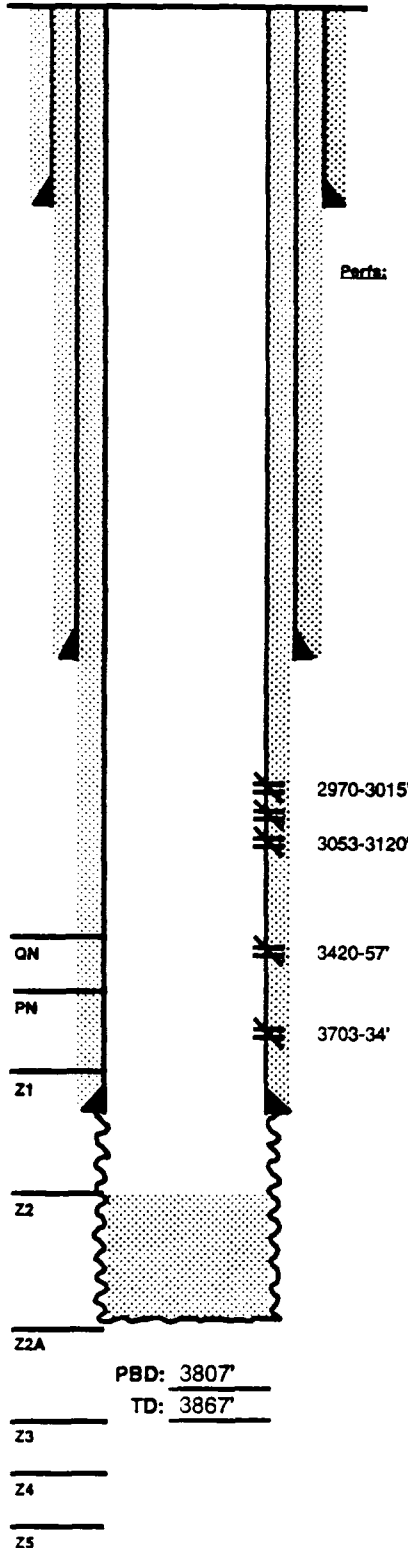
12-1/2" OD
 CSG
 Set @ 281' W/ 200 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (16" hole)

Tubing & Rod Detail:
 Original KB to THF:
 NO DETAIL GIVEN
 Landed @

8-5/8" OD
 32# CSG 10rd
 Set @ 1388' W/ 800 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (11-3/4" hole)

Rod Detail:
 NO DETAIL GIVEN

5-1/2" OD
 17# CSG 10rd
 Set @ 3770' W/ 800 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (7-7/8" hole)



Completion Data

None - natural completion.

Subsequent Workover or Reconditioning:

9/48 Perf 5-1/2" csg 3703-3734'. ACDZ 3703-33' w/ 500 gals 20% acid. ACDZ 3776-3735' w/ 500 gals 20% acid (refer to previous WB diagram).
 9/10/40 PB to 3846' w/ 3 SX cement.
 6/47 PB to 3807'.
 10/8/51 PB to 3625' & perf 2970-3015' and 3053-3120'.
 1/20/70 ACDZ perms w/ 1500 gals 28% acid.
 4/30/74 Perf 3420-57' & ACDZ w/ 2000 gals. FRAC 3420-3457' w/ 11,500 gals Gel brine & 11,000# sand.
 7/87 SQZD perms 2970-3120, 3703-34 & 3420-57. D/O to 3867'. Test csg to 550 psi / 30 min - OK.
 10/28/88 Chemical squeeze.
 6/7/89 Chemical squeeze.
 3/14/90 Chemical squeeze.

Additional Data:

T/Queen Formation @ 3420'
 T/Penrose Formation @ 3575'
 T/Grayburg Zone 1 @ 3755'
 T/Grayburg Zone 2 @ 3819'
 T/Grayburg Zone 2A @ 3868'
 T/Grayburg Zone 3 @ 3928'
 T/Grayburg Zone 4 @ 3958'
 T/Grayburg Zone 5 @ 4046'
 T/Grayburg Zone 6 @ 4107'
 T/San Andres Formation @ 4151'
 KB @ 3578'



WELL DATA SHEET

LEASE: EMSU WELL: 249
 LOC: 1980' F S L & 660' F W L SEC: 6
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: _____ ST: N.M.
 (formerly: State "196" #1)

FORM: Grayburg / San Andres DATE: _____
 GL: 3572' STATUS: Producer
 KB: 3580' API NO: 30-025-04525
 DP: _____ CHEVNO: FA 5667.01

Date Completed: 5/20/1936
 Initial Production: 1/ 1480 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3745' to 3360' / GOR 0

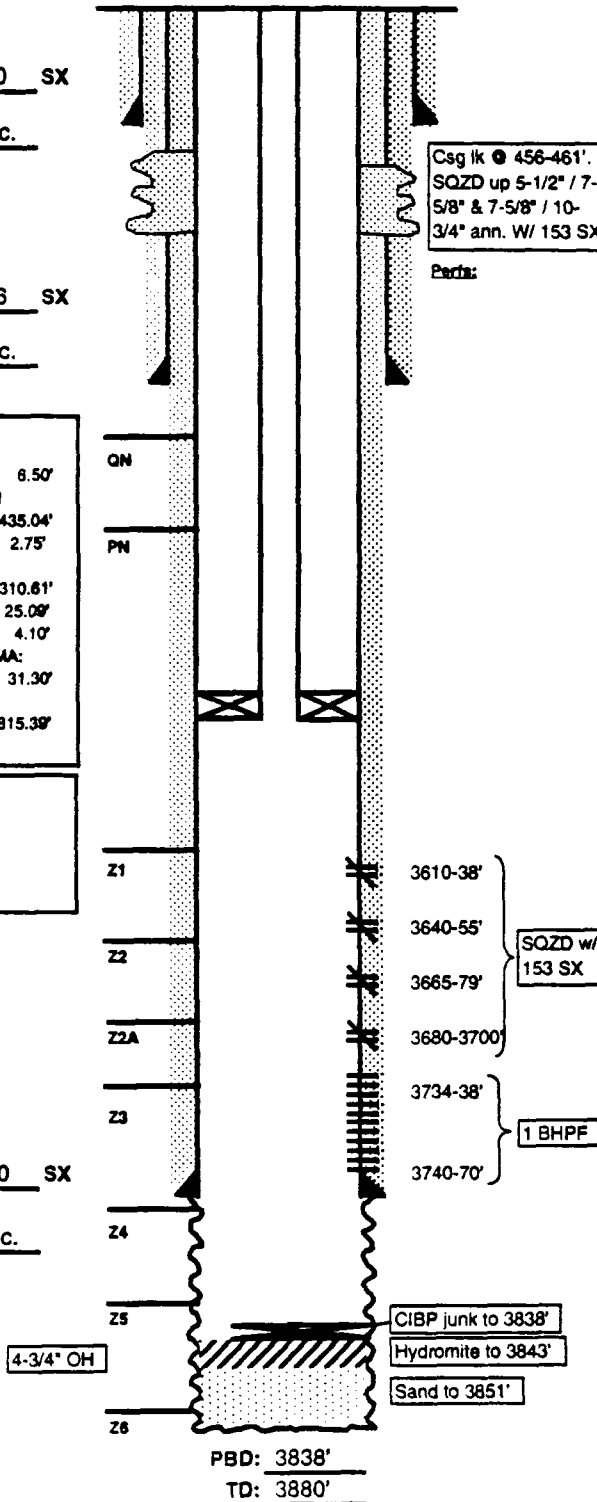
10-3/4" OD
 32# CSG
 Set @ 256' W/ 250 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

7-5/8" OD
 22# CSG
 Set @ 1304' W/ 206 SX
 Cmt circ.? No
 TOC @ 418' by calc.
 (9-7/8" hole)

Tubing Detail: 12/31/97	
Original KB to THF:	6.50'
111 Jts. 2-7/8" J-55 6.5# EUE Brd	
lbg:	3435.04'
2-7/8" X 5-1/2" TAC:	2.75'
10 Jts. 2-7/8" J-55 6.5# EUE Brd	
lbg:	310.61'
2-1/2" X 2-1/4" Pump Barrel:	25.09'
2-7/8" Perf Sub:	4.10'
2-7/8" 6.5# EUE Brd J-55 lbg BPMA:	31.30'
Landed @	3815.39'

Rod Detail:
 NO DETAIL GIVEN

5-1/2" OD
 17# CSG
 Set @ 3773' W/ 200 SX
 Cmt circ.? No
 TOC @ 1560' by calc.
 (6-3/4" hole)



Completion Data

Natural OH completion.

Subsequent Workover or Reconditioning:

9/40 Perf 3610-38, 3640-55, 3665-79, 3680-3700, 3734-38 & 3740-70 w/ 1BHPF. Put to flwg. Tst: 1/105 BO & 10 BWPD. GOR = +/- 475.
 4/49 Installed closed gas lift system. Tst 1/ 30 BO/ 25 BWPD.
 5/53 Install ppg equip. Tst: 54 BO/7 BW/ 72 MCFPD. GOR = 1339
 11/58 Set pkr @ 3724'. Swb dry. Acdz 3734-70' & OH w/ 2000 gal 15%. Well flwd 70 BW/0 BO/6 hrs. Set OH pkr @ 3854'. Swb 108 BW/ 0 BO. FL=2800'. POH. Put well on prod. Tst: 69 BO/201 BW/214 mcfpd.
 2/73 Dump acid 750 gal 15% NeA. Tst: 20 Bo/155 BWPD. B/4 - 14 BO/75 BW. Scale sqzd - 9/73, 3/74, 7/74, 1/76, 7/79, 10/80, 2/81, 8/81, 2/82, 10/82, 1/84, 12/85 - Tag @ 3871'. CO to 3880'. Ran Logs. XO WH. Return well to prod. Tst = 16 BO/220 BW. FL @ 1200' ASN.
 12/26/85 Ran prod log. 70% fluid 1/ 3860-3846', 30% 1/ 3846-3820'.
 6/86 Tag @ 3876'. Dump sd 1/ 3876-3851'. Dump hydromite 1/ 3851-3843'. Set CIBP @ 3715'. Set cmt retrn @ 3430'. Could not est. rate into perfs. Acdz w/ 500 gal 15% NeFeA. Sqzd perfs w/ 153 SX (rev out 55 SX). Tst csg ok. While drtg cmt, comm. devel betw. 5-1/2"/7-5/8" & 10-3/4". Fnd csg lk @ 456-61'. Sqzd cmt dn 5-1/2" w/ 153 SX, circ out 7-5/8". Did not circ out 10-3/4". D/O - CO to CIBP @ 3709'. Tst csg ok. D/O, push CIBP to 3838'. Put well on prod. Tst NA.
 11/86 Install larger ppg unit. Tst: 30 BO/370 BW/32 MCFPD. FL @ 1627' ASN. B/4 - 15 BO/195 BW/10 mcf. FL @ 1914' ASN.
 12/86 Scale sqzd
 12/86 Install lrgr ppg equip. Tst: 57 BO/577 BW/46 mcfpd. FL = 1954' ASN. B/4 - 30 BO/400 BW/10 MCFGPD.
 8/88 Scale sqzd.
 4/8/96 15 BOPD/ 341 BWPD/ 6 MCFPD. FL @ 3781'. P depth 3781'.
 12/29/97 CO and ACDZ perfs 3734-70' & OH 3773-3838' w/ 2500 gals Resisol II w/ additives (70Q).

Additional Data:

T/Queen Formation @ 3300'
 T/Penrose Formation @ 3431'
 T/Grayburg Zone 1 @ 3608'
 T/Grayburg Zone 2 @ 3644'
 T/Grayburg Zone 2A @ 3674'
 T/Grayburg Zone 3 @ 3700'
 T/Grayburg Zone 4 @ 3737'
 T/Grayburg Zone 5 @ 3789'
 T/Grayburg Zone 6 @ 3845'
 T/San Andres Formation @ 4301'
 KB @ 3580'



WELL DATA SHEET

LEASE: EMSU WELL: 250

FORM: Grayburg / San Andres DATE: _____

LOC: 660' F S L & 581' F W L SEC: 6

GL: 3585' STATUS: Producer

TOWNSHIP: 21S CNTY: Lea

KB: 3585' API NO: 30-025-04526

RANGE: 36E UNIT: U ST: N.M.

OP: _____ CHEVNO: FA 56680:01

(formerly: R.R. Bell NCT-D #2)

Date Completed: 12/12/36

Initial Production: F/ 804 BOPD

Initial Formation: Queen-Grayburg

FROM: 3774' to 3888' / GOR 1238

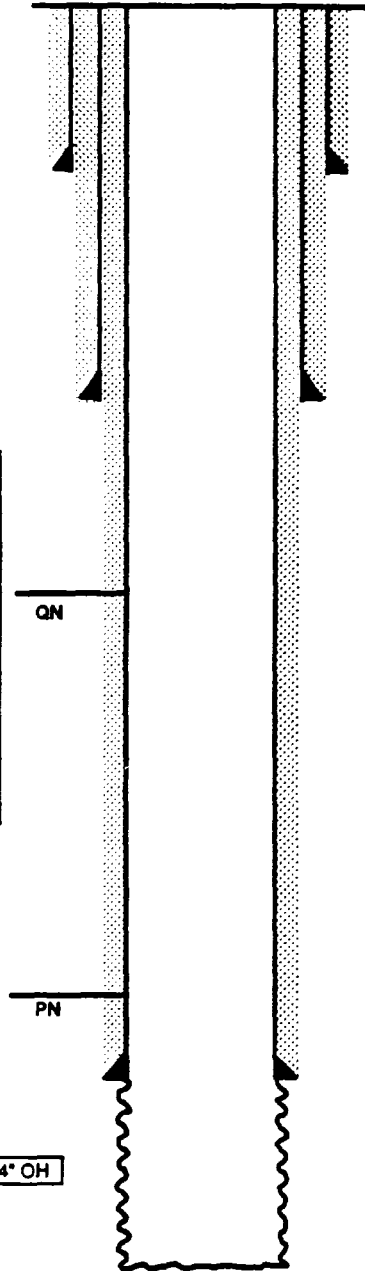
16" OD
70# CSG
Set @ 32' W/ 60 SX
Cmt circ.? Yes
TOC @ surf. by calc.

7-5/8" OD
22# CSG
Set @ 1320' W/ 500 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(9-7/8" hole)

Tubing Detail: 12/29/87
Original KBTH: 0.00'
Landed @:
Rod Detail:
NONE GIVEN

5-1/2" OD
17# CSG 10rd
Set @ 3774' W/ 150 SX
Cmt circ.? No
TOC @ 2114' by calc.
(6-3/4" hole)

4-3/4" OH



Z1

Z2

PBD: _____

TD: 3888'

Completion Data

ACDZ w/ 3000 gals 14% acid.

Subsequent Workover or Reconditioning:

10/44 Install gas lift.
5/8/53 Install pumping equipment.

Additional Data:

T/Queen Formation @ 3599'
T/Penrose Formation @ 3770'
T/Grayburg Zone 1 @ 3940'
T/Grayburg Zone 2 @ 4003'
T/Grayburg Zone 2A @ 4052'
T/Grayburg Zone 3 @ 4112'
T/Grayburg Zone 4 @ 4140'
T/Grayburg Zone 5 @ 4216'
T/Grayburg Zone 6 @ 4266'
T/San Andres @ 4306'
KB @ 3585'



WELL DATA SHEET

LEASE: EMSU **WELL:** 251WI
LOC: 660' F S L & 1980' F WL **SEC:** 6
TOWNSHIP: 21S **CNTY:** Lea
RANGE: 36E **UNIT:** V **ST:** N.M.
 (formerly: State "K" #1)

FORM: Grayburg / San Andres **DATE:** _____
GL: 3581' **STATUS:** Injector
KB: 3578' **API NO:** 30-025-04520
DF: _____ **CHEVNO:** FA 5662:01

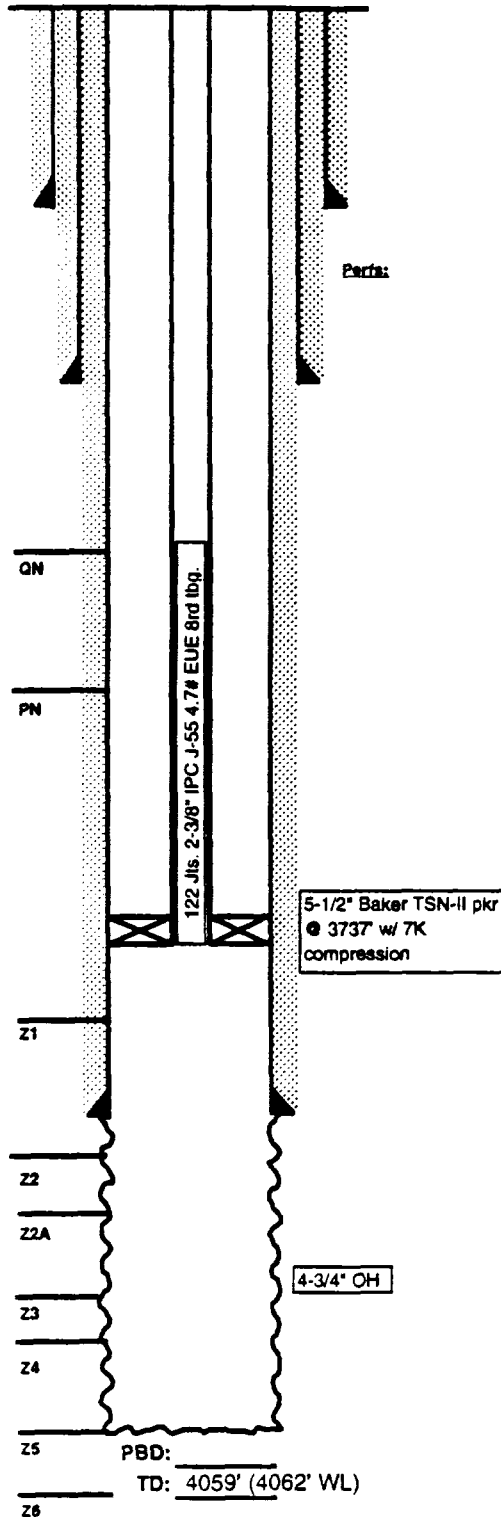
Date Completed: 5/20/1936
Initial Production: 1/ 1480 BOPD / 0 BOPD
Initial Formation: Grayburg
FROM: 3745' to 3860' / GOR 0

12-1/2" OD
CSG
Set @ 254' W/ 250 SX
Cmt circ.? Yes
TOC @ surf. by calc.
 (17-1/2" hole)

11" OD
32# CSG 10rd
Set @ 1390' W/ 720 SX
Cmt circ.? Yes
TOC @ surf. by calc.
 (11" hole)

Tubing Detail: 2/6/97	
Original KB to THF:	0.00'
1 Jt. 2-3/8" J-55 4.7# EUE 8rd IPC	
tbg:	31.24'
2 - 6" X 2-3/8" IPC Tbg Subc:	12.15'
2 - 4" X 2-3/8" IPC Tbg Subc:	8.20'
121 Jts. 2-3/8" J-55 4.7# EUE 8rd	
IPC tbg:	3679.65'
5-1/2" X 2-3/8" PC XL O/O Tool w/	
1.78" F" Nipple:	1.97'
5-1/2" X 2-3/8" GIV inj pkr 17-20#:	3.73'
2-3/8" Nicke plazed Pump Out	
plug:	0.55'
Landed @	3737.48'

5-1/2" OD
17# CSG 10rd
Set @ 3796' W/ 700 SX
Cmt circ.? Yes
TOC @ surf. by calc.
 (7-5/8" hole)



Completion Data

5/36 Natural completion.

Subsequent Workover or Reconditioning:

10/43 Acdz 3820-3886 w/ 600 gals 15% acid
 10/44 Acdz 3820-3886 w/ 300 gals 15% acid
 1/48 Acdz w/ 200 gals
 1/50 Acdz 3795-3842 w/ 500 gals 20% acid
 5/59 Well prmpg 28 BO/722 BW
 8/21/87 Tag fill @ 3871'. Deepen to 3910'. Log w/ CNL, GR, CCL, caliper. RIH w/ PE. RTP.
 2/88 Tag fill @ 3841'. Deepen to 4059'. Log w/ cal, CNL, GR, CCL. RIH w/ 5-1/2" Baker TSN-2 pkr on 123 jts 2-3/8" IPC J-55 4.7# EUE 8rd tbg to 3753'. Set pkr @ 3759' w/ 7K compression.
 1/30/97 TOH w/ pkr.
 1/31/97 Dump 5200# frac sand, tag 3865'.
 2/4/97 Set CICR @ 3697, cmt w/ 125 SX Class C.
 2/5/97 Tag cmt @ 3637, D/O cmt & CICR to 3850, void to 3852'. D/O cmt to 3865'. C/O sand to 4000'.
 2/6/97 C/O sand to 4059'. RIH w/ inj equipment to 3737'. TOTP.

Additional Data:

T/Queen Formation @ 3418'
 T/Penrose Formation @ 3584'
 T/Grayburg Zone 1 @ 3765'
 T/Grayburg Zone 2 @ 3832'
 T/Grayburg Zone 2A @ 3885'
 T/Grayburg Zone 3 @ 3948'
 T/Grayburg Zone 4 @ 3977'
 T/Grayburg Zone 5 @ 4059'
 T/Grayburg Zone 6 @ 4120'
 T/San Andres Formation @ 4165'
 KB @ 3590'



WELL DATA SHEET

LEASE: EMSU **WELL:** 252
LOC: 660' F S L & 1980' F E L **SEC:** 6
TOWNSHIP: 21S **CNTY:** Lea
RANGE: 36E **UNIT:** W **ST:** N.M.
 (formerly: Graham State "NCT-E" #1)

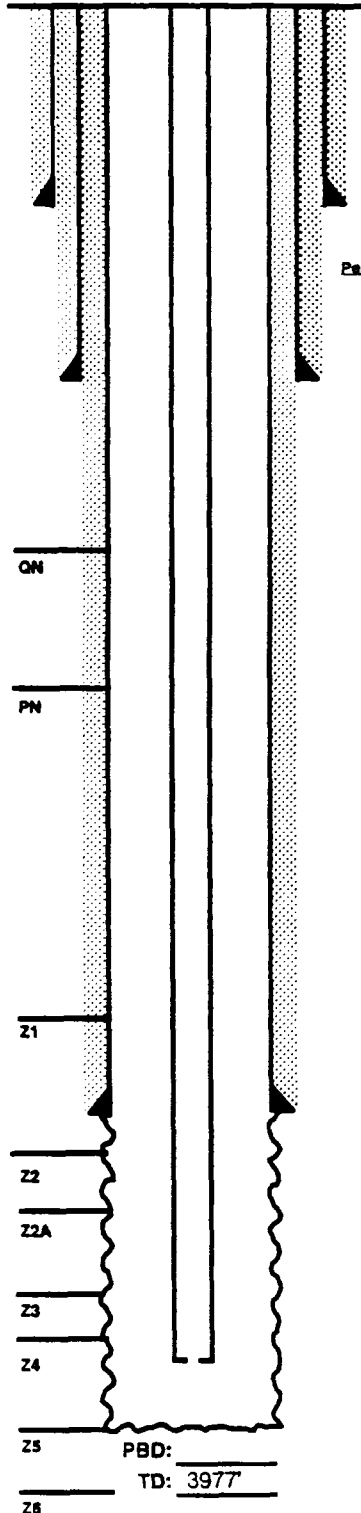
FORM: Grayburg / San Andres **DATE:** _____
GL: 3588' **STATUS:** Producer
KB: 3588' **API NO:** 30-025-04528
DF: _____ **CHEVNO:** FA 5670:01

10-3/4" OD
 40# CSG
 Set @ 321' W/ 250 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

7-5/8" OD
 26# CSG 8rd
 Set @ 1267' W/ 250 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 8/30/93	
Original KB to THF:	6.50'
117 Jts. 2-7/8" J-55 6.5# EUE tbg:	3813.90'
5-1/2" X 2-7/8" TAC:	2.85'
9 Jt. 2-7/8" EUE J-55 6.6# tbg:	278.88'
2-7/8" EUE IPC 6.5# tbg:	31.00'
Seating Nipple:	1.10'
2-7/8" Perf Sub:	3.86'
Mud Jt. w/ BPOB:	30.84'
Landed @	3969.02'
Rod Detail: 8/30/93	
78 - 7/8" KD Rods	
78 - 3/4" KD Rods	
2-1/2" X 2" X 20' Pump	
No Subs	

5-1/2" OD
 17# CSG 10rd
 Set @ 3758' W/ 300 SX
 Cmt circ.? No
 TOC @ 450' by calc.



Date Completed: 3/19/1936
Initial Production: 1/ 484 BOPD / 0 BWPD
Initial Formation: Grayburg
FROM: 3769' to 3890' / GOR 2446

Completion Data

ACDZ w/ 1000 gals Dowell X solution.

Subsequent Workover or Reconditioning:

4/46 Install Flow valve in the Tst 136 Bo/10 Bw
 7/50 Tbg stuck. Aczd w/ 500 gal. Tst 24 Bo/80 BWPD.
 6/53 Install Ppg Equip. Tst 67 Bo/8 BWPD.
 2/54 Between period & int. csg string 15# Continuous weak blow of ga. Checked 1 hour later & no blow. Continued no leak.
 2/66 Over 500. Acid 15% NeFeA in csg. Test 13 Bo/41 BWPD B14 tst 12 Bo/13 BWPD.
 5/74 Trtd OH w/ 4000 gal 15% NeFeA in 4 stgs w/ BAF's GRs as diverter. Test 12 Bo/50 BWPD. B/4 tst 1 Bo/33 BWPD.
 9/81 Pump stuck. Pull tbg retrieve pump. Pump 750 gal. 15% DI HCL dn tbg. Scale and indicate current in pump. Test 5 Bo/40 Bw. B/4 tst 8 Bo/66 BWPD.
 2/82 Pump stuck. Freed pmp. Pump 1000 gal 15% NeFeA dn tbg. Test 6 Bo/55 BWPD. B/4 - 8 Bo/44 BWPD.
 4/84 Chem. sqzd OH.
 1/88 C/O WH. Tag btm @ 3874' (16' f.) Circ w/ foam comm to 7 5/8" int. csg. ind hole in 5 1/2 prod csg. C/O & deepened to 3977' Ran logs. Return well do prod. Test 14 Bo/181 Bw/46 mcfpd FL @ 183' asn. B/4 test 7 Bo/68 BW/2mcfpd.
 2/90 Chem sqzd OH. Fluid coming out int. csg when press on prod. string.
 8/93 Aczd OH w/ 6000 gal 15% NeFeA w/ 2? antisludging compound in 1st 1500 gal in 4 stgs w/ 2000 GRs. EFL @ 2200', Rcur 99 bbls...2% oil cut EFL @ 2100'. Rcur 64 bbls...2% oil cut, SN @ 3934'. Tst: B-2Bo/139 Bw/1 MCF, A-16 Bo/434 Bw/39 MCF.

Additional Data:

T/Queen Formation @ 3396'
 T/Penrose Formation @ 3550'
 T/Grayburg Zone 1 @ 3727'
 T/Grayburg Zone 2 @ 3801'
 T/Grayburg Zone 2A @ 3850'
 T/Grayburg Zone 3 @ 3914'
 T/Grayburg Zone 4 @ 3940'
 T/Grayburg Zone 5 @ 4010'
 T/Grayburg Zone 6 @ 4055'
 T/San Andres Formation @ 4124'
 KB @ 3588'



WELL DATA SHEET

LEASE: EMSU WELL: 253WIC

LOC: 660' F S L & 660' F E L SEC: 6

TOWNSHIP: 21S CNTY: Lea

RANGE: 36E UNIT: X ST: N.M.

FORM: Grayburg / San Andres DATE: _____

GL: 3586' STATUS: Injector

KB: 3586' API NO: 30-025-08702

DF: _____ CHEVNO: FA 9766:01

Date Completed: 12/7/1935

Initial Production: F/ 511 BOPD

Initial Formation: Grayburg

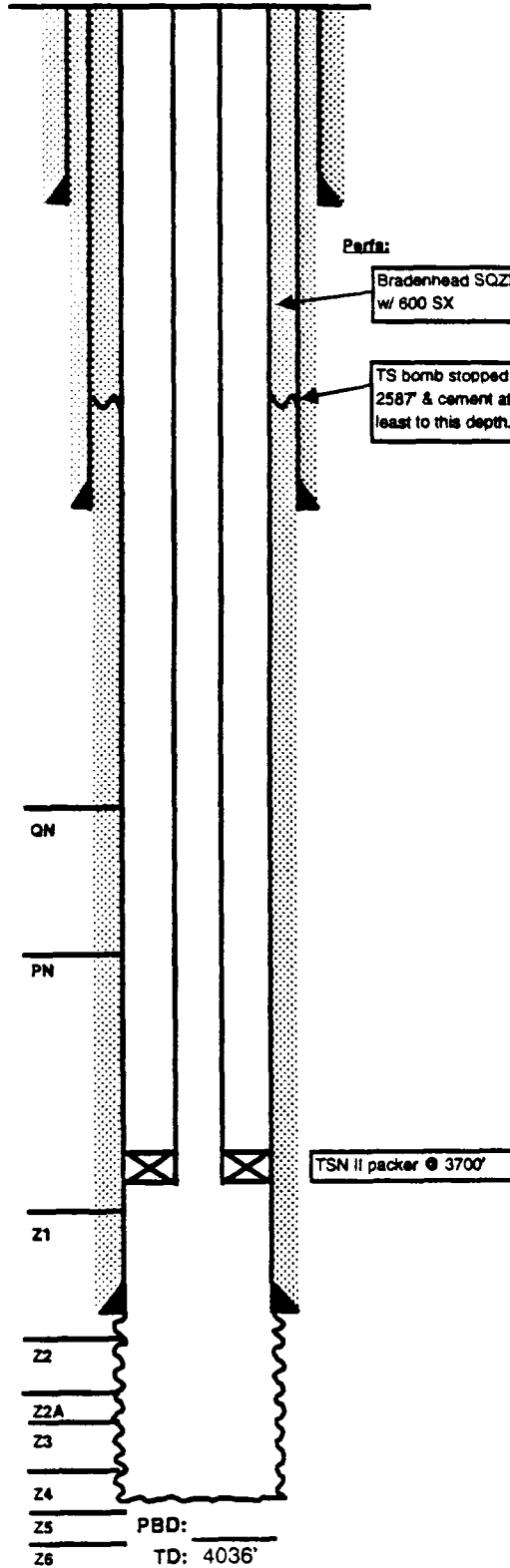
FROM: 3761' to 3895' / GOR 2935

10-3/4" OD
CSG
Set @ 318' W/ 250 SX
Cmt circ.? Yes
TOC @ surf. by calc.

7-5/8" OD
26# CSG
Set @ 2753' W/ 550 SX
Cmt circ.? Yes
TOC @ surf. by calc.

Tubing Detail: 8/3/88	
Original KBTH:	0.00'
1 Jt. 2-3/8" J-55 4.7# 8rd IPC w/ SC-850 (Reg upset):	31.47'
120 Jts. 2-3/8" J-55 4.7# EU/E 8rd IPC w/ SC-850 (Ext. upset):	3663.90'
5-1/2" BAKER TSN II inj. pkr.	5.57'
Landed @:	3700.95'

5-1/2" OD
17# CSG 10rd
Set @ 3761' W/ 25 SX
Cmt circ.? No
TOC @ 3484' by calc.



Completion Data
12/35 Natural OH completion.

Subsequent Workover or Reconditioning:

1/38 BHP @ -250' SS = 1208 psi.

11/38 Acdz w/ 2000 gals 15% acid. Tst: F/ 124 BO (1.6% wtr). 744 MCFG.

4/40 ACDZ w/ 1500 gals 15% & 1000 gals 7-1/2". D/O prod. pkr & CO to TD. Pump several batches of Dowell formation plug chemical to shut off water to allow well to flow.

11/40 ACDZ w/ 1000 gals. Tst f/ 104 BO / 0 BW. GOR = 4271.

6/53 Install ppg. equipment. Tst: 87 BO / 0 BW / 68 MCFGPD.

2/54 SI pumping unit. Had 280# pressure on 5-1/2" csg. Oil (and gas) flowed intermittently out the csg. ann. Cmt'd dwn 7-5/8" X 5-1/2" ann. w/ 150 SX cmt. Circ. out 10-3/4 X 7-5/8" ann. Closed 10-3/4" & bradenhead - SQZD 450 Sx dwn ann. Ran TS, bomb stopped @ 2100'. Showed cmt 2100' fr surf. Reran survey. Bomb stopped @ 2587'. Showed cmt f/ 2587' to surf. Tst: 50 BO / 0 BWPD.

3/73 500 gal dump acid job. Tst: 68 BO / 5 BW. B/A - 54 Bo / tr wtr.

2/79 Sd pmp 17' to TD. ACDZ w/ 750 gals 15% dbl. inhibit. acid. Tst: 70 BO / 60 BW.

10/79 ACDZ w/ 1000 gals dbl. inhibit. NeA. Tst: 46 BO / 11 BW. B/A - 40 BO / 7 BW.

7/88 XO WH. CO junk to TD. Deepen to 4036'. GIH w/ TSN-II pkr on 2-3/8" IPC tbq. Circ. pkr fluid. Set pkr @ 3700'. Put on inj - Test: 711 BWIPD @ 0 psig.

10/94 ACDZ w/ 6000 gals 15% NeFeHCl w/ Pentol 100. A 1950 BWIPD @ Vac. B - 767 BWIPD @ 692 psi.

Additional Data:

T/Queen Formation @ 3406'

T/Penrose Formation @ 3554'

T/Grayburg Zone 1 @ 3731'

T/Grayburg Zone 2 @ 3790'

T/Grayburg Zone 2A @ 3896'

T/Grayburg Zone 3 @ 3958'

T/Grayburg Zone 4 @ 3989'

T/Grayburg Zone 5 @ 4040'

T/Grayburg Zone 6 @ 4095'

T/San Andres Formation @ 4125'

KB @ 3586'

WELL DATA SHEET

FIELD: EMSU

WELL NAME: EMSU 649

FORMATION: Grayburg

**LOC: 210' FSL & 40' FEL
TOWNSHIP: 21S
RANGE: 36E Unit X**

**SEC: 6
COUNTY: Lea
STATE: NM**

**GL: 3583'
KB: 3594.8'
DF to GL:**

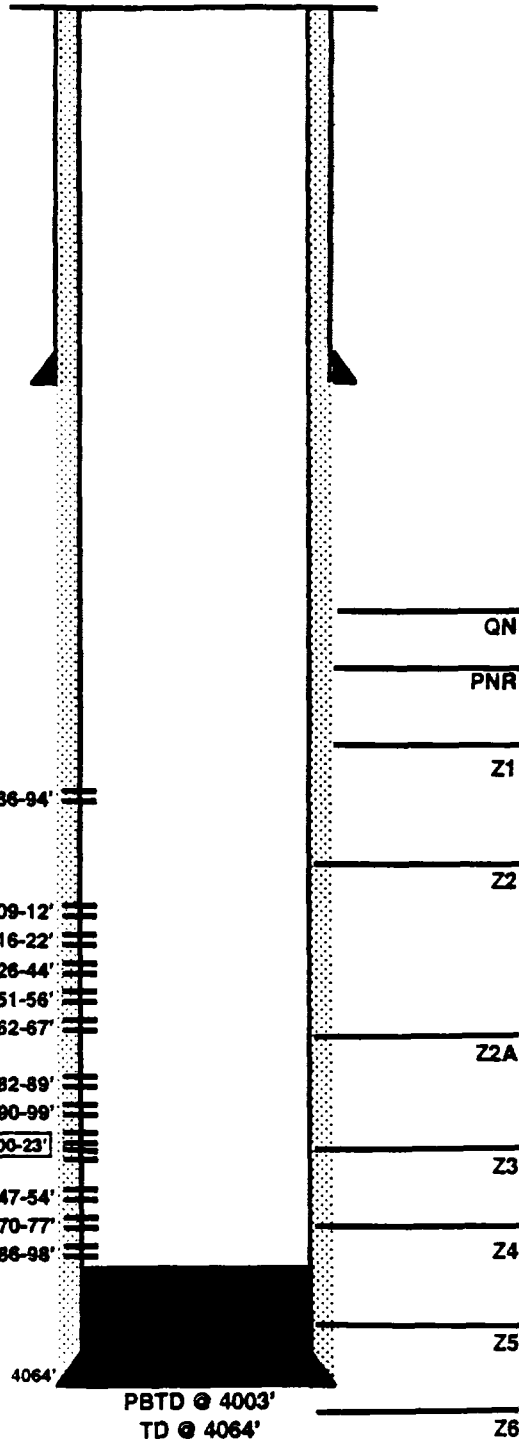
**CURRENT STATUS: Producer
API NO: 30-025-33187
CHEVNO: BD6710**

**8-5/8", 24#/ft, Surf. Pipe
set @ 1190' w/ 675 SX cmt.
TOC @ Surf' by circ.
(12-1/4" hole)**

Tubing Detail: 4/15/98	
KBTH:	5.00'
118 Jts. 2-7/8" 8.5# J-55:	3713.05'
5-1/2" X 2-7/8" TAC:	251.90'
8 Jts. 2-7/8" Tbg 8.5# J-55 8RD Tbg	25.05'
2.5 X 2-1/4" X 20' THBC	25.19'
Landed @	3995.00'

**5-1/2", 15.5#/ft, csg set @
4064' w/ 575 SX cmt.
Cmt Circ.? No
TOC @ 720' by TS
(8-3/4" hole)**

Rod Detail: 4-15-98	
1 1-1/2 X 22' Polish Rod	
1-2', 6' & 8' 7/8 N-97 Rods	
148 7/8 N-97 Rods	
12 1-3/4 KBARS	
2' X 3/4 SUB	
2-1/4 Plunger Standing Valve	



Date Completed: 2-96
Initial Prod: 13 BOPD/ 55 BWPD/ 22 MCF
Initial Formation: Grayburg From: To:
Completion Data:
 Perf 3882-89' and 3900-23' w/ 3 JHPF. Pickle tbg w/ 350 gals acid. Spot 100 gal acid, break down & acidz w/ 3000 gal 15% HCl w/ iron control additives.

Workover History:
2/96 Perf 3809-12, 3816-22, & 3826-44. RBP @ 3863'. Acidize perfs 3809-3844 w/ 3000 gals 15% HCl in 7 stages. RIH w/ PE. TOTP.

4/96 Retrieve and POH w/ RBP @ 3863'. DOC to 4040' and perf 3786-94, 3851-56, 3862-67, 3890-99, 3947-54, 3970-77, & 3986-98 (3 JHPF). ACDZ perfs w/ 8400 15% HCl in 15 stages. Swb (8 runs). IFL - 1800'. EFL - 2800'. Rec'd 45 BW. RIH w/ PE, TOTP.

4/98 ACDZ 3786-3998 w/ 3000 15% REAXE-3000 and 2000 gals 15% S-3000 w/ 3500# GRS as diverter.

Additional Data:
 T/Queen Formation @ 3418'
 T/Penrose Formation @ 3560'
 T/Grayburg Zone 1 @ 3748'
 T/Grayburg Zone 2 @ 3793'
 T/Grayburg Zone 2A @ 3874'
 T/Grayburg Zone 3 @ 3937'
 T/Grayburg Zone 4 @ 3978'
 T/Grayburg Zone 5 @ 4045'
 T/Grayburg Zone 6 @ 4095'
 T/San Andres Formation @ 4139'
 KB @ 3594.8'

**FILE: EMSU649WB.XLS
RLM: 8/24/98**



WELL DATA SHEET

LEASE: EMSU WELL: 286
 LOC: 660' F N L & 660' F E L SEC: 7
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: _____ ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3590' STATUS: Producer
 KB: 3590' API NO: 30-025-04540
 DF: _____ CHEVNO: FA 5682:01

Date Completed: 1/23/1936
 Initial Production: F/ 298 BOPD
 Initial Formation: Grayburg
 FROM: 3760' to 3880' / GOR 15101

12-1/2" OD
40# CSG
 Set @ 240' W/ 150 SX
 Cmt circ.? No
 TOC @ 25' by calc.

8-5/8" OD
28# CSG
 Set @ 2689' W/ 500 SX
 Cmt circ.? No
 TOC @ 1410' by calc.

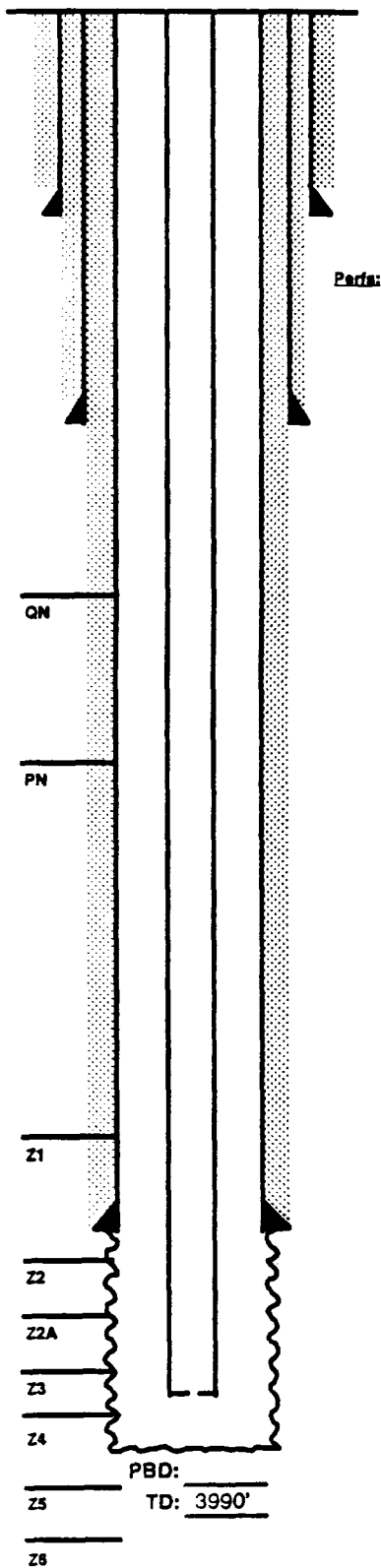
Tubing Detail: 2/16/98

Original KBTH:	10.00'
119 Jts. 2-7/8" J-55 6.5# EUE	
tbgs:	3672.76'
2-7/8" X 7" TAC	2.72'
8 Jts. 2-7/8" J-55 6.5# EUE	246.70'
PUMP Barrel (2.5" X 2.25"	
THBC-20-4-4):	25.07'
2-7/8" Slotted MA	18.00'
Landed @:	3973.27'

Rod Detail: 2/16/98

1-1/2" X 22' Polished Rod
1" X 2' KD Sub
57 - 1' X 25' KD Rods
100 - 7/8" x 25' KD Rods
7/8" X 2' KD Sub
2.25 Plunger w/ Standing Valve
1-1/4" X 2' Gas Anchor

7" OD
24# CSG 10rd
 Set @ 3760' W/ 100 SX
 Cmt circ.? No
 TOC @ 3058' by calc.



Completion Data

Natural OH completion.

Subsequent Workover or Reconditioning:

3/50 Install ppg equip. Tst: 112 Bo / 0 BWPD.
 3/68 Ppd 500 gal Tolulene. Test 56 Bo / 18 BW. B/4 - 38 BO / 2 BWPD.
 6/68 Ppd 800 gal condensate+ dn csg. Tst 54 BO / 9 BWPD.
 12/72 Ppd 50 bbls cond. Dn csg. Tst 51 BO / NMOW.
 3/73 Perf OH 3770-3828' w/ 15 FP. Acdz OH w/ 4000 gal 15% acid in 4 stgs. Tst: 43 BO / 113 BWPD. B/4 tst: 35 BO / Tr wtr.
 10/80 Scale treatment.
 1/88 C/O & dpnd to 3990'. Put on prod. Test 3 BO / 116 BW / 8 MCFGPD. FL=61' ASN. B/4 tst: 15 BO / 12 BW / 3 MCFPD.
 8/90 Chem treatment.
 12/92 Install larger pumping equip. Test: 76 BO / 181 BW / 14 MCFGPD. FL=0'
 5/94 CO. Acdz 3750 gals 15%. Wash perfs w/ prod. wtr w/perf clean tool. SWB 155 BBLS wtr, 6 BBLS oil. EFL @ 2400'. SN @ 3894'. Tst: A - 88 BO / 382 BW / 48 MCFG. B/4 - 56 BO / 158 BW / 10 MCFG.
 2/14/98 Acdz w/ 2000 gals 15% 90/10 resisol II using 70Q foam as diverter.

Additional Data:

T/Queen Formation @ 3426'
 T/Penrose Formation @ 3566'
 T/Grayburg Zone 1 @ 3744'
 T/Grayburg Zone 2 @ 3795'
 T/Grayburg Zone 2A @ 3870'
 T/Grayburg Zone 3 @ 3934'
 T/Grayburg Zone 4 @ 3963'
 T/Grayburg Zone 5 @ 4038'
 T/Grayburg Zone 6 @ 4097'
 T/San Andres Formation @ 4153'
 KB @ 3590'



WELL DATA SHEET

LEASE: EMSU WELL: 287WI
 LOC: 675' F N L & 2160' F E L SEC: 7
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: B ST: N.M.

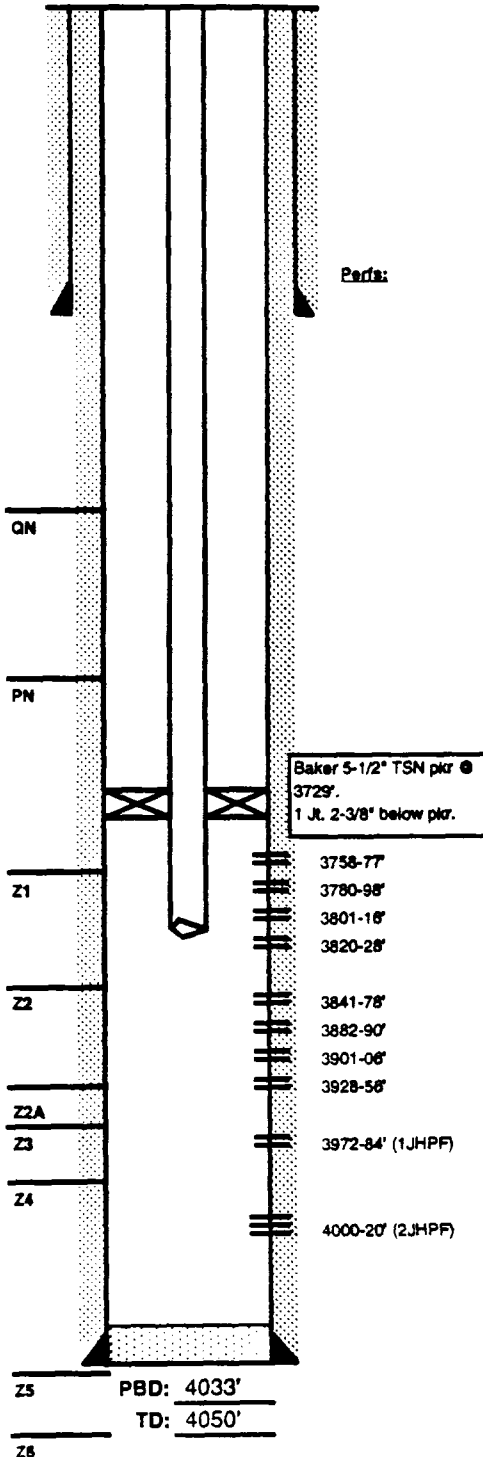
FORM: Grayburg / San Andres DATE: _____
 GL: 3595' STATUS: Injector
 KB: 3613' API NO: 30-025-2990
 DF: _____ CHEVNO: IH 4137:01

Date Completed: 7/26/1987
 Initial Production: _____
 Initial Formation: Grayburg
 FROM: 3758' to 3984'

8-5/8" OD
 32# CSG K-55 LT&C
 Set @ 1258' W/ 750 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (12-1/4" hole)

Tubing Detail: 7/26/87
 Original KBTH: 17.00'
 1 jt. 2-3/8" J-55 4.7# 8rd EUE IPC
 tbg w/ SC-850: 30.29'
 120 Jts. 2-3/8" J-55 4.7# 8rd EUE
 IPC tbg w/ TK-69: 3677.35'
 Baker TSN 5-1/2" Inj Packer 5.45'
 Landed @: 3730.09'

5-1/2" OD
 15.5# CSG 8rd K-55 ST&C
 Set @ 4049' W/ 600 SX
 Cmt circ.? Yes
 TOC @ 404' by calc.
 (7-5/8" hole)



Completion Data

Log w/ CBL, CET, GR, CCL. Perf 3972-84' (1JHPF). ACdz w/ 1200 gals 15%. Swb 6/108 @ 9.4 BPH. EFL - 2700'.
 Perf 3841-78, 3882-90, 3901-06 & 3928-56 (1JHPF). ACdz w/ 5950 gal 15% w/ 120 BS. Good BA. Swb 3841-3984, rec 2/203 FeR 28 BPH. EFL - 2700'. Perf 3758-77, 3780-98, 3801-16, 3820-28 (1JHPF). Acdz w/ 4500 gals 15% w/ 90 Bs. Good BA. Swb 3758-3828'. Rec 100% wtr - FeR 19 BPH. EFL - 1800'. Run TSN on 121 jts 2 3/8" IPC. Pkr @ 3725'. TOP f/Inj.

Subsequent Workover or Reconditioning:

9/89 CO to 4033'. Added perfs in zone 4 @ 4000-20' (2JHPF) Acdz w/ 1500 gals 15% NeFe & 50Bs. RIH w/Inj tbg. Set pkr @ 3729' w/ 7 pts comp. - 1 jt 2-3/8" IPC Below pkr. EOT = 3760'. AW: Inj 903 BWIPD @ 40 psi. B/4 - 936 BW @ 40#.

Additional Data:

T/Queen Formation @ 3456'
 T/Penrose Formation @ 3604'
 T/Grayburg Zone 1 @ 3783'
 T/Grayburg Zone 2 @ 3840'
 T/Grayburg Zone 2A @ 3928'
 T/Grayburg Zone 3 @ 3965'
 T/Grayburg Zone 4 @ 3985'
 T/Grayburg Zone 5 @ 4054'
 T/Grayburg Zone 6 @ 4104'
 T/San Andres Formation @ 4150'
 KB @ 3613'



WELL DATA SHEET

LEASE: EMSU WELL: 288
 LOC: 330' F N L & 2310' F W L SEC: 7
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: C ST: N.M.

FORM: Grayburg / San Andrea DATE: _____
 GL: 3607 STATUS: Producer
 KB: 3607 API NO: 30-025-04552
 DF: _____ CHEVNO: FA 5694:01

Date Completed: 5/8/1936
 Initial Production: F/ 878 BOPD
 Initial Formation: Grayburg
 FROM: 3826' to 3905'

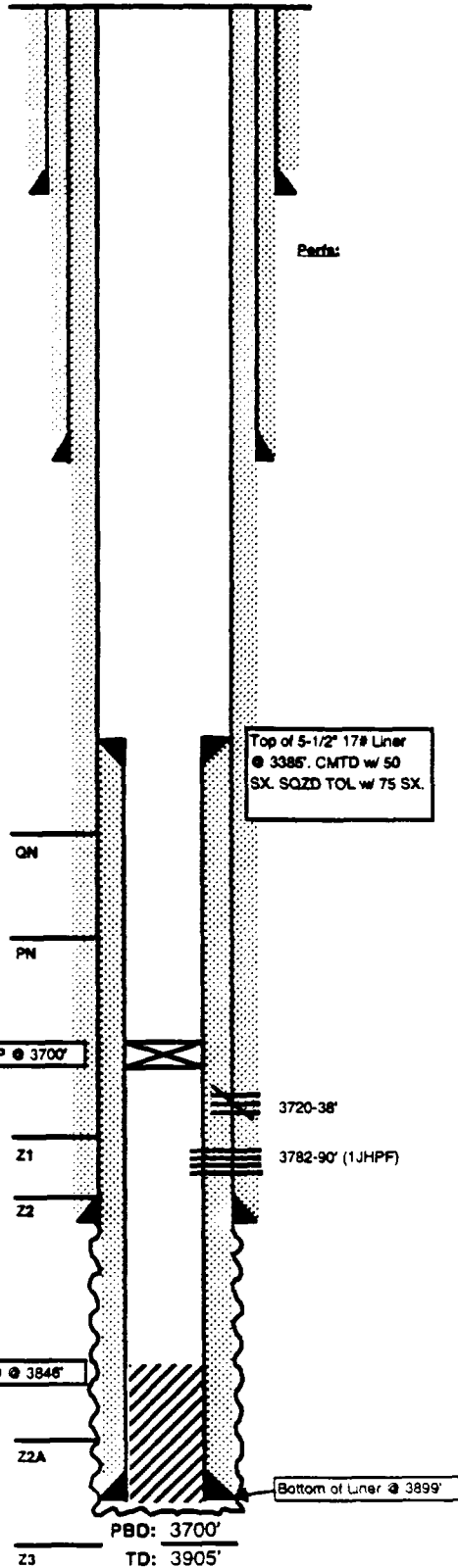
12-1/2" OD
 50# CSG
 Set @ 260' W/ 275 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

9-5/8" OD
 40# CSG
 Set @ 1348' W/ 500 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 12/2/87	
Original KBTH:	0.00'
120 Jts. 2-7/8" H-40 6.5# EUE 8rd	
tbg:	3775.38'
2-7/8" SN	1.10'
2-7/8" Tubing Pump	20.00'
2-7/8" Perf Sub	4.10'
2-7/8" 6.5# 10V EUE J-55 MA w/ BPOB	31.63'
Landed @:	3832.21'

Rod Detail: 12/2/87	
1-1/4" X 22' Polished Rod	
7/8" X 2' Rod Sub	
71 - 7/8" X 25' KD Steel Rods	
80 - 3/4" X 25' KD Steel Rods	
2-1/4" X 4' Pump Plunger	

7" OD
 24# CSG
 Set @ 3826' W/ 250 SX
 Cmt circ.? No
 TOC @ 2289' by calc.



Completion Data

Natural OH completion.

Subsequent Workover or Reconditioning:

6/53 PB w/ pea gravel f/ 3903-3870'. PB w/ cmt 3870-3858'. Acdz w/ 2000 gal 15% HCl. Put on prod. Test: 38 BO / 55 BWPD. Workover performed to plug off water.
 1/75 T/A'd well as uneconomic.
 3/85 GIH tag @ 3905' ? (Arco) Test csg to 500 psi - OK. Turn over to Gulf.
 9/85 XO WH. Tag fill @ 3860'. CO to 3905'. Ran GR, CNL, CCL. Acdz w/ 3500 gal 15% NeFeA. Swb. Chem sqzd. Put on prod. Test: 10 BO / 318 BW / 32 MCFPD. B/4: T/A'd. 7/86 Chem sqzd.
 11/87 Perf 3720-38' w/ 1JHPF. Acdz perms w/ 1600 gal 15% NeFeA & 27 RCNBs. Swb 126 BW Tr oil, 23 runs. SFL=1500', EFL=2150'. Run 5-1/2" 17# Liner. TOL @ 3385'. Btm liner @ 3899'. Cmt liner w/ 50 SX. Sqzd liner top w/ 75 SX. D/O cmt to 3846'. Ran CBL/CET Log. Perf 3782-3790' w/ 1JHPF. Acdz w/ 1000 gal 15% NeFeA. Swb 5 BW / 0 BO in 1/2 hr. FL=1100', swb. SFL=1600'. EFL=1850'. 18 runs, rec 60 BW. Put on prod. Test: 3 BO / 406 BW / 9 MCFG. FL=1189' ASN. B/4 - 4 BO / 596 BW / 23 MCFG. 1/90 POH w/ equip. Set CIBP @ 3700'. GIH circ inhib - fl. POH. Well T/A'd.

Additional Data:

- T/Queen Formation @ 3418'
- T/Penrose Formation @ 3575'
- T/Grayburg Zone 1 @ 3760'
- T/Grayburg Zone 2 @ 3823'
- T/Grayburg Zone 2A @ 3875'
- T/Grayburg Zone 3 @ 3940'
- T/Grayburg Zone 4 @ 3974'
- T/Grayburg Zone 5 @ 4049'
- T/Grayburg Zone 6 @ 4105'
- T/San Andrea Formation @ 4146'
- KB @ 3607'



WELL DATA SHEET

LEASE: EMSU WELL: 289
 LOC: 660' F S L & 581' F W L SEC: 7
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: D ST: N.M.
 (formerly: R.R. Bell NCT-D #2)

FORM: Grayburg / San Andres DATE: _____
 GL: 3592' STATUS: Producer
 KB: 3608' API NO: 30-025-08707
 DP: _____ CHEVNO: FA 97710:01

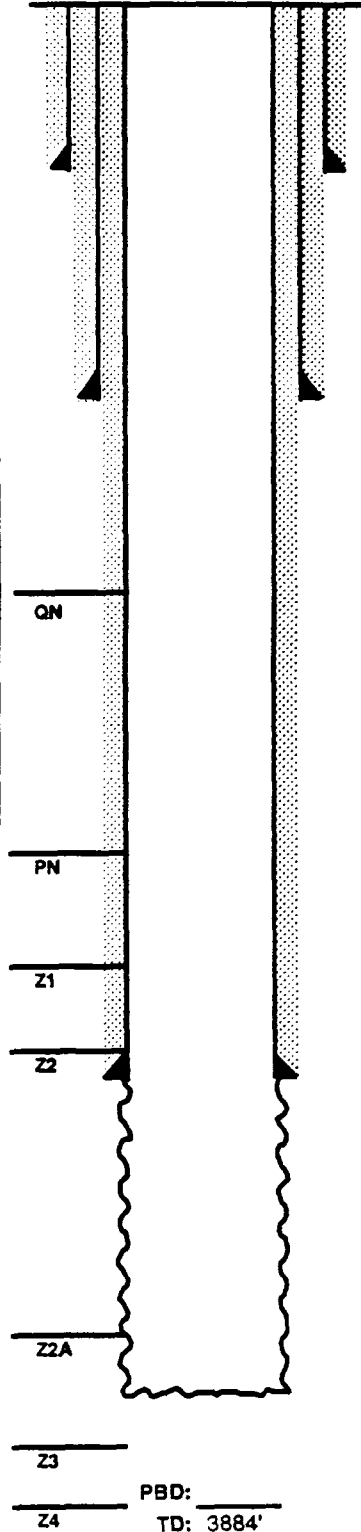
Date Completed: 8/3/36
 Initial Production: F/ 468 BOPD
 Initial Formation: Grayburg
 FROM: 3819' to 3884' / GOR ---

12-1/2" OD
50# CSG
 Set @ 282' W/ 200 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (17" hole)

8-5/8" OD
32# CSG 8rd
 Set @ 1473' W/ 800 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (11" hole)

Tubing Detail:
 Original KBTH: 0.00'
 Landed @:
 Rod Detail:
NONE GIVEN

5-1/2" OD
17# CSG 10rd
 Set @ 3819' W/ 800 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (7-5/8" hole)



Completion Data

8/36 Natural completion.

Subsequent Workover or Reconditioning:

- 3/44 Acdz OH w/ 500 gal acid.
- 4/47 Acdz OH w/ 500 gal 20% acid.
- 9/47 Acdz OH w/ 500 gal 20% acid.
- 11/48 Acdz OH w/ 500 gal 20% acid.
- 5/50 Acdz OH w/ 500 gals 20% LST NEA.
- 9/50 Acdz OH w/ 500 gals 20% acid.
- 10/50 Acdz OH w/ 500 gal 15% LST NEA.
- 2/52 Acdz 3844-3884 w/ 500 gals 20% acid.
- 7/59 Acdz OH 38193884 w/ 2000 gal 15% LSTNEA. A/W: 21 BOPD/ 85 BWPD GOR 404. B/4: 18 BOPD/ 22 BWPD GOR 647.
- 8/87 Chem treat.
- 9/88 Chem treat.
- 10/90 Chem treat.

Additional Data:

- T/Queen Formation @ 3418'
- T/Penrose Formation @ 3573'
- T/Grayburg Zone 1 @ 3760'
- T/Grayburg Zone 2 @ 3815'
- T/Grayburg Zone 2A @ 3872'
- T/Grayburg Zone 3 @ 3938'
- T/Grayburg Zone 4 @ 3970'
- T/Grayburg Zone 5 @ 4050'
- T/Grayburg Zone 6 @ 4099'
- T/San Andres @ 4135'
- KB @ 3608'



WELL DATA SHEET

LEASE: EMSU WELL: 290
 LOC: 1650' F N L & 990' F W L SEC: 7
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: E ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3582' STATUS: Producer
 KB: 3582' API NO: 30-025-04543
 DF: _____ CHEVNO: FA 5685:01

Date Completed: 9/9/1936
 Initial Production: F/ 1560 BOPD / GOR 580
 Initial Formation: Penrose - Grayburg
 FROM: 3774' to 3882'

12-1/2" OD
 50# CSG
 Set @ 276' W/ 200 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (15-1/2" hole)

8-5/8" OD
 32# CSG
 Set @ 1527' W/ 800 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (11" hole)

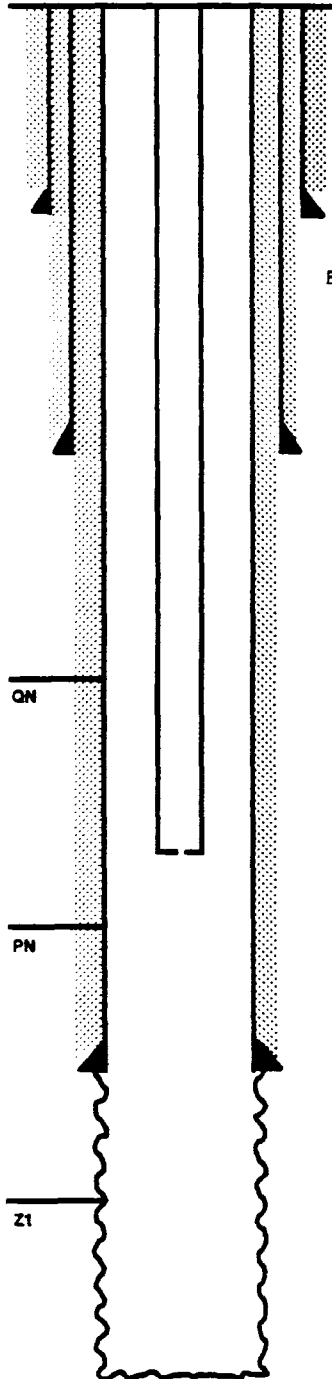
Tubing Detail: 9/28/88

Original KBTH:	0.00'
118 Jts. 2-7/8" H-40 6.5# 10V	
lbg:	3675.62'
2-7/8" SN	1.10'
2-7/8" Perf Sub	3.12'
2-7/8" 6.5# 10V EUE H-40 MA w/ BPOB	31.50'
Landed @:	3711.34'

Rod Detail: 9/28/88

1-1/4" X 16' Polished Rod
3/4" X 2' Rod Sub
102 - 3/4" Grade C Rods
38 - 3/4" Grade K Rods
18 - 3/4" Grade KD Rods
2" X 3/4" Rod Sub
1-1/2" X 2" X 12' RWTC Pump
w/ 8" X 1" Gas Anchor

5-1/2" OD
 17# CSG 10rd
 Set @ 3774' W/ 800 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (7-5/8" hole)



PBD: _____
 Z2 TD: 3982'
 Z3 _____
 Z4 _____

Completion Data
9/36 Natural Completion

Subsequent Workover or Reconditioning:
 5/45 ACDZ w/ 1750 gals. acid.
 3/51 ACDZ w/ 1000 gal 20% LST Acid.
 8/87 Chem treat
 9/88 CO WH. Deepen to 3982'. Log w/ GR, CNL, CDL, CCL, Caliper. TIH w/ PE. TOTP.
 A/W: 13 BO / 311 BW / 32 MCFGPD. B/4: 10 BO / 176 BW / 15 MCFGPD.
 7/89 Chem treat
 8/90 Chem treat
 9/90 Dump acid - 100 gals 15% NeFe HCl. A/W: 10 BO / 329 BW / 13 MCFG. B/4: 6 BO / 15 BW / 6 MCFG.

Additional Data:
 T/Queen Formation @ 3570'
 T/Penrose Formation @ 3746'
 T/Grayburg Zone 1 @ 3932'
 T/Grayburg Zone 2 @ 3990'
 T/Grayburg Zone 2A @ 4057'
 T/Grayburg Zone 3 @ 4115'
 T/Grayburg Zone 4 @ 4141'
 T/Grayburg Zone 5 @ 4220'
 T/Grayburg Zone 6 @ 4259'
 T/San Andres Formation @ 4310'
 KB @ 3582'



WELL DATA SHEET

LEASE: EMSU WELL: 291WIC
 LOC: 1650' F N L & 1492' F W L SEC: 7
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: F ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3582' STATUS: Injector
 KB: 3582' API NO: 30-025-04553
 DP: _____ CHEVNO: FA 5695:01

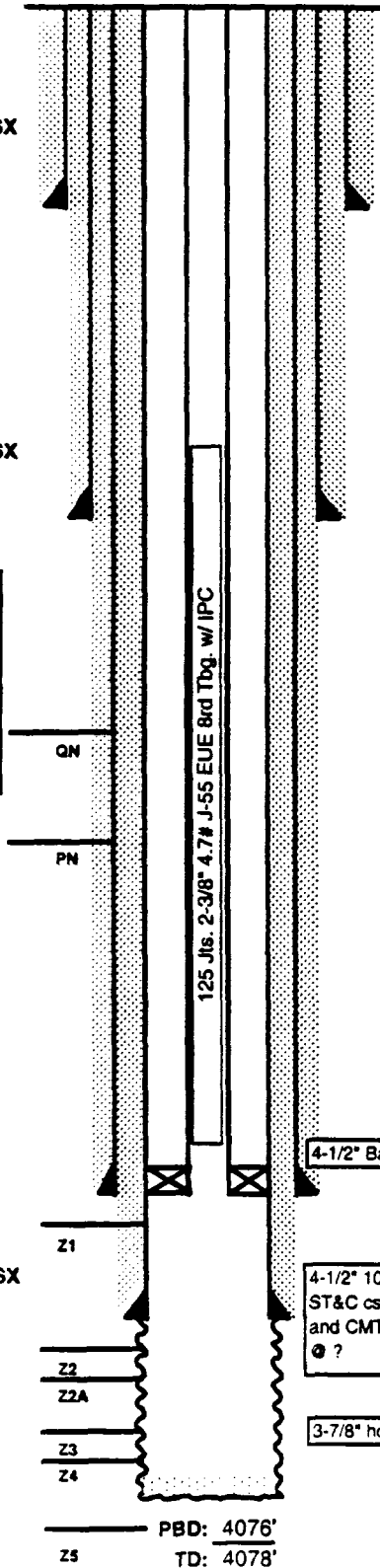
Date Completed: #####
 Initial Production: F 1358BOPD
 Initial Formation: Grayburg
 FROM: 3791' to 3882'

12-1/2" OD
CSG
 Set @ 261' W/ 150 SX
 Cmt circ.? No
 TOC @ 46' by calc.

9-5/8" OD
CSG
 Set @ 1381' W/ 500 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 12/29/87	
Original KBTH:	0.00'
125 Jts. 2-3/8" J-55 4.7# IPC 8rd	
tbq:	3825.24'
Baker 4-1/2" TSN Pkr	5.63'
Landed @:	3857.87'

6-5/8" OD
CSG
 Set @ 3791' W/ 300 SX
 Cmt circ.? No
 TOC @ 2013' by calc.



Completion Data

10/36 Natural Completion

Subsequent Workover or Reconditioning:

3/51 ACDZ 3774-3882' w/ 1000 gals 20% acid.
1/75 TA'd
5/86 Found multiple csg leaks 600-3000'. C/O to 3887'; ran 4-1/2" 11.6# & 10.5#/sx. K-55 STC csg to 3884'. Cmt'd w/450 sx cmt flash set. D/O same, installed 7-1/16" 3M tbq head. D/O cmt to 3877'. Tested csg to 600 psi - OK. Work performed by ARCO.
12/87 XO WH - tag cmt @ 3875'. DOC 3875-3884'. Deepen to 4075'. Ran GR, CNL, CCL. Swb OH to test Z3. Set inj pkr @ 3858'. TOTP. PWOI on 12/31/87: 718 BWIPD @ 0#.
3/90 Acdz GB zones 1,2 & 3 w/ 3000 gals 15% HCL + 1250 GRS.
10/96 CO w/ CTU to 4076'. ACDZ w/ 6000 gals 15% Resisol.

Additional Data:

T/Queen Formation @ 3494'
 T/Penrose Formation @ 3671'
 T/Grayburg Zone 1 @ 3862'
 T/Grayburg Zone 2 @ 3915'
 T/Grayburg Zone 2A @ 3989'
 T/Grayburg Zone 3 @ 4039'
 T/Grayburg Zone 4 @ 4065'
 T/Grayburg Zone 5 @ 4134'
 T/Grayburg Zone 6 @ 4180'
 T/San Andres Formation @ 4229'
 KB @ 3582'



WELL DATA SHEET

LEASE: EMSU WELL: # 292

LOC: 1980' F N L & 1980' F E L SEC: 7

TOWNSHIP: 21S CNTY: Lea

RANGE: 36E UNIT: G ST: N.M.

(formerly: H.L. Houston #4)

FORM Grayburg / San Andra DATE: _____

GL: 3585' STATUS: Producer

KB: 3597' API NO: 30-025-04542

DP: _____ CHEVNO: FA 5684:01

Date Completed: 1/6/1937

Initial Production: F 713 BOPD

Initial Formation: Grayburg

FROM: 3797' to 3890' / GOR 631

12-1/2" OD
CSG
Set @ 232' W/ 265 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(17-1/2" hole)

8-5/8" OD
32# CSG 8rd
Set @ 2710' W/ 500 SX
Cmt circ.? No
TOC @ 893' by calc.
(11" hole)

Tubing Detail: 2/28/88

Original KBTH: 0.00'

128 Jts. 2-3/8" J-55 4.7# EUE 8rd
tbg: 3886.83'

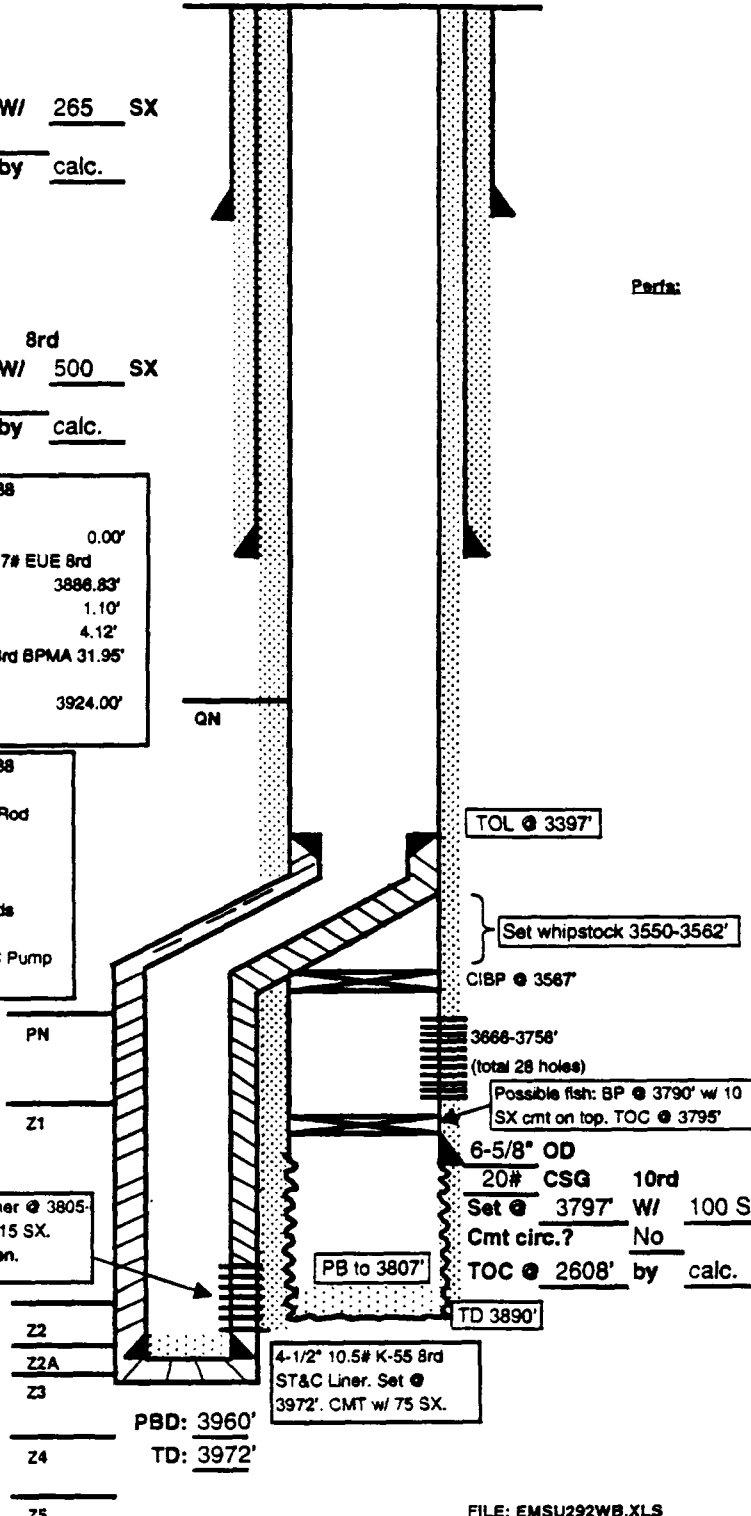
2-3/8" Standard SN 1.10'
2-3/8" Perf Sub 4.12'
2-3/8" J-55 4.7# EUE 8rd BPMA 31.95'

Landed @: 3924.00'

Tubing Detail: 2/28/88

1-1/4" X 22' Polished Rod
2' X 3/4" Sub
2' 6" X 3/4" Subs
8' X 3/4" Sub
153 3/4" X 25' KD Rods
2' X 3/4" Sub
2 X 1 1/2" X 16' RWTC Pump

Perfs in 4-1/2" Liner @ 3805-3878' SQZD w/ 115 SX. 3918-3950' is open.



Completion Data
1/37 Natural completion.

Subsequent Workover or Reconditioning:

3/50 Set plug @ 3815' w/ pea gravel & plastic on top. Top of plastic @ 3807'. ACDZ OH w/ 1000 gals 15% Acid. Prod survey showed wtr. entry @ 3799'. 100% wtr. f/open hole. SQZD OH w/ 100 SX (3797-3846'). D/O to 3890' (TD).

5/75 Set BP @ 3790' w/ 10 SX cmt on top. TOC @ 3677'. Perf 3666-3756'. ACDZ w/ 2500 gals 15% Acid.

Swab test -

Perfs 3666-3756'	Rec'd 10 BO / 150 BW
Perfs 3714-3756'	Rec'd 0 BO / 40 BW
Perfs 3666-3701'	Rec'd 25 BO / 315 BW
Perfs 3691-3701'	Rec'd 2 BO / 40 BW
Perfs 3666-3669'	Rec'd 3 BO / 70 BW
Perfs 3666-3669'	Rec'd 20 BO / 140 BW

10/84 TA'd.
7/87 Chem treat.
12/86 CO to 7-1/16 tbg head, ran 2-3/8" PE.
1/88 CO to 3795' - top of fish. Set CIBP @ 3567'. Set whipstock @ 3550-62'. Cut window & deepen to 3972'. Log w/ CNL, CCL, Cal, GR. Run 4-1/2" 10.5# K-55 8rd ST&C liner. Set @ 3972'. TOL 3397'. Cmt w/ 75 SX Cl C. CO to 3960'. Test liner to 400 psi - OK. Perf liner 3918-3950' (32 holes). ACDZ w/ 500 gal 15% NeFe. ReAczd w/ 1200 gals 15% NeFe. Perf 3805 - 3878' (56 hole). Aczd w/ 600 gals 15% NeFe. Set CIBP @ 3898' & CIRC @ 3728'. SQZD perfs 3805-3878' w/ 115 SX Cl C. D/O to 3960'. RIH w/ PE. AW - 0 BO/7 BW 48 MCF. B/4 - 3 BO/ 262 BW/ 6 MCF.

Additional Data:

T/Queen Formation @ 3451'
T/Penrose Formation @ 3600'
T/Grayburg Zone 1 @ 3785'
T/Grayburg Zone 2 @ 3843'
T/Grayburg Zone 2A @ 3928'
T/Grayburg Zone 3 @ 3971'
T/Grayburg Zone 4 @ 4005'
T/Grayburg Zone 5 @ 4091'
T/Grayburg Zone 6 @ 4155'
T/San Andres Formation @ 4203'
KB @ 3597'



WELL DATA SHEET

LEASE: EMSU **WELL:** # 293WIC **FORM:** Grayburg / San Andres **DATE:** _____
LOC: 1980' F N L & 660' F E L **SEC:** 7 **GL:** 3598'
TOWNSHIP: 21S **CNTY:** Lea **KB:** 3603' **STATUS:** Injector
RANGE: 36E **UNIT:** H **ST:** N.M. **DF:** _____ **API NO:** 30-025-04539
CHEVNO: FA5681:01

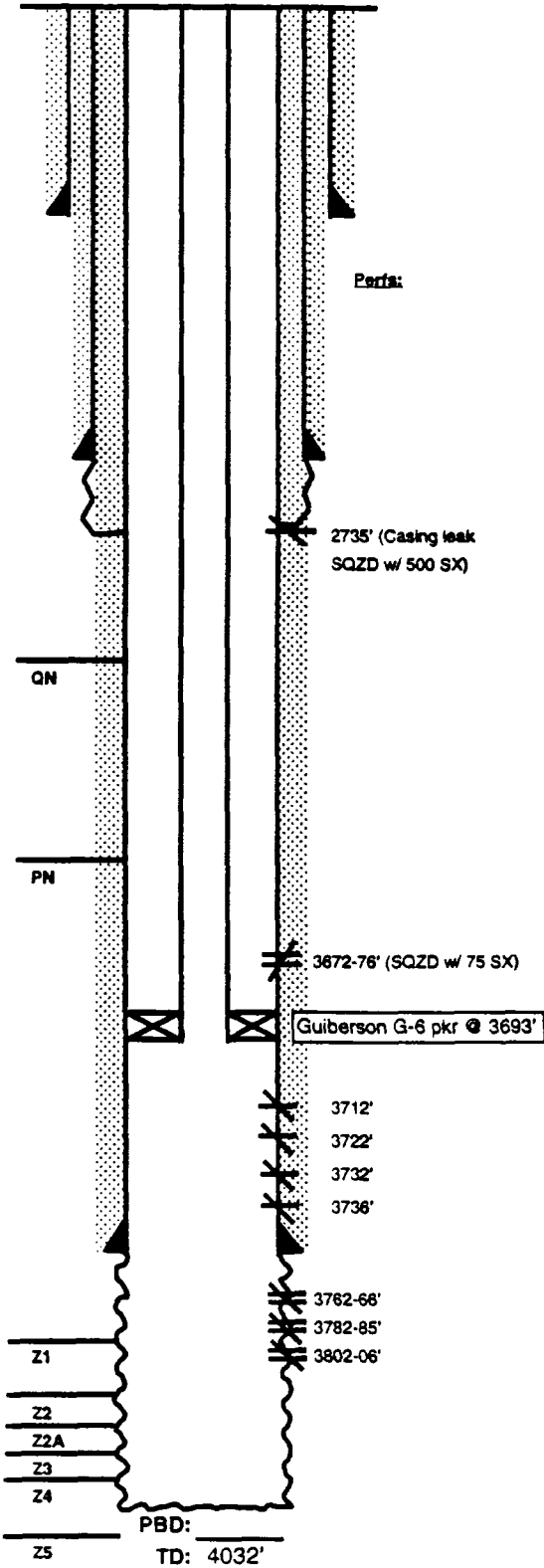
Date Completed: 6/15/1935
Initial Production: F144BOPD
Initial Formation: Grayburg
FROM: 3745' to 3833'

12-1/2" OD
 40# CSG
 Set @ 275' W/ 175 SX
 Cmt circ.? No
 TOC @ 24' by calc.

9-5/8" OD
 36# CSG
 Set @ 2685' W/ 500 SX
 Cmt circ.? No
 TOC @ 999' by calc.

Tubing Detail: 1/26/99
 Original KBTH: 8.00'
 1Jt. 2-3/8" EPC & IPC 4.7# J-55 8rd
 tbg: 31.05'
 118 Jts. 2-3/8" J-55 4.7# IPC 8rd
 tbg: 3652.04'
 P.C'd XL O/O tool w/ 1.781 "F"
 Nipple: 1.97'
 P.C'd Guiberson G-6 pkr in 10 pts
 Compression: 4.55'
 2-3/8" Wireline Re-Entry Guide: 0.55'
 Landed @: 3698.16'

7" OD
 24# CSG
 Set @ 3745' W/ 75 SX
 Cmt circ.? No
 TOC @ 3218' by calc.



Completion Data
 ACDZ OH w/ 2000 gal 15% acid.

Subsequent Workover or Reconditioning:
 9/54 Install ppg equip. Tst: 89 BO/O BW/ GOR=1104.
 9/68 Acadz w/ 2000 gal 15% acid in 2 stgs. Tst: 10 BO / 10 BWPD.
 1/74 Perf 3712, 3722, 3732, 3736, 3762-66, 3782-85, 3802-06 (1 SPF). Acadz w/ 3000 gal 15% NeA & 50/50 mix GRS & BAF as div.
 7/75 Acadz perfs & OH w/ 4000 gal 15% NeFeA & 50/50 mix BAF/GRS. Swb 5 BO/21 BW in 21 runs. FFL=3500'.
 9/76 Perf 3672-76' w/ 2 JHPF. ACDZ w/ 750 gal 15% NeA. Swb perfs - 3 BO/195 BW/36 runs.
 8/77 PB w/ sand to 3682'. Set SVEZ drill @ 3559'. Sqzd perfs 3672-76' w/ 75sx cmt. D/O retr, cmt & sd. Reran pumping equip.
 3/78 POH w/ppg equip. CI well.
 10/87 C/O & deepened to 4032'. Acadz w/ 3500 gal 15% NeFeA. Swb 20 BW. Swb Tr. oil, 70 BW in 8-1/2 hrs. GIH w/ 2-3/8" IPC tbg. Set Baker TSN-2 @ 3699'. Conv. to Inj. Test: 717 BWIPD @ 0 psig.
 3/90 Set RBP @ 3652'. Cap w/ 2 SX sand. Pmp hot wtr dn 7"/9-5/8" ann. Ran temp log. Fnd btm fl movement @ 2830'. Perf 7" @ 2735' w/ 4 JHPF. Set CICR @ 2677'. Sqz 7"/9-5/8" w/ 500 SX. D/O, CO hole. Test csg to 540 psi - OK. Acadz perfs & OH w/ 4000 gal 15% NeFeA in 3 stgs. GIH w/ inj equip. Set pkr @ 3692'. RTI. Test: 720 BWIPD @ 34 psi. B/4: tst 720 BWIPD @ 160 psi.
 11/95 Tag @ 4004'. Acadz 6000 gals 15% NeFe Resisol 100.
 1/26/99 D/O fill fr 3995-4032' and circ. clean. Squeezed perfs 3672-76' leaking - ACDZ OH w/ 2000 gals 15% antisludge acid w/ 70Q 1% KCl water. Dump 5000# 20/40 sand & wash sd to 3855'. ACDZ perfs 3672-3736' & OH to 3855' w/ 1000 gals. Cap w/ 100# CaCO3 to 3850'. RIH w/ 7" CICR to 3624'. Pump 1002 bbls Marci System 1 polymer: STP - 873#, BHP - 2360#. Pump 106 bbls UN XL gel @ 1 BPM w/ 819# STP & 2356# BHP. M&P 100 SX CI C cmt w/ additives - capped w/ 58 SX. D/O 11' cmt & CICR. DO hard cmt to 3714'. Tst sqzd perfs 3712-36' to 700# - OK. Fin D/O cmt to 3870', wash sd to 3945'. Circ. hole clean to 4032'. Set Guiberson pkr @ 3693', run MIT and RTI.

Additional Data:
 T/Queen Formation @ 3465'
 T/Penrose Formation @ 3612'
 T/Grayburg Zone 1 @ 3794'
 T/Grayburg Zone 2 @ 3851'
 T/Grayburg Zone 2A @ 3931'
 T/Grayburg Zone 3 @ 3979'
 T/Grayburg Zone 4 @ 4000'
 T/Grayburg Zone 5 @ 4061'
 T/Grayburg Zone 6 @ 4107'
 T/San Andres Formation @ 4162'
 KB @ 3603'

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 680	FIELD: Eunice-Monument	API: 30-025-35970
LOC: 1490 FNL & 185 FEL, Unit F	SEC: 7	BLK: T21S, R36E	REF NO: B19675
SVY: N.M.P.M.	GL: 3582	CTY/ST: Lea / NM	SPUD: 1/30/1997
CURRENT STATUS: Prod	KB: 3582	DF: 3587	TD DATE: 3/20/1997

8-5/8", 23# Csg K-55
set @ 1225' w/ 650 SX
Cmt Circ? Yes (105 SX)
TOC @ surf. by circ.
(12-1/4" hole)

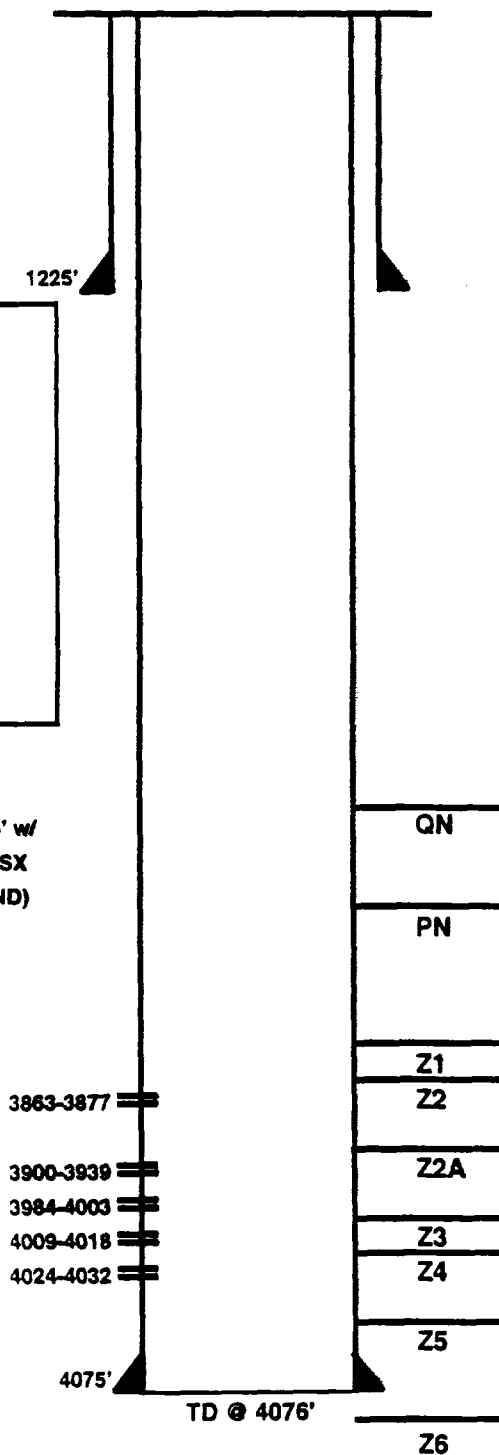
Tubing Detail: 04/14/97

121 Jts. 2-7/8"
TAC
7 Jts.
Perf Sub
Pump w/ Stabilizer
SMAJ

Landed @

5-1/2", 15.5#, 8 rd Thd,
Gr K-55 Csg set @ 4075' w/
875 SX. Cmt. Circ? 130 SX
TOC @ surf. by circ. (2ND)
(8-5/8" hole)

LC Zone 3637'



Date Completed: 3-20-97
Initial Prod: BOPD/BWPD/MCFPD
Initial Formation: Grayburg From: To:
Completion Data:
 2-7-97 Lost circulation @ 3637'.
 2-8-97 Core 3750-4078 LDT/CNL/MCFL/GR. Sonic/GR, CMR/GR.
 2-14-97 DV Tool at 3578' w/ 90 SX Circ, FC @ 4025'.

Workover History:
 3-20-97 Drill DV tool, drill Float Collar & cmt to 4061'. Run GR/CBL/CCL // 4066 to 1225'; GR/CCL to surf. Last cmt @ 1200', marg // 3500 to surf.
 3-21-97 Perf // 3863-3877, 3900-3939, 3984-4003, 4009-4018 & 4024-4032. RIH w/ pkr to 3863' and RBP.
 3-24-97 Spot 220 gals RS II, break down perms // 4032-3877, move pkr to 3763'. Pump 168 bbls RS II w/ 25 ball sealers every 10 bbls.
 3-25-97 Run 26 RCNBs @ 2.1 BPM. Flush. POH w/ RBP & pkr. RIH w/ PE. TOTP.
 4-9-97 POH w/ Prod. equip.
 4-10-97 ACDZ perms w/ 4000 gals 90/10 Resisol II. Run GR fr 3990-3700 but unable to log 4003-4032 due to salt fill. No comm. in upper perms @ 3863-77.

Additional Data:
 T/Queen @ 3448'
 T/Penrose @ 3584'
 T/AGU @ N/A
 T/Grayburg Zone 1 @ 3770'
 T/Grayburg Zone 2 @ 3829'
 T/Grayburg Zone 2A @ 3903'
 T/Grayburg Zone 3 @ 3955'
 T/Grayburg Zone 4 @ 3978'
 T/Grayburg Zone 5 @ 4043'
 T/Grayburg Zone 6 @ 4090'

Rod Detail: 04-14-97
 93 3/4" N-97 Rods
 61 7/8" N-97 Rods

FILE: EMSU680WB.xls
DKTS: 10/31/98

11/1/1999



WELL DATA SHEET

LEASE: EMSU WELL: 282
 LOC: 660' F N L & 760' F E L SEC: 8
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: A ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3576' STATUS: Producer
 KB: 3588' API NO: 30-025-21902
 DF: _____ CHEVNO: FG 0120:01

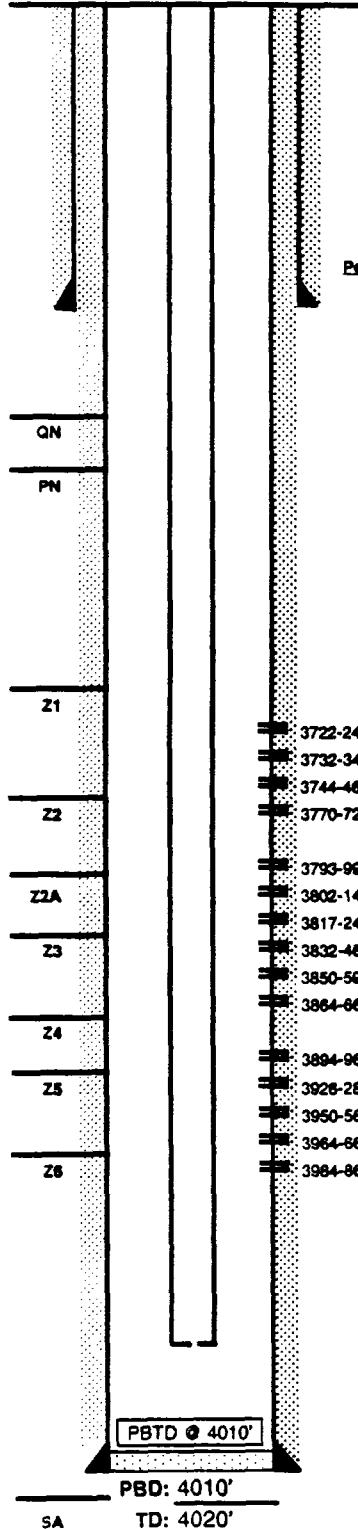
Date Completed: 1/9/1967
 Initial Production: 22 BOPD 33 BWPD GOR 773
 Initial Formation: Grayburg
 FROM: 3793' to 3868'

8-5/8" OD
24 # CSG 8rd
 Set @ 1315' W/ 550 SX
 Cmt circ.? Yes (30 SX)
 TOC @ surf. by circ.

Tubing Detail: 12/24/97
 KBTH: 12.00'
 124 Jts. 2-7/8" 6.5# EUE J-55 8rd tbg
 w/ T.D. couplings: 3916.65'
 1 Pump Barrel 24.10'
 Landed @ 3952.75'

Rod Detail: 12/24/97
 1 1-1/4" X 22' Polished Rod
 1 1" X 8' KD Pony Rod
 56 1" X 25' KD Rods
 101 7/8" X 25' KD Rods
 1 51" Steel Plunger

4-1/2" OD 8rd
9.5 # CSG
 Set @ 4019' W/ 615 SX
 Cmt circ.? no
 TOC @ 2100' by calc.



Completion Data

12/66 Perf 4-1/2" csg. @ 3793-97, 3802-14, 3817-24, 3832-48, 3850-59 & 3864-68' (2 JHPF). ACDZ 3793-3868' w/ 1000 gal 15% NeA. REACDZ w/ 15,000 gals 28% HCl. ACDZ w/ 15,000 gals 3% HCl, 1000# GBS & 26 tons CO2

Subsequent Workover or Reconditioning:

4/8/88 D/O to 4010'. Perf @ 3894-96, 3926-28, 3954-56, 3964-68 & 3984-86'. Ran DPI tool & acidize perfs w/ 500 gals 15% NeFe HCl. Isolate new perfs and ACDZ w/ 1000 gal acid. Pick up and ACDZ all perfs w/ w/ 1500 gals acid.
 5/5/88 Set CIBP @ 3884'. Test CIBP to 500 psi. RTP. B - 5 BOPD / 30 BWPD A - 6 BOPD / 45 BWPD
 8/28/88 Perforate 3722-24, 3732-34, 3744-48 & 3770-72 (16 holes). ACDZ w/ 1500 gals 15% NeFe.
 12/18/97 TIH w/ bit & CO to TD. SI for weekend. Treat perfs 3722-3988' w/ 3000 gal 15% HCl w/ additives, using 3500 gal 70Q foamed GBW as diverter. Swb. TIH w/ prod. tbg and rods. TOTP.

Additional Data:

T/Queen Formation @ 3414'
 T/Penrose Formation @ 3549'
 T/Grayburg Zone 1 @ 3718'
 T/Grayburg Zone 2 @ 3758'
 T/Grayburg Zone 2A @ 3798'
 T/Grayburg Zone 3 @ 3833'
 T/Grayburg Zone 4 @ 3873'
 T/Grayburg Zone 5 @ 3938'
 T/Grayburg Zone 6 @ 3962'
 T/San Andres Formation @ 4024'
 KB @ 3588'

FILE: EMSU282WB.XLS

Printed: 10/28/1999



WELL DATA SHEET

LEASE: EMSU **WELL:** 285WIC
LOC: 990' FNL & 330' FWL **SEC:** 8
TOWNSHIP: 21S **CNTY:** Lea
RANGE: 36E **UNIT:** B **ST:** N.M.

FORM: Grayburg / San Andrea **DATE:** _____
GL: 3582' **STATUS:** Injector
KB: 3590' **API NO:** 30-025-24563
DF: _____ **CHEVNO:** EN 6624:01

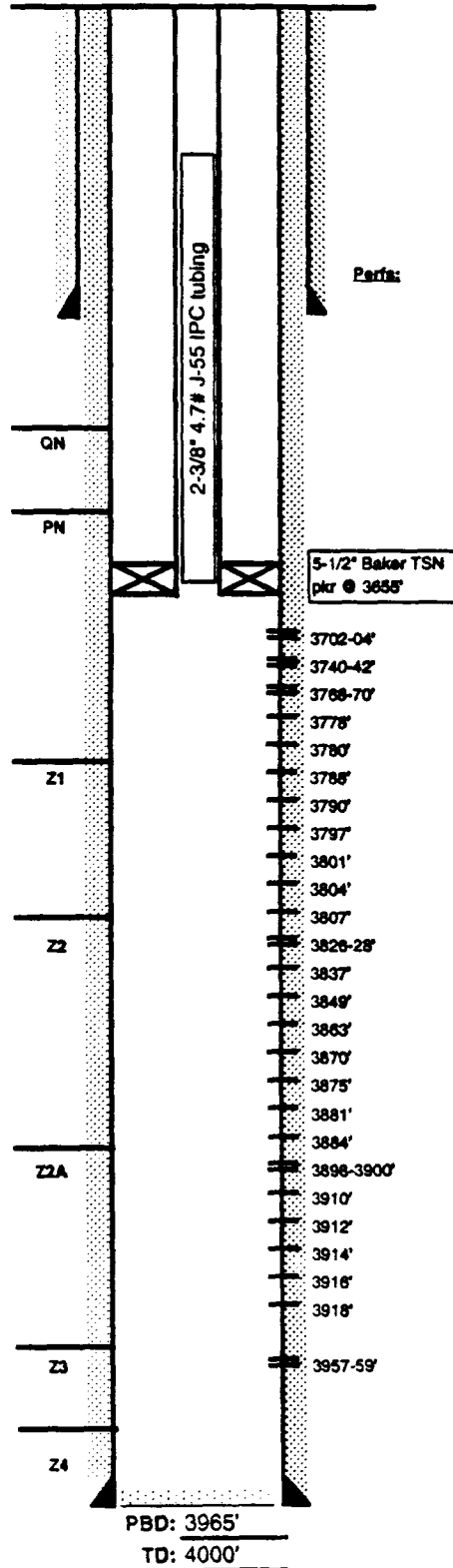
Date Completed: 11/18/1973
Initial Production: p59 BOPD 61 BWPD GOR 135
Initial Formation: Grayburg
FROM: 3837' to 3910'

8-5/8" OD
 20 # CSG 8rd
 Set @ 1198' W/ 625 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.

Tubing Detail: 12/5/86

KBTH:	0.00'
117 Jts. 2-3/8" 4.7# J-55 IPC tbq:	3618.30'
1 Jt. 2-3/8" 4.7# J-55 8rd EUE IPC	31.51'
1 Jt. 5-1/2" x 2-3/8" x 900 Gray Tbg Head	1.00'
1 5-1/2" X 2-3/8" Baker TSN packer	6.00'
Landed @	3655.21'

5-1/2" OD
 14 # CSG 10rd
 Set @ 4000' W/ 300 SX
 Cmt circ.? no
 TOC @ 2500' by TS
 (7-7/8" hole)



Completion Data

Perf 3910, 12, 14, 16 & 18 (1 JHPF). Swb 16 bbl & dry. ACDZ w/ 500 gal 28% NeA. Swb 35 BF (10% oil). Last hr 1.5 bbl - 50% oil. Put on pump. Test 10 BO/ 2 BW/ 145 MCFPD. POH. Perf 3863, 70, 75, 81 & 84 (1 JHPF). Set RBP @ 3899'. ACDZ w/ 900 gal 15% NeA & RCNBs. Acid Frac w/ 1000 gal 28% NeA. Swb 22 BF 6 hrs. Last 4 hrs swb 1 BFPH Tr oil. Perf 3837 & 3849 (2 JHPF). ACDZ w/ 1000 gal 15% NeA. Swab 25 BW Tr oil 4 hrs. Last hr 1.5 BPH Tr oil. Put on prod. (Cored 3762-4000')

Subsequent Workover or Reconditioning:

3/75 CO & acidized w/ 1000 gal. Tst 44 BOPD.
 12/79 Tag fill @ 3962' (4'). ACDZ w/ 5000 gal 15% NeFeA acid in 2 stages. Scale sqzd. Test 54 BO/ 0 BW/ 8 MCFPD.
 11/82 ACDZ 3837-3910' w/ 1596 gal 15% NeFeA & 38 RCNBs. Perf 3778, 80, 88 90, 92; 3801, 04 & 07 (1 JHPF). ACDZ new perfs w/ 672 gal 15% NeFeA & RCNBs. Tst 47 BO/ 28 BW/ 7 MCF. B/4 - 39 BO/ 13 BWPD.
 8/83 Dump acid 840 gal 15% NeFeA. Tst 62 BO/ 37 BW/ 6 MCFPD.
 7/84 Dump acid 840 gal 15% NeFeA. Tst 35 BO/ 39 BW/ 20 MCFPD.
 12/86 Perf 3702-04, 3740-42, 3768-70, 3826-28, 3898-3900 & 3957-3959 w/ 2 JHPF. ACDZ w/ 3000 gal 15% NeFeA in 3 stgs. GIH w/ 5-1/2" Baker TSN pkr on 2-3/8" IPC tbq. Circ. pkr fld, set @ 3655'. Test ann. to 600 psig OK. Convert to inj. Tst 720 BWIPD @ 0 psig.
 11/84 Tag w/ SL @ 3930'. ACDZ perfs 3704-3918' w/ 4000 gals 15% NeFe w/ 10% Pentol solution. A - 2083 BWIPD @ VAC B - 659 BWIPD @ 691 psi

Additional Data:

- T/Queen Formation @ 3438'
- T/Penrose Formation @ 3575'
- T/Grayburg Zone 1 @ 3747'
- T/Grayburg Zone 2 @ 3807'
- T/Grayburg Zone 2A @ 3887'
- T/Grayburg Zone 3 @ 3943'
- T/Grayburg Zone 4 @ 3978'
- T/Grayburg Zone 5 @ 4048'
- T/Grayburg Zone 6 @ 4101'
- T/San Andrea Formation @ 4152'
- KB @ 3590'

CURRENT WELLBORE DIAGRAM

LEASE: <u>EMSU</u>	WELL: <u>650</u> FIELD: <u>EMSU</u>	API: <u>30-025-33800</u>
LOC: <u>250' FNL & 1135' FWL</u>	SEC: <u>8</u> BLK: <u>T21S, R36E</u>	REF NO: <u>BL1209</u>
SVY: _____	GL: <u>3578</u> CTY/ST: <u>LEA CO., N.M.</u>	SPUD: <u>2/25/1997</u>
CURRENT STATUS: <u>Producer</u>	KB: <u>3582</u> DF: <u>3580.5</u>	TD DATE: <u>3/8/1997</u>

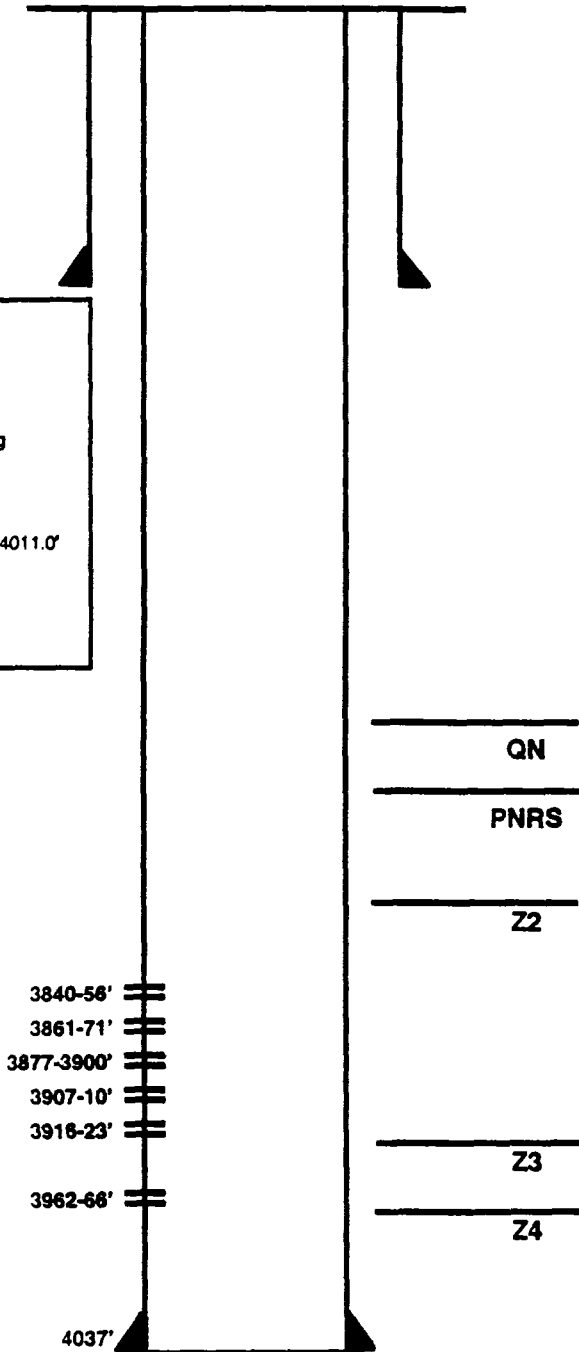
8-5/8", 24#/ft, K-55 Surf.
 Pipe set @ 1185' w/ 650
 SX cmt. 145 SX circ.
 TOC @ Surf by circ.

Tubing Detail: 09/12/97

KBTH:
 120 Jts. 2-7/8" 6.5#:
 2-7/8" X 7 TAC:
 2-7/8" Tbg 6.5# J-55 8RD Tbg
 Pump Barrel
 2-7/8" OE MAJ

Landed @ 4011.0'

5-1/2", 15.5#/ft, csg set @
 4037' w/ 965 SX cmt.
 Cmt Circ? 145 SX circ.
 TOC @ Surf by circ.



Date Completed: 5-10-97
 Initial Prod: 16 BOPD/91 BWPD/43 MCFPD
 Initial Formation: Grayburg From: 4037' To: 4038'
 Completion Data:
 2/25/97 Cored 3755-4039. GR/LDT/CNL/BHC/DLL/MCFL/CMR. CMT 1st stage w/ 90 SX Cl C, open DVT, circ. 36 SX to surf. CMT 2nd stage w/ 875 SX Cl C & circ. 50 SX cmt to surf.

Workover History:

4/30/97 - D/O FC & cmt to 4028'. Circ. clean. Pickle w/ 1000 gals 15% HCl. Perf // 3840-56, 3861-71, 3877-3900, 3907-10, 3916-23 & 3962-66 (2 JHPF). Set BP @ 4020. Spot 500 gals Resisol II. ACDZ w/ 1300 gals RS II ACDZ perms 3865-3966' w/ 5000 gals 15% RS II. foamed w/ N2 (9 stages w 50-75Q). Ret BP. Run GR log all zones treated.

9/10/97 - Run perf clean tool to 3700'. ACDZ perms 3840-3900' w/ 2268 gals RS II and 3907-66' w/ 714 gals RS II. Swb, then RIH w/ prod equip and TOTP.

Additional Data:
 T/Queen @ 3422'
 T/Penrose @ 3571'
 T/AGU @ N/A
 T/Grayburg Zone 1 @ 3747'
 T/Grayburg Zone 2 @ 3800'
 T/Grayburg Zone 3 @ 3932'
 T/Grayburg Zone 4 @ 3977'
 KB @ 3581.5'

Rod Detail: 06-05-97

Polish Rod
 82 7/8" N97 Rods
 96 3/4" N97 Rods
 Plunger



WELL DATA SHEET

LEASE: EMSU WELL: 279WIC
 LOC: 330' F N L & 2310' F E L SEC: 9
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: B ST: N.M.

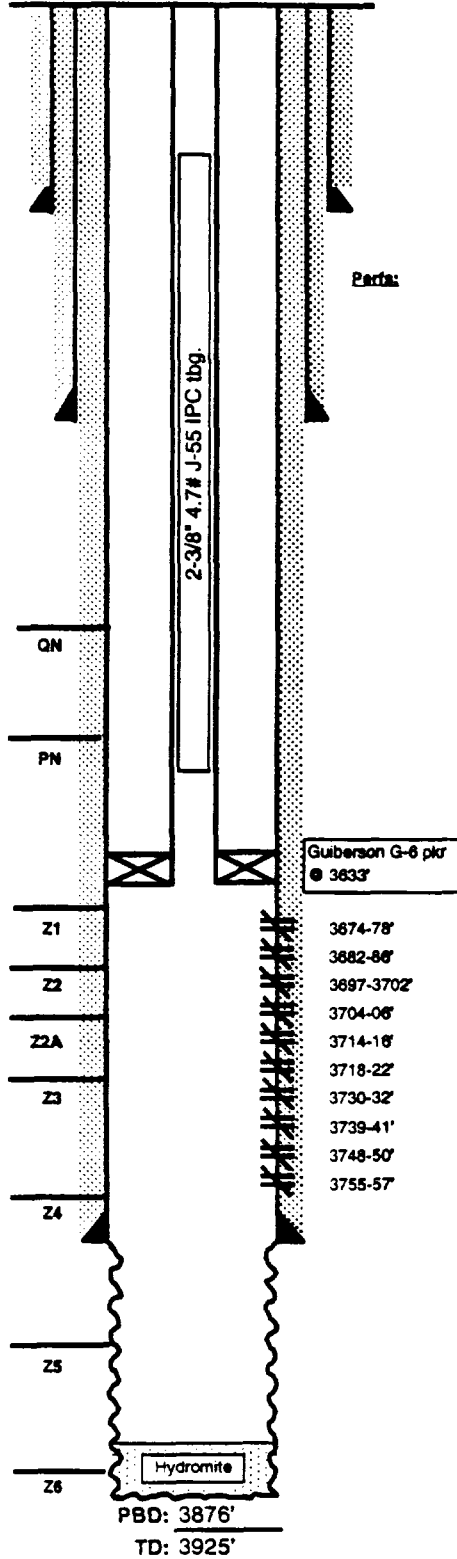
FORM: Grayburg / San Andree DATE: _____
 GL: 3590' STATUS: Injector
 KB: 3590' API NO: 30-025-04581
 DF: _____ CHEVNO: FA 5722:01

Date Completed: #####
 Initial Production: 1/ 492 BOPD 0 BWPD
 Initial Formation: Grayburg
 FROM: 3783' to 3900'

15-1/2" OD
 70 # CSG
 Set @ 272' W/ 300 SX
 Cmt circ.? yes
 TOC @ surf. by calc.

10-3/4" OD
 45 # CSG 8rd
 Set @ 1466' W/ 500 SX
 Cmt circ.? no
 TOC @ 314' by calc

Tubing Detail: 12/9/97	
KBTH:	0.00'
117 Jts. 2-3/8" 4.7# J-55 8rd IPC:	3631.40'
XL O/O tool w/ "F" nipple:	1.97'
GUIB G-6 P.C pkr in 10 pts	4.87'
Re-Entry Guide	0.55'
Landed @	3638.59'



Completion Data

Natural OH well completion.

Subsequent Workover or Reconditioning:

2/57 ACDZ OH w/ 500 gal 15% & 500 gals 5% acid.
 8/86 Deepen to 3925'. Perf 3714-16, 3730-32, 3739-41, 3748-50, 3755-57 (2 JHPF). ACDZ w/ 4000 gals 15% NeFe. Turn on inj. 682 BWIPD @ 0 psig.
 9/89 PB to 3876' w/ Hydromite. Perf 3674-78, 3682-86, 3697-3702 & 3718-22 (2 JHPF - 34 total holes). ACDZ w/ 3360 gals 15% NeFe. Start injection 936 BWIPD @ 41 psig.
 7/90 Replace pkr and check tubing.
 5/91 ACDZ w/ 3000 gals 15% HCl & Unisol solution. A - 1728 BWIPD @ 497 psi. B - 688 BWIPD @ 648 psi
 11/25/97 ACDZ perms 3674-3757' w/ 500 gals 15% NeHCl & OH w/ 1500 gals 15% RS II pumping 70Q GBW as diversion. Swb. Dump 2500# 20/40 sd down csg. SION. RIH w/ CIBP, set @ 3762'. RIH w/ CIGR to 3619'. M&P 200 SX Cl C - sqzd 172 SX in form. Tag cmt @ 3613', D/O cmt & CIGR, soft cmt to 3762'. Set Guiberson G-6 pkr @ 3633'. Run MIT. RTI.

Additional Data:

- T/Queen Formation @ 3364'
- T/Penrose Formation @ 3496'
- T/Grayburg Zone 1 @ 3666'
- T/Grayburg Zone 2 @ 3700'
- T/Grayburg Zone 2A @ 3729'
- T/Grayburg Zone 3 @ 3762'
- T/Grayburg Zone 4 @ 3797'
- T/Grayburg Zone 5 @ 3841'
- T/Grayburg Zone 6 @ 3892'
- T/San Andree Formation @ 3951'
- KB @ 3590'

7" OD
 # CSG 10rd
 Set @ 3798' W/ 400 SX
 Cmt circ.? no
 TOC @ 2386' by calc

PBD: 3876'
 TD: 3925'



WELL DATA SHEET

LEASE: EMSU WELL: 280
 LOC: 660' F N L & 1980' F E L SEC: 9
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: ST: N.M.

FORM: Grayburg / San Andres DATE:
 GL: 3580' STATUS: Producer
 KB: 3580' API NO: 30-025-04568
 DF: CHEVNO: FA 5709:01

Date Completed: 7/8/1935
 Initial Production: 144 BOPD / 0 BWPD
 Initial Formation: Grayburg
 FROM: 3703' to 3884' GOR 1736

10-3/4" OD
 # CSG
 Set @ 94' W/ 75 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (12-1/2" hole)

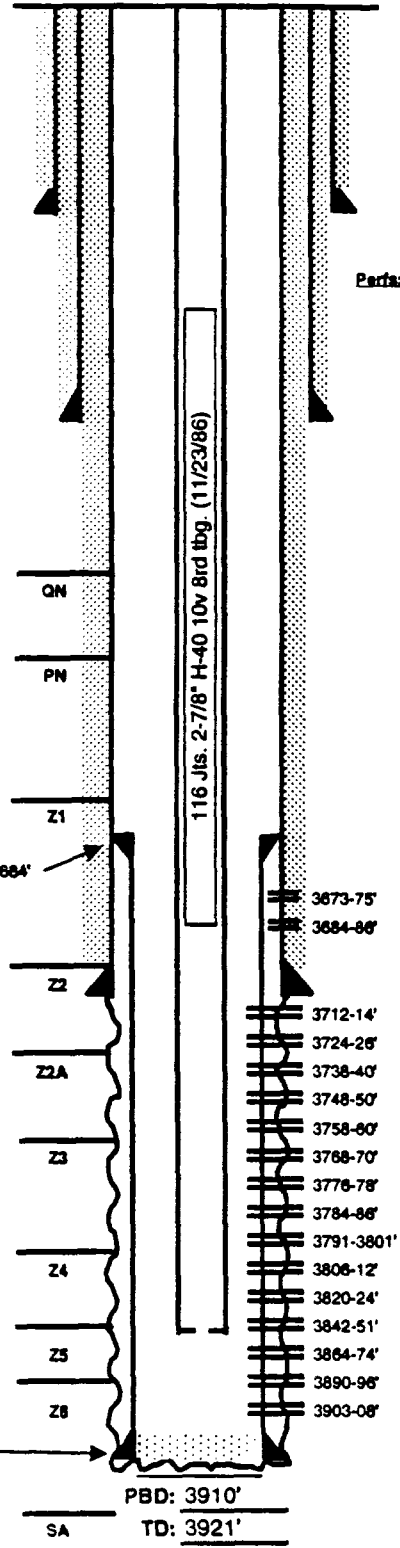
7-5/8" OD
 # CSG
 Set @ 1606' W/ 400 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (9-7/8" hole)

Tubing Detail: 11/23/86	
KBT#:	0.00'
10' X 2-7/8" Sub H-40	10.00'
116 Jts. 2-7/8" H-40 10v 8rd tbg:	3403.57'
8 Jts. 2-3/8" 4.7# J-55 EUE tbg:	250.83'
1 2' X 1.10 SN	1.10'
1 MA OE	31.25'
Landed @	3896.79'

5-1/2" OD
 # CSG
 Set @ 3703' W/ 400 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (6-3/4" hole)

Rod Detail: 11/23/86	
153 3/4" Rods (pulled and run back in hole)	

4-1/2" 13# N-80 Liner
 set @ 3920'



Completion Data

Subsequent Workover or Reconditioning:

10/35 ACDZ w/ 3000 gals
 7/52 ACDZ w/ 500 gals
 9/60 Deepen to 3921'. Set 4-1/2" liner @ 3920'. Top @ 3664'.
 Perf 3791-3801', 3806-12', 3820-24', 3842-51', 3864-74', 3890-96' &
 3903-3908'. ACDZ w/ 2000 gal 15% LSTNaA
 4/83 Perf lower GB 3794, 3797, 3808, 3810, 3821, 3823, 3834,
 3836, 3844, 3847, 3864, 3867 & 3872. ACDZ w/ 2100 gals 15%
 NeFe HCl. Perf upper GB 3740, 3743, 3745, 3746, 3759, 3760,
 3768, 3769 (1 JHPF). ACDZ w/ 1008 gals 15% NeFe HCl. Chem
 treat. RIH w/ PE. A/W 0 BO/ 20 BW/ 14 MCF.
 11/19/86 COWH. Perf 3673-75, 3684-86, 3712-14, 3724-26,
 3738-40, 3748-50, 3758-60, 3768-70, 3776-78 & 3784-86. ACDZ
 w/ 5500 gal 15% Ne HCl. Swb 3.5 hrs - SFL=3300'. EFL=3500'.
 Rec 21 BW/ spent acid. Chem sqz. RIH w/ PE. RTP. A/W 3 BO/
 33 BW/ 8 MCF. B/4 3 BO/ 13/ BW/ 6 MCF.
 8/97 ACDZ w/ 2000 gal 15% 90/10 Resisol II using 70Q GBW.

Additional Data:

T/Queen Formation @ 3351'
 T/Penrose Formation @ 3495'
 T/Grayburg Zone 1 @ 3659'
 T/Grayburg Zone 2 @ 3699'
 T/Grayburg Zone 2A @ 3728'
 T/Grayburg Zone 3 @ 3760'
 T/Grayburg Zone 4 @ 3792'
 T/Grayburg Zone 5 @ 3845'
 T/Grayburg Zone 6 @ 3890'
 T/San Andres Formation @ 3891'
 KB @ 3580'



WELL DATA SHEET

LEASE: EMSU WELL: 281WIC
 LOC: 660' F N L & 660' F W L SEC: 9
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: D ST: N.M.

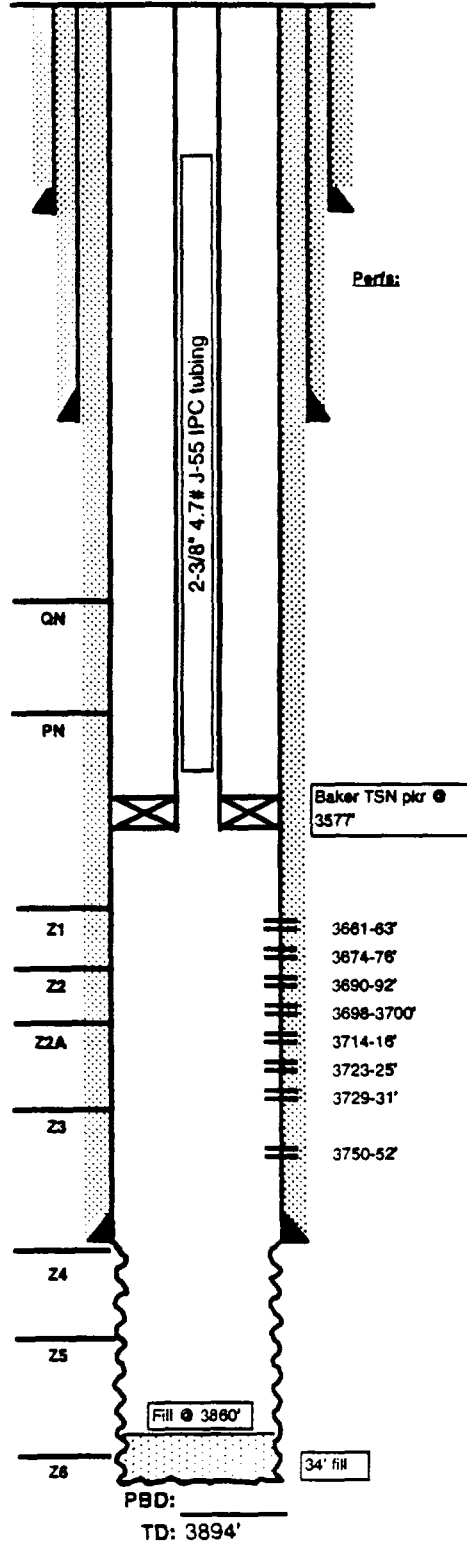
FORM: Grayburg / San Andres DATE: _____
 GL: 3566' STATUS: Injector
 KB: 3571' API NO: 30-025-04577
 DP: _____ CHEVNO: FA 5718:01

Date Completed: 4/9/1935
 Initial Production: 1/ 678 BOPD 0 BWPD
 Initial Formation: Grayburg
 FROM: 3728' to 3880' GOR 737

10" OD
 40 # CSG
 Set @ 359' W/ 275 SX
 Cmt circ.? _____
 TOC @ _____ by _____
 (13-3/4" hole)

7" OD
 24 # CSG 8rd
 Set @ 2818' W/ 450 SX
 Cmt circ.? _____
 TOC @ _____ by _____

4-3/4" OD
 16 # CSG 10rd
 Set @ 3772' W/ 100 SX
 Cmt circ.? no
 TOC @ _____ by _____
 (depth per Logger's CCL)



Completion Data

Natural OH well completion.

Subsequent Workover or Reconditioning:

5/44 Install gas lift equip. Tst 189 BO / 10 BW.
 5/53 Install ppg. equip. Test 20 BO/ 46 BW/ GOR 1210.
 9/64 PB w/ 37 gal Hydromite to 3855'. ACDZ OH w/ 2000 gal 15% NeA. Tst 26 BO/ 47 BWPD. B/4: Tst 4 BO/ 47 BWPD.
 8/68 500 gal 15% NeA dump acid. Tst: 21 BO/ 46 BWPD. B/4: 1 BO/ 37 BWPD.
 8/86 XO WH. CO & deepened to 3894'. Perf 3661-63, 3674-76, 3690-92, 3698-3700, 3714-16, 3723-25, 3729-31 & 3750-52 (2 JHPF). NOTE: logger found 4-3/4" csg shoe @ 3772', not @ 3728' as per original 1935 record. ACDZ OH 3772-3894' w/ 4000 gal 15% NeFeA. Swb 13 BW/Tr oil. ACDZ new perms w/ 1750 gal 15% NeFeA & 50 RCNBs. Swb 16 BW/ Tr oil. Swb dry. GIH w/ 2-3/8" 4.7# J-55 IPC tbg. & Baker TSN pkr. Circ. pkr fluid & set pkr @ 3577'. Put on inj. 11/7/86 (700 BWIPD @ 0 psig).
 4/91 Injection profile logger TD @ 3860' indicating 34' fill.
 11/93 ACDZ w/ 3000 gal 15% HCl - Unisol mix.
 Inject: A - 720 BWIPD @ 452 psig (12/93) B - 72 BWIPD @ 698 psig
 7/23/96 ACDZ w/ 6000 gal acid.
 2/9/99 Sat down @ 3600'

Additional Data:

T/Queen Formation @ 3337'
 T/Penrose Formation @ 3480'
 T/Grayburg Zone 1 @ 3634'
 T/Grayburg Zone 2 @ 3681'
 T/Grayburg Zone 2A @ 3708'
 T/Grayburg Zone 3 @ 3737'
 T/Grayburg Zone 4 @ 3774'
 T/Grayburg Zone 5 @ 3824'
 T/Grayburg Zone 6 @ 3876'
 T/San Andres Formation @ 3915'
 KB @ 3571'

WELL DATA SHEET

FIELD: Oil Center

WELL NAME: EMSU #1SWD
(formerly Meyer "B-4" #23)

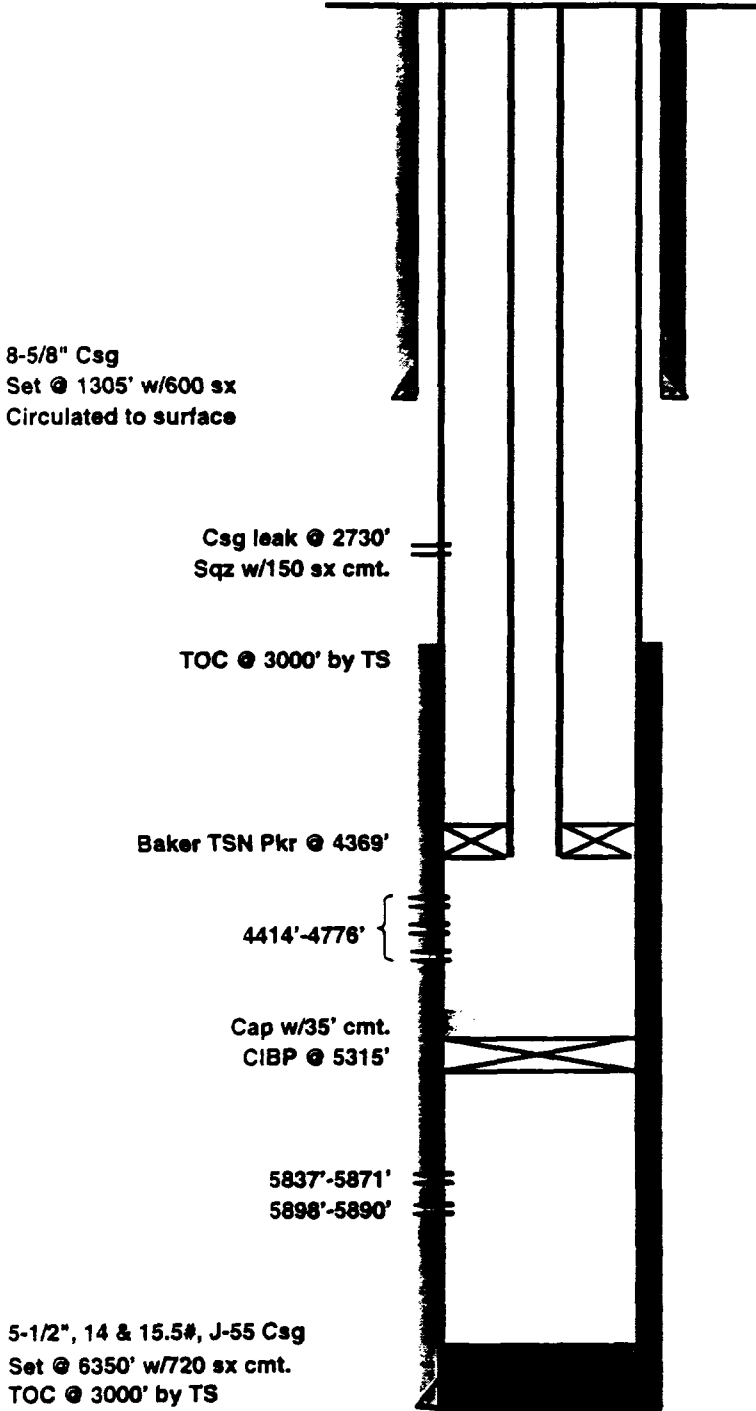
FORMATION: San Andres

LOC: 660' FSL & 1980' FEL, Unit W
TOWNSHIP: 21S
RANGE: 36E

SEC: 4
COUNTY: Lea
STATE: NM

GL: 3584'
KB to GL: 11'
DF to GL:

CURRENT STATUS:
API NO: 30-025-04484
REFNO: FA5626



Date Completed: 10/62
Initial Formation: Blinbry
FROM: **TO:**

Completion Data:
Acdz w/2000 gals. Frac w/10,000 gals oil & 10,000# sd.

Subsequent Operations:
(01/67) Backed off csg @ 663' & replaced bad joint. Frac 5898'-5890' w/8,000 gals lse oil & 8,000# sd (screened out). Frac w/47,000 gals & 47,000# sd. Perf 5837'-5871' w/1 JHPF. Acdz w/10,000 gals.

(11/72) Acdz w/1500 gals.

(10/74) Perf @ 2730' & sqz w/150 sx.

(03/87) RIH w/5 1/2" CIBP, set @ 5315', cap w/35' cmt. PB to 5280' WL. Perf 4414'-4776' w/3 3/8" guns, 4 JHPF. Acdz w/24,500 gals 15% NEFE HCL. Run 5 1/2" Baker TSN pkr @ 4369'.

(09/87) SWD not taking water. Acdz via flowline w/1000 gals 15% NEFE.

TD 6350'

WELL DATA SHEET

FIELD: Oil Center

WELL NAME: Bell Ramsay NCT-A #12

FORMATION: Blinebry

LOC: 2217' FNL & 990' FWL
TOWNSHIP: 21S
RANGE: 36E
UNIT LETTER: E

SEC: 4
COUNTY: Lea
STATE: NM

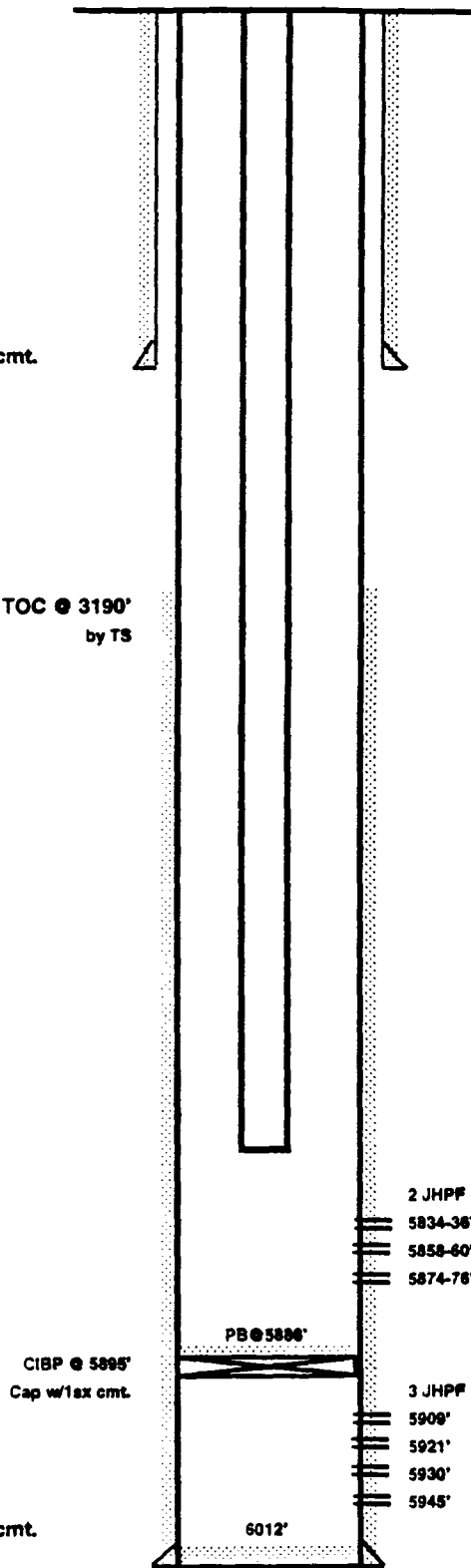
GL: 3556'
KB to GL:
DF to GL:

CURRENT STATUS:
API NO: 30-025-04487
REFNO: FA5629

Date Completed: 01/04/63
Initial Production: 124 bopd / 15 bwpd / 679 mcfd

7-5/8", 26# Csg
 Set @ 1281' w/550 sx cmt.
 Circulated (by calc).

TOC @ 3190'
 by TS



Completion Data:

Perf w/3 JHPF @ 5909', 5921', 5930' & 5945'. Spot 500 gals 15% NEFE HCL. Frac w/16,000 gal lse oil and 40,000# sd.

Subsequent Operations:

10/63 Install ppg equip.

7/65 Pump plugged w/ calcium. Dump 250 gals 15% NEA down csg.

6/71 Set CIBP@5895'. Cap w/1 sx cnt. Perf w/ 2 JHPF @ 5834-36', 5858-60', & 5874-76'. Acdz w/3,000 gals 28% NEA.

4/79 Repair surface csg leak.

4-1/2", 11.6# Csg
 Set @ 6050' w/400 sx cmt.
 TOC @ 3190' (by TS)

TD 6050''

FILE: bell-ramsay-a-#12.xls
 keta 2/13/97

CURRENT WELL DATA SHEET

FIELD: Eumont

WELL NAME: H. T. Orcutt (NCT-B) Com # 14

FORMATION: YTS 7R Qn

LOC: 1500' FNL & 725' FWL

SEC: 4

GL: 3551'

CURRENT STATUS:

TOWNSHIP: 21S

COUNTY: Lea

KB to GL: 6'

API NO: 30-025-34344

RANGE: 36E

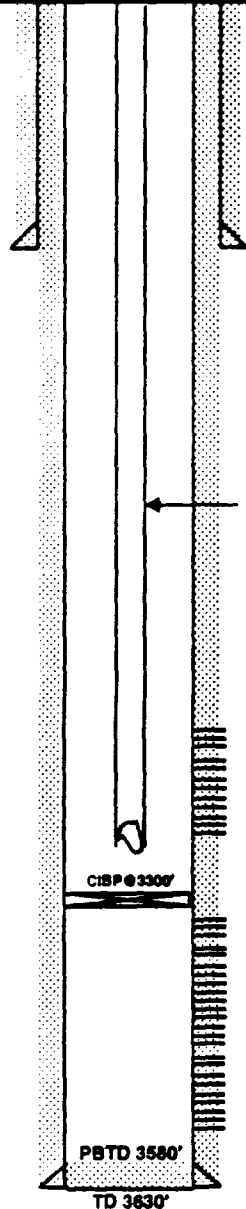
STATE: NM

DF to GL: 5'

REFNO: BQ9909

Unit Letter: E

8 5/8", 23#, WC-50 Csg
Set @ 515', w/ 300 sx. cmt.
cmt. circulated
12 1/4" hole



2 3/8" Prod. Tbg.
EOT @ 3112'

Perfs w/ 2 JHPF
2968' - 2970'
2980' - 2982'
2982' - 2984'
3010' - 3012'
3046' - 3048'

Perfs w/ 1 JHPF
3344' - 3346'
3356' - 3358'
3362' - 3364'
3376' - 3378'
3391' - 3393'
3402' - 3404'
3426' - 3428'
3473' - 3475'
3492' - 3494'

CIBP @ 3300'

PBTD 3580'

TD 3630'

Spud Date: 3/29/98
Completion Date: 5/26/98
IP: _ BO / _ MCF / _ BW,

Initial

Spud Date: March 29, 1998
Dog-lag seventy above 3 at multiple points below 2500'.

Perfed 3344' to 3494' w/ 1 jhpf. PPI acid perfs all communicated. Ran CBL. Fraced w/ CO2 foam and 100,000# 12/20. Tested. Gas TSTM. Set RBP @ 3200'. Perfed 2986' to 3048' w/ 2 jhpf. PPI acid perfs. Fraced w/ CO2 Foam and 191,000# 12/20. Tested. Removed RBP and CO.

Perf intervals:

2 JHPF
2968' - 2970'
2980' - 2982'
2992' - 2994'
3010' - 3012'
3046' - 3048'
1 JHPF
3344' - 3346'
3356' - 3358'
3362' - 3364'
3376' - 3378'
3391' - 3393'
3402' - 3404'
3426' - 3428'
3473' - 3475'
3492' - 3494'

Formation Tops

Yates 2704'
7-Rvrs 2906'
Queen 3331'

5 1/2", 15.5#, K-55 Csg
Set @ 3630', w/ 700 sx. cmt.
CMT circulated
7 7/8" hole

Subsequent Well Works:

7/14/98 Set CIBP @ 3300'. Acdz perfs 2968' - 3048' w/6000 gals 15% HCL

WELL DATA SHEET

LEASE: Meyer "B-4"
OPERATOR: Texon Oil & Gas
LOC: 2260' F S L & 1980' F W L
TOWNSHIP: 21S
RANGE: 36E **UNIT:** C
WELL: 15
SEC: 4
CNTY: Lea
ST: N.M.

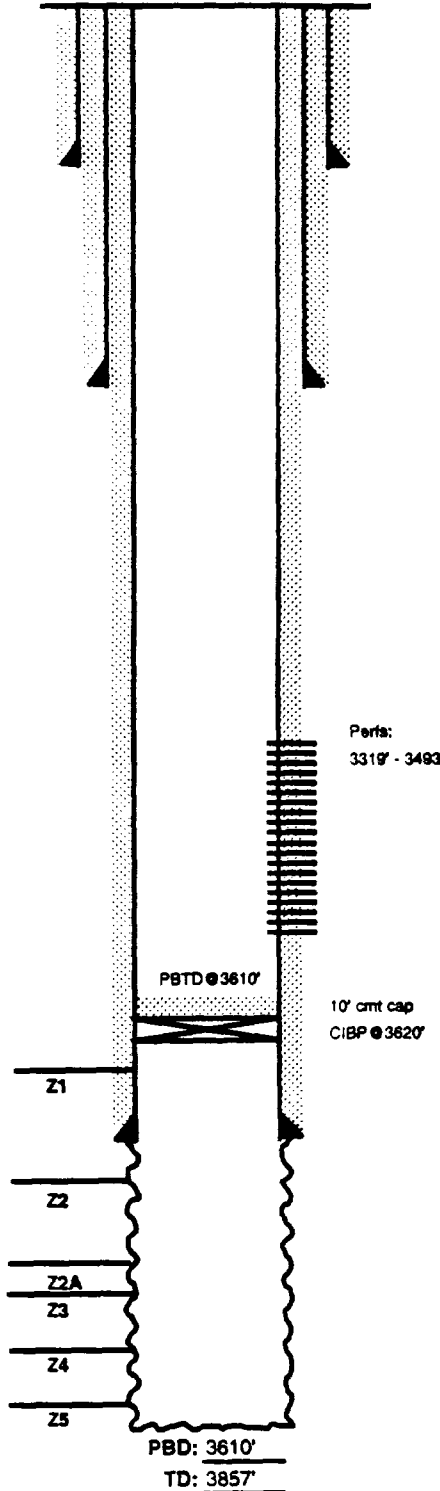
FIELD: Eumont
FORM: Yates-7Rvrs-Queen
GL: 3545'
KB:
DF:
DATE: 12/15/1999
STATUS: Producer
API NO: 30-025-04475
CHEVNO: FA 5617:0:AA
EMSU: 182X

Date Completed: 10/14/36
Initial Production: F/ 144 BOPD / 0 BWPD
Initial Formation: Grayburg
FROM: 3738' to 3857'

10-3/4" OD
 # CSG rd
 Set @ 312' w/ 225 SX
 Cmt circ.? Yes
 TOC @ by

7-5/8" OD
 # CSG rd
 Set @ 1242' w/ 425 SX
 Cmt circ.? Yes
 TOC @ by

5-1/2" OD
 # CSG rd
 Set @ 3738' w/ 425 SX
 Cmt circ.? Yes
 TOC @ by



Completion Data

10/36 Shot OH w/ 195 qts. Nitro.

Subsequent Workover or Reconditioning:

7/51 Acids w/ 3000 gals acid.
 9/54 Install Ppg Equip.
 3/66 TA well.
 7/80 Set CIBP @ 3620' & cap w/ 10' cmt. Abandon Grayburg formation. Perf 3319' - 3493'. Acids w/1400 gals acid. Frac w/1500 gals 7 1/2% acid, 19,000 GGBW & 36,000# snd.

Additional Data:

- T/Queen Formation @ 3320'
- T/Penrose Formation @ 3446'
- T/Grayburg Zone 1 @ 3625'
- T/Grayburg Zone 2 @
- T/Grayburg Zone 2A @
- T/Grayburg Zone 3 @
- T/Grayburg Zone 4 @
- T/Grayburg Zone 5 @
- T/Grayburg Zone 6 @
- T/San Andres @ 3829'

FILE: Meyer B-4 #15 WB.XLS
 rima 12/15/99

WELL DATA SHEET

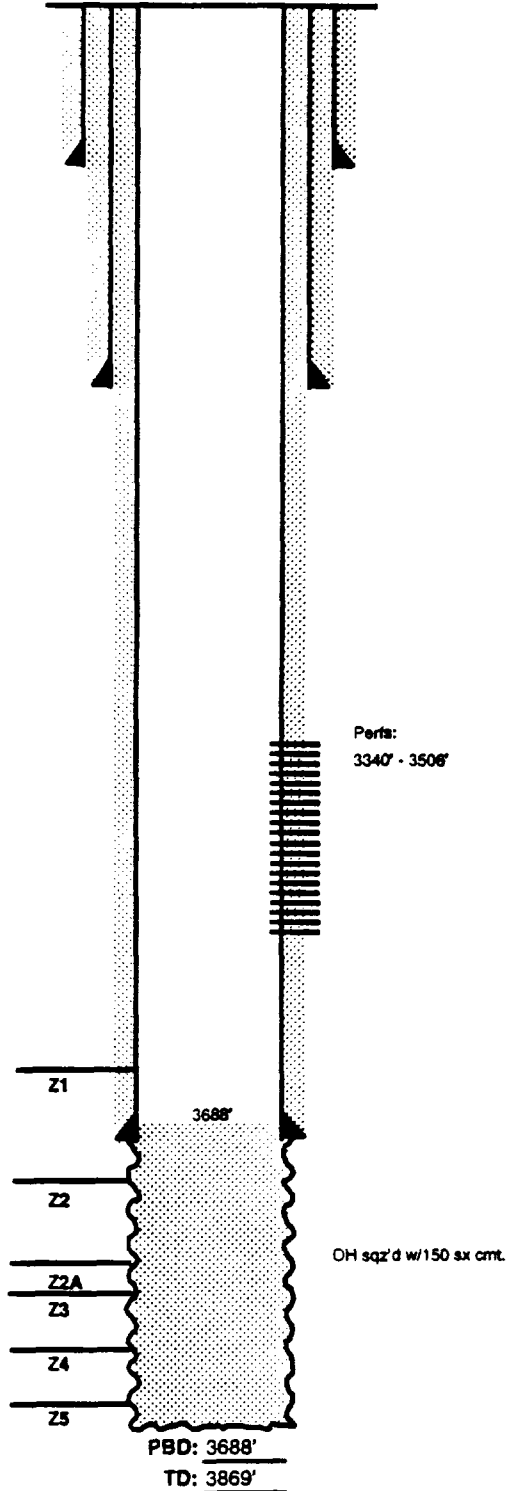
LEASE: Meyer "B-4"
OPERATOR: Texon Oil & Gas
LOC: 1980' F N L & 1980' F E L
TOWNSHIP: 21S
RANGE: 36E **UNIT LETTER:** G
WELL: 14
SEC: 4
CNTY: Lea
ST: N.M.

FIELD: Eumont **DATE:** 12/15/1999
FORM: Yates-7Rvrs-Queen
GL: _____
KB: 3544'
DF: _____
Status: Producer
API NO: 30-025-04474
CHEVNO: FA 5616.0:AA
EMSU: 202X
Date Completed: 9/1/36
Initial Production: F/ 319 BOPD / 0 BWPD / 940 GOR
Initial Formation: Grayburg
FROM: 3699' to 3869'

10-3/4" OD
 # CSG rd _____
Set @ 312' w/ 200 SX
Cmt circ.? Yes
TOC @ surf by calc.

7-5/8" OD
 26.4 # CSG rd _____
Set @ 1294' w/ 400 SX
Cmt circ.? Yes
TOC @ surf by calc.

5-1/2" OD
 17 # CSG rd _____
Set @ 3699' w/ 425 SX
Cmt circ.? Yes
TOC @ surf by calc.



Completion Data

8/36 Acdz w/ 1,500 gals acid.
 9/36 Acdz w/ 3,000gals acid.
 9/36 Shot OH w/ 190 qts. Nitro.

Subsequent Workover or Reconditioning:

1/54 PB to Eumont Gas. Sqz OH w/ 150 sx cmt.
 Perf / 3340' - 3506'

Additional Data:

- T/Queen Formation @ 3358'
- T/Penrose Formation @ 3481'
- T/Grayburg Zone 1 @ 3660'
- T/Grayburg Zone 2 @
- T/Grayburg Zone 2A @
- T/Grayburg Zone 3 @
- T/Grayburg Zone 4 @
- T/Grayburg Zone 5 @
- T/Grayburg Zone 6 @
- T/San Andres @ 3864'

FILE: Meyer B-4 #14 WB.XLS
 r/m 12/15/99

WELL DATA SHEET

FIELD: Eumont

WELL NAME: Bell Ramsay NCT-A #8

FORMATION:

LOC: 3258' FNL & 660' FWL, Unit L
TOWNSHIP: 21S
RANGE: 36E

SEC: 4
COUNTY: Lea
STATE: NM

GL: 3570'
KB to GL:
DF to GL:

CURRENT STATUS:
API NO: 30-025-04491
REFNO: FA5633:0:01
EMSU: 211X

Date Completed: 05/28/36
Initial Formation:

15-1/2", 70# Csg
 Set @ 34' w/50 sx cmt.
 Circulated to surface.

7-5/8", 26# Csg
 Set @ 1281' w/550 sx cmt.
 Circulated (by calc).

5-1/2", 17# Csg
 Set @ 3680' w/300 sx cmt.
 TOC @ 1927' (by calc)

TOC @ 55'

TOC @ 1927'

3005'-3086'

3355'-3390'

3410'-3460'

3505'-3520'

PB 3558'

TD 3890'

Completion Data:

Acidz w/1000 gals Dowell X solution. Acidz w/2000 gals Hydrochloric acid 50% solution. No inhib used. Acidz w/2000 gals Dowell X solution. IP @ 100 BOPD & 4,973 MCFD.

Subsequent Operations:

(12/36) Acidz w/1000 gals 14% non-inhib solution.

(05/40) PB w/700 gals Jelly Seal w/J-4 on btm. Pmp 1000 gals Dowell Form Plug. IP 1250#. Spot 150 gals Super Jelly Seal on btm, followed w/600 gals Dowell Chemical Form Plug, flushed w/13 BW & 2 BO. Spot 15 gals Jellflake on btm. Trtd w/2000 gals Dowell X, flushed w/15 BO.

(12/42) Spotted 10 gals hvy Jelly Seal on Btm. Trtd w/2000 gals Dowell X.

(03/56) Broke form w/1400# press. Sqz OH w/208 sx cmt. Perf csg @ 3355'-3390', 3410'-3460', 3505'-3520', w/2-1/2" JHPF. Trtd form w/10,000 gals rfd oil w/1# SPG by Dowell.

(03/67) Csg leak 3' from surface. Dig out cellar. Chg out csg nip & WH equip.

(09/94) CO f/3421'-3557'. Pump 750 gals 15% NEFE acid. Spot acid to perms 3510'-3520' w/500 gals 15% NEFE acid. Frac Queen perms w/41,250 gals 50Q CO2 linear gel & 152,000# 12/20 Brady sd. Flush. Swab. Perf f/3086'-3005'. Spot acid across new perms. Frac 3086'-3005' w/40,850 gals 50Q CO2 linear gel & 152,000# 12/20 Brady sd.

WELL DATA SHEET

FIELD: Oil Center

WELL NAME: Bell Ramsay NCT-A #11

FORMATION: Blinbry

LOC: 3540' FSL & 990' FWL
 TOWNSHIP: 21S
 RANGE: 36E
 UNIT LETTER: M

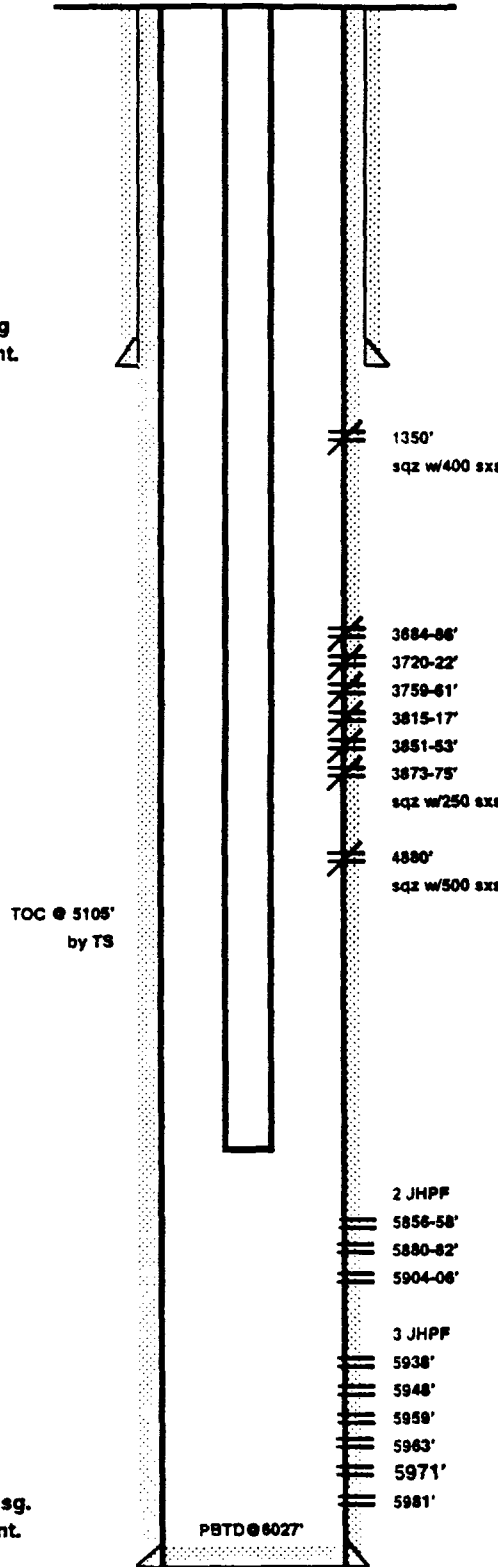
SEC: 4
 COUNTY: Lea
 STATE: NM

GL: 3570'
 KB to GL: 3579'
 DF to GL:

CURRENT STATUS:
 API NO: 30-025-04494
 REFNO: FA5636

Date Completed: 05/01/62
 Initial Production: 100 bopd / 84 bwpd / 11 mcf/d

8-5/8", 24# Csg, J-55 Csg
 Set @ 1300' w/605 sx cmt.
 Circulated



Completion Data:
 Perf w/3 JHPF @ 5959', 5963', & 5981'. Spot 750 gals 15% mud acid and 8,000 gals 15% retarded acid. Frac w/20,000 GGRO and 60,000# sd. Perf w/4 JHPF @ 4811'. Set CIBP @ 4811'. Sqz w/500 sx cmt. DO & CO to 6025'.

Subsequent Operations:
 10/63 Perf w/3 JHPF @ 5938' & 5948'. Acdz w/4,000 gals 15% HCL NEA. PB left in hole.
 2/69 CO scale from 5938' to 6027'. Spot 250 gals Gypsol. Acdz w/500 gals 20% NEA. Ppd 165 gals scale treatment down csg.
 10/70 Scale treatment.
 6/71 CO scale to 6010'. Acdz w/2,000 gals 15% NEA. Perf w/2 JHPF @ 5856-58', 5880-82', & 5904-06'. Set BP @ 5929'. Acdz w/3,000 gals 28% NEA. Picked up Bp and POH.
 3/72 Scale treatment.
 9/72 Scale treatment.
 8/73 Scale treatment.
 7/74 Scale treatment.
 7/75 Scale treatment.
 10/75 Scale treatment.
 12/76 Perf Eu-Mon w/4 JHPF @ 3684-86', 3720-22', 3759-61', 3815-17', 3851-52' & 3873-75'. Acdz w/3,000 gals 15% NEA. Sqz perms 3684-3875' w/250 sx cmt.
 7/79 Scale treatment.
 10/80 Scale treatment.
 7/81 Scale treatment.
 8/83 Repair csg leak. Perf w/4 JHPF @ 1350'. Sqz w/400 sx cmt.
 1/84 Scale treatment.

4-1/2", 11.6# Csg, J-55 csg.
 Set @ 6055' w/160 sx cmt.
 TOC @ 5105' (by TS)

TD 6055'

FILE: bell-ramsay-a-#11.xls
 keta 2/14/97

WELL DATA SHEET

LEASE: Meyer "B-4"
OPERATOR: Texon Oil & Gas
LOC: 1980' F S L & 1980' F W L
TOWNSHIP: 21S
RANGE: 36E **UNIT LETTER:** S
WELL: 4
SEC: 4
CNTY: Lea
ST: N.M.

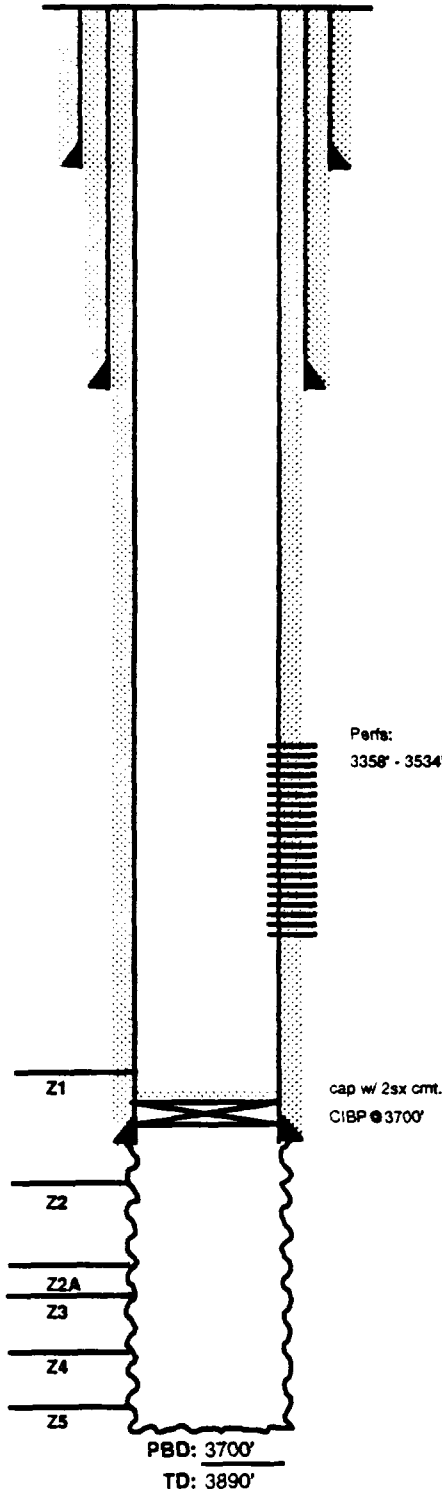
FIELD: Eumont
FORM: Yates-7Rvrs-Queen
GL:
KB: 3587'
DF:
DATE: 12/15/1999
STATUS: Producer
API NO: 30-025-04465
CHEVNO: FA 5607.0:AA
EMSU: 240X

Date Completed: 1/9/36
Initial Production: F/ 780 BOPD / 0 BWPD / 985 GOR
Initial Formation: Grayburg
FROM: 3747' to 3890'

10-3/4" OD
CSG _____ **rd** _____
Set @ 320' **w/** 175 **SX**
Cmt circ.? Yes
TOC @ surf **by** calc.

7-5/8" OD
CSG _____ **rd** _____
Set @ 1612' **w/** 400 **SX**
Cmt circ.? Yes
TOC @ surf **by** calc.

5-1/2" OD
CSG _____ **rd** _____
Set @ 3750' **w/** 400 **SX**
Cmt circ.? Yes
TOC @ surf **by** calc.



Completion Data

Subsequent Workover or Reconditioning:

11/45 Acdz w/ 1,000 gals acid.
 4/52 Acdz w/ 1,000 gals acid.
 10/54 Install Pgp Equip.
 2/73 Plug back to Eumont Gas. Set CIBP @ 3700' & cap w/ 2 sx cmt. Perf f/ 3358' to 3534'. Acdz w/ 1,500 gals acid. Frac w/ 20,000 GGRO & 40,000 # snd.

Additional Data:

T/Queen Formation @ 3353'
 T/Penrose Formation @ 3486'
 T/Grayburg Zone 1 @ 3652'
 T/Grayburg Zone 2 @
 T/Grayburg Zone 2A @
 T/Grayburg Zone 3 @
 T/Grayburg Zone 4 @
 T/Grayburg Zone 5 @
 T/Grayburg Zone 6 @
 T/San Andres @ 3886'

FILE: Meyer B-4 #14 WB.XLS
rima 12/15/99

WELL DATA SHEET

FIELD: Eumont Gas

WELL NAME: Bell Ramsay NCT-A #5

FORMATION:

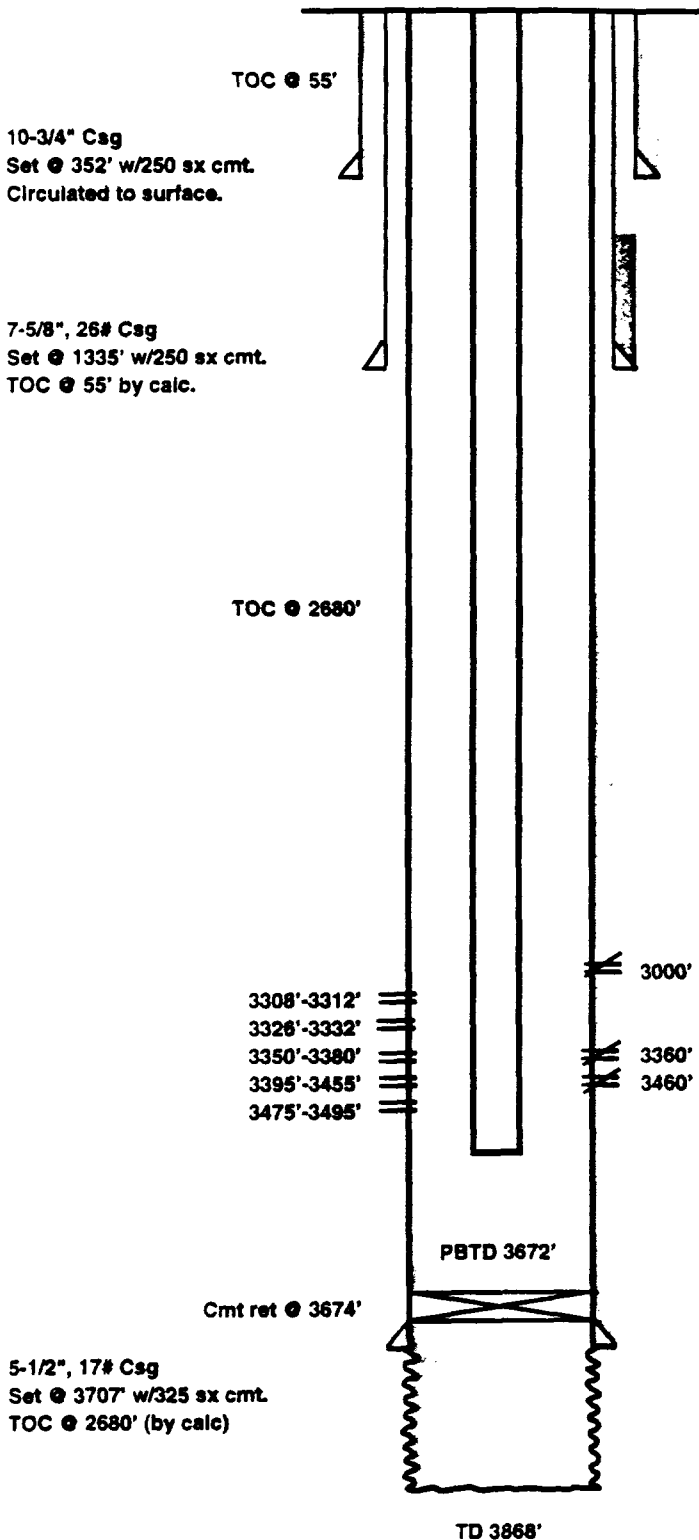
LOC: 660' FSL & 660' FWL, Unit U
TOWNSHIP: 21S
RANGE: 36E

SEC: 4
COUNTY: Lea
STATE: NM

GL: 3583'
KB to GL:
DF to GL:

CURRENT STATUS:
API NO: 30-025-04488
REFNO: FA5830:0:AA
EMSU: 258X

Date Completed: 10/15/35
Initial Formation: Grayburg



Subsequent Operations:
 (09/43) Acdz w/1000 gals
 (06/52) Acdz w/2000 gals 15%
 (11/52) Acdz w/1500 gals 15%
 (12/55) PB w/cal seal to 3844', pmp 5 sx cmt, CO to 3824', dumped 32 gals hydromite PB to 3789', acdz OH 3707'-89' w/500 gals, dumped 24 gals hydromite PB 3746', dumped 7 gals hydromite PB 3770', install pmp equip.
 (04/56) Set cmt ret at 3674', cmt w/117 sx, rev out 25 sx, PB depth 3672', perf 5 1/2" csg @ 3460', 3360', 3000'. Sqz w/45 sx cmt, rev out 5 sx. CO & perf Eumont 3350'-80', 3395'-3455', 3475'-3495' w/2-1/2" JHPF, acdz w/500 gals.
 (06/92) Acdz perms 3350'-3495' w/450 gals 15% NEFE. Perf 3308'-12' & 3326'-32', 60 deg phsd 4" guns Acdz w/600 gals 15% NEFE. TIH w/pkr, set @ 3230'. Frac perms 3308'-3495' w/1059 bbls gelled water, 164 tons CO2, 157,000# sd.

WELL DATA SHEET

FIELD: Eumont Gas

WELL NAME: H. T. Orcutt (NCT-B) Com #1

FORMATION:

LOC: 1980' FNL & 1980' FEL, Unit G

SEC: 5

GL: 3568'

CURRENT STATUS:

TOWNSHIP: 21S

COUNTY: Lea

KB to GL:

API NO: 30-025-04509

RANGE: 36E

STATE: NM

DF to GL:

REFNO: FA5651:0:01

EMSU: 199X

Date Completed: 04/29/36

Initial Formation:

10 3/4", 40# Csg
Set @ 306' w/250 sx cmt.
Circulated to surface (calc)

7 5/8", 26# Csg
Set @ 1207' w/300 sx cmt.
Circulated to surface (calc)

Completion Data:

Acdz w/1000 gals. *Note*: Struck DP at TD 3862', left 6 jts in hole, set whipstock at 3300'.

Subsequent Operations:

(08/39) Acdz w/1000 gals

(02/44) Acdz w/1000 gals 15% NE.

(10/48) Acdz w/1000 gals

(08/49) TA'd

(08/51) Cut tbg at 3670', pulled & cut off at 3830', rec 120 jts tbg, cut tbg 3644', set cmt ret at 3600', sqz w/125 sx cmt, top cmt 3583', perf 5 1/2" csg 3335'-3550' w/2 JHPF, acdz w/500 gals.

(09/72) Acdz w/250 gals 15% NE.

(04/91) TIH w/pkr @ 3226'. Frac w/66,000 gals 50/50 xl-gel CO2 & 125,000# 12/20 sd.

Perfs @ 3335'-3550' (430 holes)

3583'

Cmt ret @ 3600', cap w/125 sx cmt

5 1/2", 17# Csg
Set @ 3745' w/300 sx cmt.
Circulated to surface (calc)

Junk in hole

TD 3865'

WELL DATA SHEET

FIELD: Eumont Gas

WELL NAME: Graham Orcutt Gas Com #2 **FORMATION:**

LOC: 4600' FNL & 1983' FWL, Unit N
TOWNSHIP: 21S
RANGE: 36E

SEC: 5
COUNTY: Lea
STATE: NM

GL: 3590'
KB to GL:
DF to GL:

CURRENT STATUS:
API NO: 30-025-04505
REFNO: FA5647:0:01
EMSU: 225X

Date Completed: 09/18/35
Initial Formation: Grayburg

10-3/4" Csg
 Set @ 355' w/250 sx cmt.
 Circulated to surface.

7-5/8", 26# Csg
 Set @ 2719' w/325 sx cmt.
 Circulated (by calc).

Completion Date:
 None - natural.

Subsequent Operations:
 (10/48) Acdz w/1000 gals

 (05/51) Perf OH f/3810'-3890' w/1 shot per ft. 90 holes total.

 (02/54) Set CIBP @ 3710' w/1 sx cmt cap. Perf 5-1/2" csg @ 3400'-3399' w/8, 1/2" JH. Set cmt ret @ 3389', attempt sqz but would not take fluid, cmt down 7-5/8"-5-1/2" annulus w/250 sx cmt. TS showed cmt 0'-2900'. Perf 3700'-3550', 3530'-3420', w/4, 1/2" JHPF. Acdz w/1000 gals.

 (09/96) POH w/tbg. Pump 150 sx cl "C" @ 3365'. Drilled cmt to 3510', CO. Perf sqz holes @ 3310', 3293', 3090' & 2800'. Perf 3200'-3440' w/4" csg guns, 3 JHPF. Spot acid. Pump 75 sx cl "C" @ 2839'. Tag @ 2830'. Drilled cmt to 3450'. Perf 3200'-3293' w/1 JHPF & 3415'-3440' w/2 JHPF. Perf 2792'-3057' w/1 JHPF. Acdz w/40 bbls 15% HCL. Frac'd 3200'-3440' w/43,750 gals foam & 275,500# 12/20 sd. RIH w/tbg @ 3411'.

TOC @ 2900' from sqz job 2/54

2792'-3057'
 3200'-3293'
 3415'-3440'

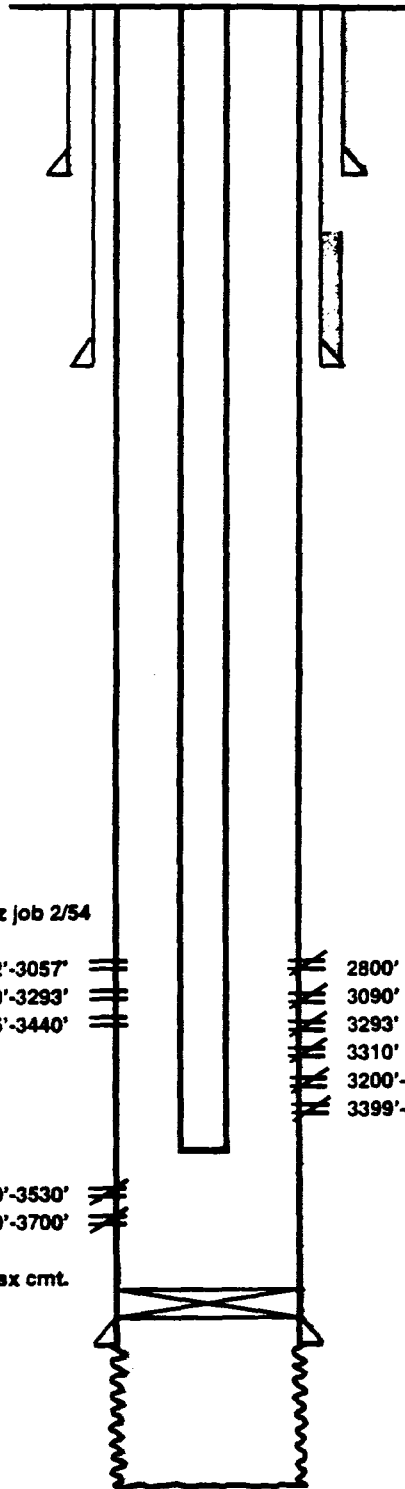
2800'
 3090'
 3293'
 3310'
 3200'-3440'
 3399'-3400' sqz w/250 sx cmt dn annulus

Sqz perfs w/75 sx cmt.

Sqz w/150 sx cmt. { 3420'-3530'
 3550'-3700'

CIBP @ 3710', cap w/1 sx cmt.

5-1/2", 17# Csg
 Set @ 3718' w/15 sx cmt.
 TOC @ 2900' (by calc)



TD 3890'

WELL DATA SHEET

FIELD: Eumont

WELL NAME: Graham-Orcutt #4

FORMATION: 7 Rvrs Queen Penrose

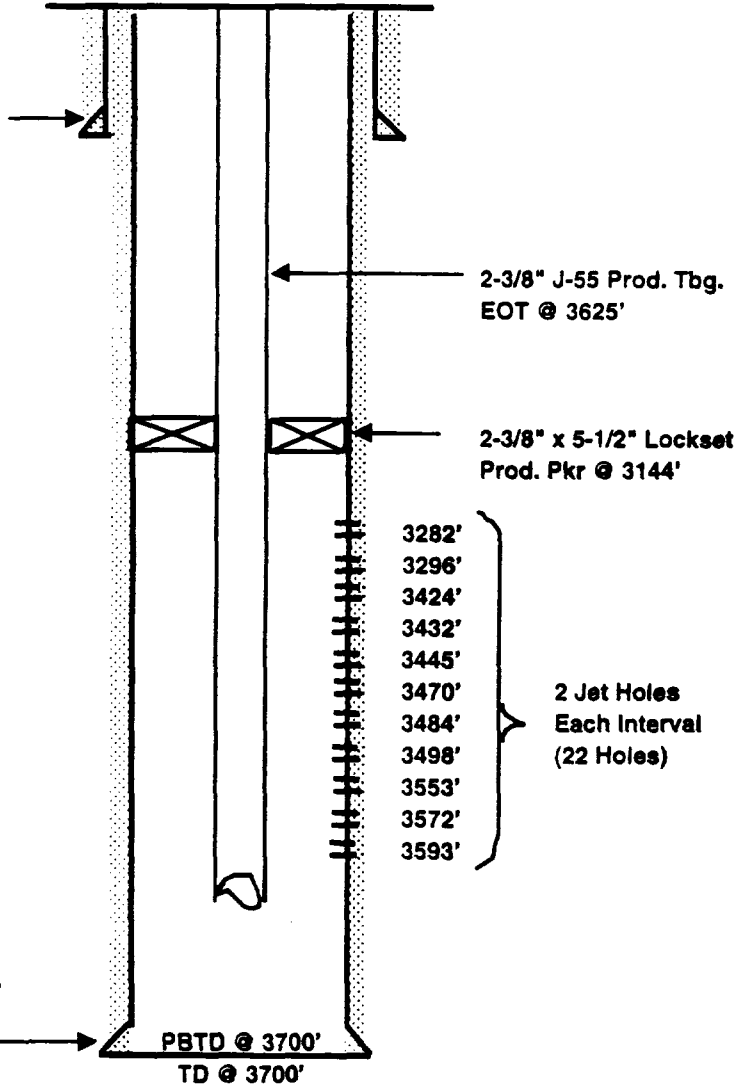
LOC: 3560' FNL & 660' FWL
 TOWNSHIP: 21S
 RANGE: 36E
 Unit Letter: L

SEC: 5
 COUNTY: Lea
 STATE: NM
 Fee Land

GL: 3585'
 KB to GL: 13.5'
 DF to GL: 12.5'

CURRENT STATUS: Prod
 API NO: 30-025-31749
 REFNO: OU5355

8 5/8" 23# M-50 Surf. Csg.
 set @ 1148' w/550 sx cmt.
 Cmt. Circ.
 12 1/4" hole



Spud Date: 11/7/92
 Completion Date: 12/18/92
 IP: 0 BO / 304 MCF / 0 BW,
 48/64" choke, FTP 250#

5-1/2" OD, 15.5# K-55 Csg.
 set @ 3700' w/450 sx cmt.
 Cmt. Circ.
 7 7/8" hole

2 Jet Holes
 Each Interval
 (22 Holes)

Formation Tops	
Yates	2802'
7-Rvrs	3062'
Queen	3396'

Remarks or Additional Data:

Initial completion: Acdz w/ 850 gals 15% NEFE HCL

CURRENT WELL DATA SHEET

FIELD: Eumont

WELL NAME: Heasley State # 8

FORMATION: YTS / 7R / Qn

LOC: 600' FNL & 500' FEL

SEC: 5

GL: 3545'

CURRENT STATUS: Flow

TOWNSHIP: 21S

COUNTY: Lea

KB to GL: 10.8'

API NO: 30-025-20175

RANGE: 36E

STATE: NM

DF to GL: 9.8'

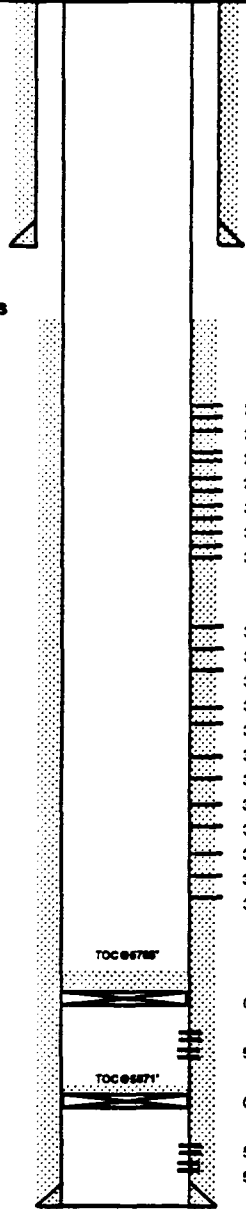
REFNO: FB3662

Unit Letter: A

State Land

8 5/8", 24#, J-55 Csg
Set @ 1195', w/ 456 ex. cmt.
cmt. circulated
11" hole

TOC @ 2290' by TS



Spud Date: 3/11/63
Completion Date: 5/13/63
IP: 44 BO / _ MCF / 40 BW,

Initial Completion Data

Perf 5904'-07' & 5935'-38' w/ 2 JHPF.
Acidz w/ 4000 gals 15% NEHCL.
Frac w/ 16,000 gal lease oil,
33,000# 20-40 sd.

4 1/2", 11.6#, J-55 Csg
Set @ 6025', w/ 597 ex. cmt.
TOC @ 2290' by TS
7 7/8" hole

TD 6025'

Formation Tops

Yates 2680'
7-Rvrs 2877'
Queen 3300'
Glorieta 5262'

Subsequent Well Work:

- 7/69 - SI. Uneconomic
- 5/71 - Set CIBP @ 5890'. Cap w/ cmt (TOC @ 5871'). Perf @ 5858' - 5868'. Acid w/ 1000 gals 15% NEA..
- 5/91 - Set CIBP @ 5800'. Cap w/ cmt (TOC @ 5765'). Perf @ 3464', 3455', 3448', 3388', 3382', 3367', 3361', 3342', 3338', 3327', 3320', and 3312' (0 deg PHZ and 1 jhpf - 12 holes total). Frac w/ 70,300 gal 50/50 Gel / CO2, 152,000#, 20/40 Brady @ 20 BPM
- 9/94 - Set RBP @ 3200'. Perf @ 3030', 3018', 3004', 2982', 2970', 2960', and 2950' (120 deg PHZ and 3 jhpf - 21 holes total). Fraced w/ 34,000 gal 50Q Linear Gel, 141,450#, 12/20 Brady @ 35 BPM
- 3/95 - PKR removed from well and lowered tbg. Tagged fill @ 3085'.
- 10/97 - Removed RBP. CO to 3579'. Acid treat lower perms.

WELL DATA SHEET

FIELD:

WELL NAME: State "G" #2

FORMATION:

LOC: 3222' FNL & 581' FWL, Unit L
TOWNSHIP: 21S
RANGE: 36E

SEC: 6
COUNTY: Lea
STATE: NM

GL: 3554'
KB to GL:
DF to GL:

CURRENT STATUS:
API NO: 30-025-08703
REFNO: FA9767:0:AA
EMSU: 219X

Date Completed: 12/36
Initial Formation: Grayburg

12 1/2" Csg
Set @ 198' w/150 sx cmt.
Circulated to surface.

9 5/8", 36# Csg
Set @ 1218' w/375 sx cmt.
Circulated to surface (by calc)

TOC @ 2173' by calc.

7", 24# Csg
Set @ 3754' w/225 sx cmt.
TOC by 2173' by calc.

4 1/2", 10.5#, K-55 Liner
Set @ 3340'-4435' w/100 sx cmt.

4395'-4435'

TD 4435'

Completion Data:

None - natural.

Subsequent Operations:

(09/39) Acdz w/1000 gals

(10/60) String shot OH & acdz w/1000 gals

(10/62) TA'd

(10/74) Shell sold well to Truckers Water Co.

(03/75) Deepened well to 4435' w/6 1/8" bit, ran 4 1/2" K-55, 10.5#/ft liner from 3340'-4435', cmt w/100 sx cmt, rev out 30 sx. Perf 4395'-4435', acdz w/500 gals 15%.

WELL DATA SHEET

FIELD: Eumont

WELL NAME: H. T. Orcutt (NCT-C) Com #3 **FORMATION:**

LOC: 1980' FNL & 1980' FEL, Unit G
TOWNSHIP: 21S
RANGE: 36E

SEC: 6
COUNTY: Lea
STATE: NM

GL: 3562'
KB to GL: 5'
DF to GL:

CURRENT STATUS:
API NO: 30-025-04534
REFNO: FA5678:0:01
EMSU: 194X

Date Completed: 12-16-36
Initial Formation:

10 3/4" Surf Pipe
 Set @ 303' w/250 sx cmt.
 Circulated to surface.

7 5/8", 22# Csg
 Set @ 1118' w/225 sx cmt.
 TOC @ 550' by TS.

Sqz w/28 sx cmt, 1130'

5 1/2", 17# Csg
 Set @ 3750' w/150 sx cmt.
 TOC @ 1800' by TS.

3353'-56'
 3388'-91'
 3436'-39'
 3467'-70'
 3494'-97'
 3552'-55'
 3621'-24'

PB 3665'
 CIBP @ 3690'

TD 3862'

Completion Data:

(12/36) Acdz w/3000 gals 14% NEA, IP 495 BO

Subsequent Operations:

(12/39) Set gas pkr
 (09/43) Acdz w/1000 gals
 (12/43) Perf tbq @ 3173'
 (02/51) Acdz w/2000 gals 15% NEA
 (04/53) Install prp equip.
 (02/67) Dmpd 500 gals 15% NEA. Fishd w/16 BO.
 (02/79) Set CIBP @ 3690', cap w/35' cmt. Perf 5 1/2" csg w/2-1/2" JHPF @ 3621'-24', 3552'-55', 3494'-97', 3467'-70', 3436'-39', 3388'-91', 3353'-56'. Perf 5 1/2" csg @ 1130' w/2-1/2" JH. Spot 15% NE HCL acid to btm of tbq. Straddle ea set of perfs to acdz w/200 gals acid @ 1 BPM. Sqz 28 sx cmt thru perfs @ 1130'. Acdz dn 2 3/8" tbq thru perfs @ 3353'-3624' w/5000 gals 15% NE acid w/29 gals CF-2 chem added @ 7 BPM. Fishd w/7 bbls 2% KCL wtr @ 1300#.
 (03/79) Foam frac dn tbq thru perfs 3353'-3624' in 7 equal stages w/2000 gals 2% KCL, 70 qual foam w/3/4# 20-40 SPG @ 4300#, followed w/2000 gals 70% qual foam w/1 1/2# 20-40 SPG @ 4300#. Drpd (6) 7/8" RCNB in 2000 gals 70% qual foam pad w/50# inc w/sealers on foam.
 (03/91) P&A Eunice-Monument.

WELL DATA SHEET

FIELD: Eumont Gas

WELL NAME: Graham Orcutt Gas Com #3

FORMATION:

LOC: 1980' FSL & 1980' FEL, Unit R
TOWNSHIP: 21S
RANGE: 36E

SEC: 6
COUNTY: Lea
STATE: NM

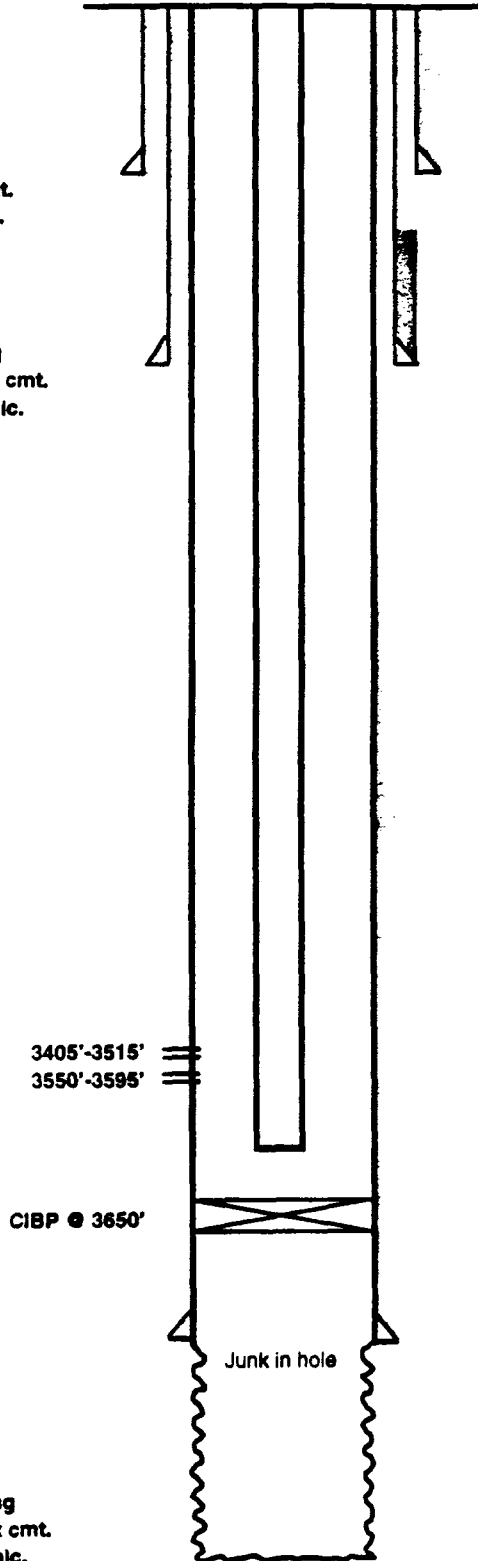
GL: 3578'
KB to GL:
DF to GL:

CURRENT STATUS:
API NO: 30-025-04529
REFNO: FA5671:0:01
EMSU: 247X

Date Completed: 9-23-36
Initial Formation: Grayburg

16", 70# Csg
 Set @ 31' w/60 sx cmt.
 Circulated to surface.

7-5/8", 22#, 8 thd Csg
 Set @ 1213' w/650 sx cmt.
 TOC @ surface by calc.



Acdz w/1000 gals 50/50 non-inhib solution.

Subsequent Operations:

- (03/37) Set 2" pkr @ 3785'. Pmpd on top of pkr 1000# Aquagel & 280# No 2 Fibrotex w/36 bbls wtr. Did not seal pkr. Pmpd on top of pkr 1000# Aquagel & 350# No. 2 Fibrotex w/45 bbl wtr. Csg press 1250#. Input on csg 750#. Final press 750# csg press.
- (04/55) Perf csg @ 3405'-3515' & 3550'-3595' w/4 1/2" JHPF. Trtd perms w/500 gals MCA acid. Trtd form thru perms w/15,000 gals sand oil frac w/1# SPG.
- (06/59) Acdz w/1,000 gals 15% NEA.
- (06/63) Acdz w/500 gals 15% NEFE.
- (06/64) Acdz w/500 gals 15% NEA.
- (09/64) Acdz w/500 gals 15% NEA.
- (10/65) Acdz w/500 gals 15% NEA.
- (05/66) Acdz w/500 gals 20% NEA.
- (11/66) Acdz w/500 gals 15% NEA.
- (06/67) Acdz w/500 gals 20% NEA.
- (04/68) Acdz w/500 gals 20% inhib acid.
- (08/68) Acdz w/250 gals 20% NE dbi inhib acid.
- (12/68) Acdz w/500 gals 20% NE dbi inhib acid.
- (06/69) Acdz w/500 gals 20% dbi inhib NEA.
- (10/69) Acdz w/500 gals 20% NE acid.
- (03/70) Acdz w/500 gals 20% NE dbi inhib acid.
- (05/70) Acdz w/500 gals 20% NE acid. Mix 5 gals Visco 103 demulsifier & 20 bbl 9.2# brine. Mxd 110 gals Visco 957 scale inhibitor w/20 bbls brine.
- (06/71) Acdz w/500 gals 20% HCL inhib acid. Sqz w/Visco 103 & 957 dn tbq.
- (09/72) Trtd w/10 bbls 9.2# brine w/2 1/2 gals Visco 103, 20 bbls brine w/2 drums Visco M-43-S & 10 bbl brine 2/ 2 1/2 gals Visco 103.
- (09/73) Pmp 1 bw w/10 gals Tretolite KW-117 dn csg.
- (11/73) Acdz w/750 gals 15% NEA dn tbq.
- (06/76) Pmp 1000 gals Tem-Block #50 dn tbq. Fish left in hole. Set CIBP @ 3650'. Set pkr @ 3348'.
- (09/87) Change out tbq. Release pkr & POH w/tbg & pkr. RIH w/115 jts 2 3/8" tbq, SN, perf sub & mud jt.

5 1/2", 17#, 10 thd Csg
 Set @ 3748' w/300 sx cmt.
 TOC @ surface by calc.

TD 3885'

WELL DATA SHEET

LEASE: Shell "E" State Com
OPERATOR: El Paso Natural Gas
LOC: 4620 F S L & 1980 F E L
TOWNSHIP: 21S
RANGE: 36E **UNIT:** J
WELL: 1
SEC: 6
CNTY: Lea
ST: N.M.

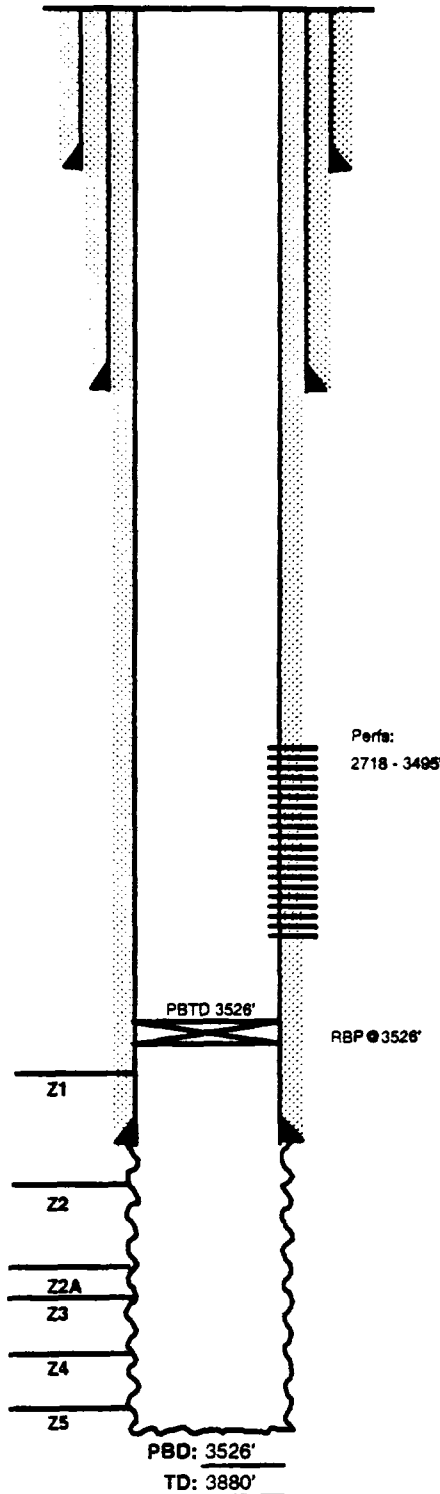
FIELD: Eumont
FORM: Yates-7Rvrs-Queen
GL:
KB: 3582'
DF:
DATE: 12/15/1999
STATUS: Producer
API NO: 30-025-04538
CHEVNO: FA 5680:0:AA
EMSU: 217X

Date Completed: 8/13/36
Initial Production: F/_ BOPD / _ BWPD
Initial Formation: Grayburg
FROM: 3780' to 3880'

12-1/2" OD
 # CSG rd
 Set @ 220' w/ 200 SX
 Cmt circ.? Yes
 TOC @ by

9-5/8" OD
 36.0 # CSG rd
 Set @ 1177' w/ 400 SX
 Cmt circ.? Yes
 TOC @ by

7" OD
 24 # CSG rd
 Set @ 3780' w/ 250 SX
 Cmt circ.? No
 TOC @ 2024' by Calc.



Completion Data

8/36

Subsequent Workover or Reconditioning:

7/55 Frac OH 3780'-3820' w/5000 GGRO & 5000# snd.
 6/60 String shot 3790'-3810'. Acdz w/1000 gal acid.
 4/64 String shot 3785'-3820'. Acdz w/1500 gal acid.
 5/65 TA well.
 8/67 Sold well to El Paso Natural Gas.
 10/67 PB to 3526'. Perf 2718'-3495'. Frac perms w/20,000 GGBW & 20,000# snd.

Additional Data:

T/Queen Formation @ 3374'
 T/Penrose Formation @ 3546'
 T/Grayburg Zone 1 @ 3742'
 T/Grayburg Zone 2 @
 T/Grayburg Zone 2A @
 T/Grayburg Zone 3 @
 T/Grayburg Zone 4 @
 T/Grayburg Zone 5 @
 T/Grayburg Zone 6 @
 T/San Andres @

FILE: Shell E State Com #1 WB.XLS
 rima 12/15/99

WELL DATA SHEET

FIELD: Eumont

WELL NAME: H. L. Houston Gas Com #3

FORMATION:

LOC: 660' FNL & 1980' FEL, Unit B
TOWNSHIP: 21S
RANGE: 36E

SEC: 7
COUNTY: Lea
STATE: NM

GL: 3600'
KB to GL:
DF to GL:

CURRENT STATUS:
API NO: 30-025-04541
REFNO: FA5683:0:AA
EMSU: 287X

Date Completed: 3/38
Initial Formation:

12 1/2" Csg
 Set @ 272' w/150 sx cmt.
 TOC @ 57' by calc.

TOC @ 57'

TOC @ 1389'

8 5/8", 28# Csg
 Set @ 2668' w/500 sx cmt.
 TOC 1389' by calc.

TOC @ 3202'

CIBP @ 3720'

6 5/8", 20# Csg
 Set @ 3795' w/100 sx.
 TOC @ 3202' by calc.

Completion Data:
 Acdz OH w/2000 gals.

Subsequent Operations:

(06/54) Ran 5" liner f/3764'-3894' w/100 sx cmt. Perf 3825'-3845' w/4 JHPF. PB to 3720'. Perf 3108'-3142', 3306'-3336', 3362'-3405', 3445'-3553', & 3590'-3648' w/3 JHPF (819 holes). Acdz w/2500 gals 15% LST acid. Frac'd w/10,000 gals oil & 10,000# sd.

(12/58) Perf 3590'-3625' w/2 JHPF. Frac w/6000 gals oil & 6000# 20/40 sd. Frac 3108'-3553' w/20,000 gals oil & 20,000# 20/40 sd.

3108'-3142'
 3306'-3336'
 3362'-3405'
 3445'-3553'
 3590'-3648' (reperf 3590'-3625' w/2 JHPF)

5" Liner f/3764'-3894' w/100 sx cmt.

3825'-3845'

TD 3895'

WELL DATA SHEET

LEASE: Meyer "B-8"
OPERATOR: Texon Oil & Gas
LOC: 660' F N L & 660' F W L
TOWNSHIP: 21S
RANGE: 36E UNIT: D
WELL: 4
SEC: 8
CNTY: Lea
ST: N.M.

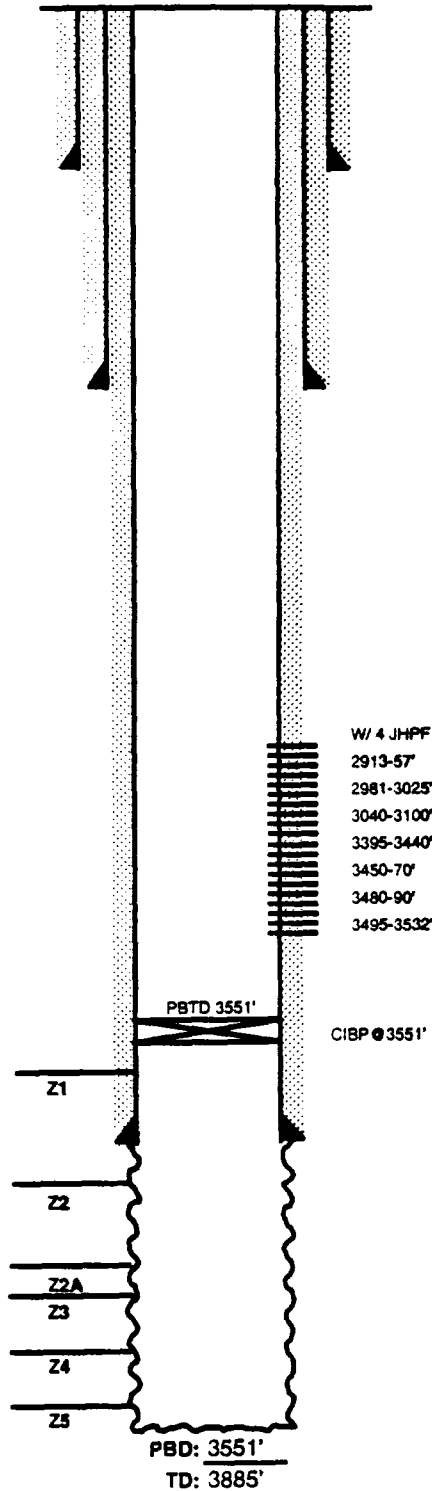
FIELD: Eumont
FORM: Yates-7Rvrs-Queen
GL:
KB: 3589'
DF:
DATE: 12/15/1999
STATUS: Producer
API NO: 30-025-04563
CHEVNO: FA 5704:0:AA
EMSU: 285X

Date Completed: 12/13/35
Initial Production: F/ 113 BOPD / 0 BWPD
Initial Formation: Grayburg
FROM: 3791' to 3885'

10" OD
 # CSG rd
 Set @ 327' w/ 175 SX
 Cmt circ.? Yes
 TOC @ by

7-5/8" OD
 # CSG rd
 Set @ 1634' w/ 400 SX
 Cmt circ.? Yes
 TOC @ by

5-1/2" OD
 # CSG rd
 Set @ 3791' w/ 500 SX
 Cmt circ.? Yes
 TOC @ by



Completion Data

12/35 Acdz w/ 1500 gals. (Conoco original operator)

Subsequent Workover or Reconditioning:

6/36 Acdz w/ 1000 gals acid.
 7/36 Acdz w/ 3000 gals acid.
 3/38 Acdz w/ 2000 gals acid.
 6/47 Perf w/ 1 JHPF @ 2770-90'. Acdz perms w/ 4000 gals acid. Oil & gas zone commingled.
 4/60 Acdz OH w/ 1000 gals 15% HEFE HCL.
 12/69 Acdz perms w/ 1500 gals 15% NEFE HCL.
 1/70 Set CIBP @ 3585' & cap w/ 10.2' cmt. Abandon Grayburg formation.

Additional Data:

- T/Queen Formation
- T/Penrose Formation
- T/Grayburg Zone 1 @ 3747'
- T/Grayburg Zone 2
- T/Grayburg Zone 2A
- T/Grayburg Zone 3
- T/Grayburg Zone 4
- T/Grayburg Zone 5
- T/Grayburg Zone 6
- T/San Andres

FILE: Meyer B-8 #4 WB.XLS
 rima 12/15/99

WELL DATA SHEET

LEASE: State "A"
OPERATOR: Tidewater Oil
LOC: 660' F N L & 660' F E L
TOWNSHIP: 21S
RANGE: 36E **UNIT:** A
WELL: 4
SEC: 8
CNTY: Lea
ST: N.M.

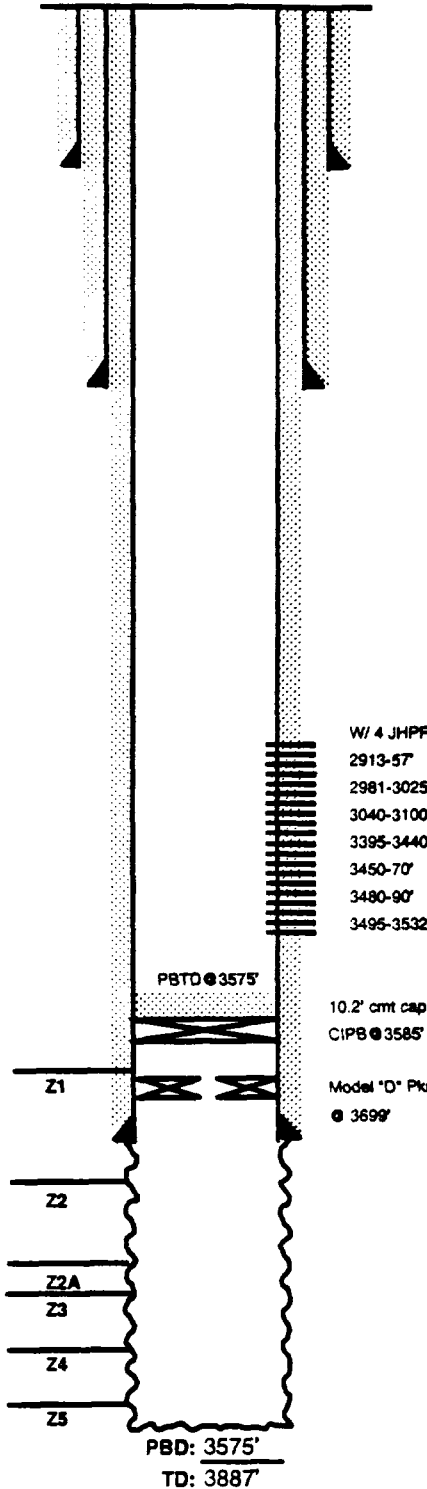
FIELD: Eumont **DATE:** 12/15/1999
FORM: Yates-7Rvrs-Queen
GL: **STATUS:** Producer
KB: 3584' **API NO:** 30-025-04567
DP: **CHEVNO:** FA 5708:0:AA
 EMSU: 282X

Date Completed: 4/1/35
Initial Production: F/ 190 BOPD / 0 BWPD
Initial Formation: Grayburg
FROM: 3765' to 3887'

12-1/2" OD
 # CSG rd
 Set @ 62' w/ 65 SX
 Cmt circ.? Yes
 TOC @ by

9-5/8" OD
 32.3 # CSG 8 rd H-40
 Set @ 2830' w/ 625 SX
 Cmt circ.? No
 TOC @ 27 by calc.

7 OD
 24 # CSG 10 rd H-40
 Set @ 3765' W/ 410 SX
 Cmt circ.? No
 TOC @ 885 by calc.



W/ 4 JHPF
 2913-57'
 2981-3025'
 3040-3100'
 3395-3440'
 3450-70'
 3480-90'
 3495-3532'

PBTD @ 3575'

10.2' cmt cap
CIPB @ 3585'

Model 'D' Pkr
@ 3699'

Completion Data

4/35 ACDZ w/ 2000 gals TD @ 3887'.

Subsequent Workover or Reconditioning:

5/35 Acdz w/ 3000 gals acid
 12/52 Acdz OH w/ 2000 gals acid. Model "D" pkr set @ 3699'.
 Perf w/ 4 jhpf @ 2913-57', 2981-3025', 3040-3100', 3395-3440', 3450-70', 3480-90', 3495-3532'. Acdz perms w/ 4000 gals acid. Oil & gas zone commingled.
 4/60 Acdz OH w/ 1000 gals 15% HEFE HCL.
 12/69 Acdz perms w/ 1500 gals 15% NEFE HCL.
 1/70 Set CIPB @ 3585' & cap w/ 10.2' cmt. Abandon Grayburg formation.

Additional Data:

T/Queen Formation @
 T/Penrose Formation @
 T/Grayburg Zone 1 @ 3718'
 T/Grayburg Zone 2 @
 T/Grayburg Zone 3 @
 T/Grayburg Zone 4 @
 T/Grayburg Zone 5 @
 T/Grayburg Zone 6 @
 T/San Andres @

FILE: State A 4 WB.XLS
 rima 12/15/99

printed: 12/15/1999

WELL DATA SHEET

FIELD: Eumont

WELL NAME: Meyer Bell Ramsay #6

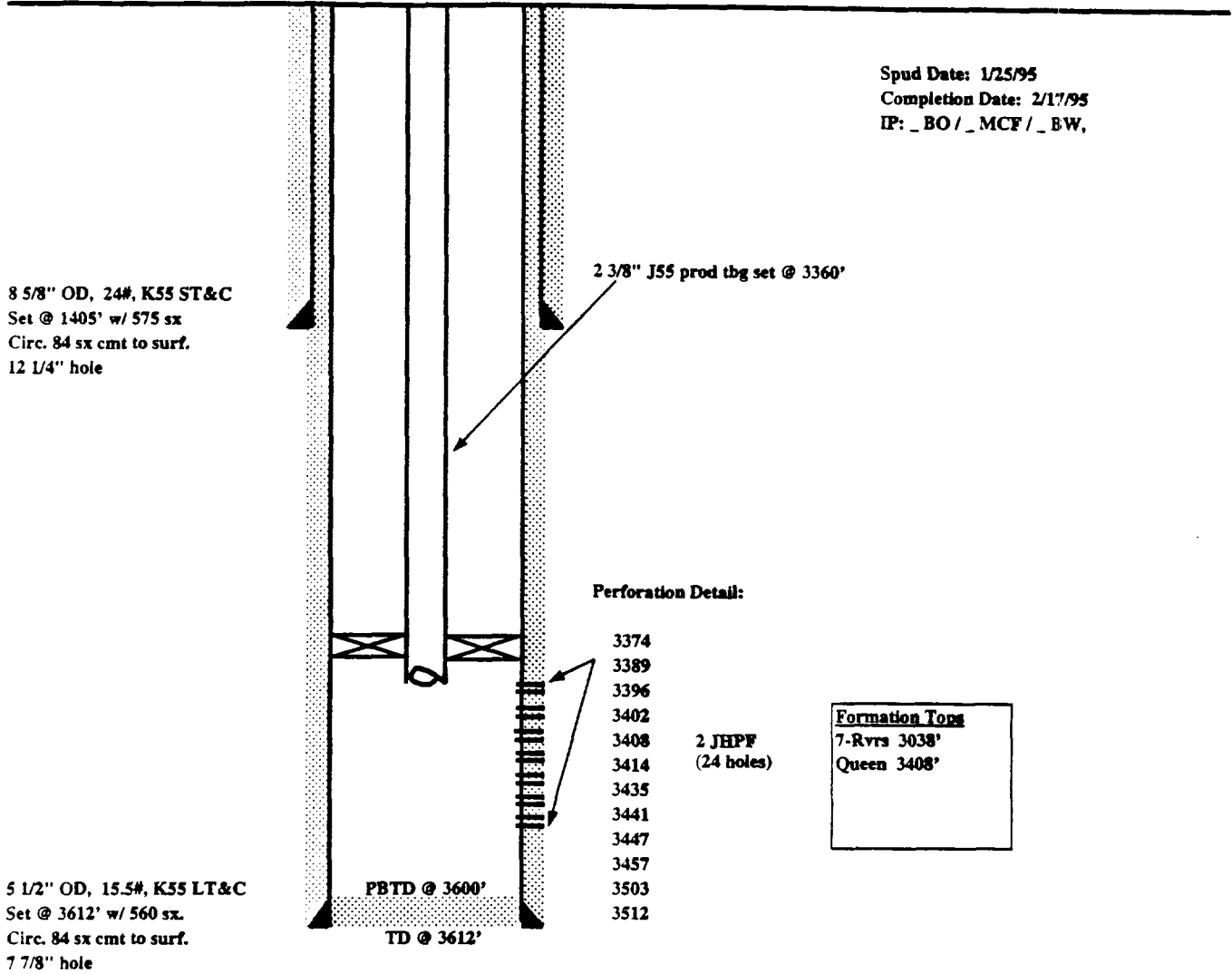
FORMATION: 7-Rvrs / Queen

LOC: 1080' FNL & 2020' FWL
 TOWNSHIP: 21-S
 RANGE: 36-E
 Unit Letter: C

SEC: 9
 COUNTY: Lea
 STATE: NM

GL: 3568'
 KB to GL: 12-1/2'
 DF to GL: 11-1/2'

CURRENT STATUS: Prod
 API NO: 30-025-32831
 CHEVNO: QW4703



Proposed Completion Information:
 Acqd w/ 15% NEFE HCL. Frac w/ 53300 gals 70Q/50Q CO2 linear gel w/ 200,400 lbs 12/20 Brady sand.

EMSU Nos. 210, 212, 222, 252, and 258
Conversion to Injection
Eunice Monument South Unit
Lea County, NM

Well No.	Max Inj. Rate (BWPD)	Avg. Inj. Rate (BWPD)	Max Inj. Press. (PSI)	Avg. Inj. Press. (PSI)	System Open	System Closed
EMSU #210	1500	750	750	650		X
EMSU #212	1500	750	750	650		X
EMSU #222	1500	750	750	650		X
EMSU #252	1500	750	750	650		X
EMSU #258	1500	750	750	650		X

Data on Proposed Operation
of
Eunice Monument South Unit

1. Proposed average and maximum daily rate and volume of fluids to be injected:

Average daily rate of 400 BWPD
Maximum daily rate of 500 BWPD

2. System is closed.
3. Proposed average and maximum injection pressures:

Average injection pressure of 350 psi
Maximum injection pressure of 740 psi *

4. The source of injection fluids will be from the San Andres formation initially, then produced water from Unit wells will be used as the primary source of water when the Unit becomes fully developed.
5. The make-up water from the San Andres formation to be used as injection fluid is compatible with the produced water from the Unit wells (See attached water analysis).

- * Until a fracture gradient is determined, maximum injection pressure will be based on a .2 psi/foot gradient.

EXHIBIT NO. 33a

Case No. 8397

November 7, 1984

Chevron USA
0127

RESULT OF WATER ANALYSES

TO Mr. Stan Chapman LABORATORY NO. 284226
P.O. Box 670, Hobbs, NM SAMPLE RECEIVED 2-15-84
 RESULTS REPORTED 2-20-84

COMPANY Gulf Oil Exploration & Production LEASE _____
 FIELD OR POOL Company
 SECTION _____ BLOCK _____ SURVEY _____ COUNTY _____ STATE _____

SOURCE OF SAMPLE AND DATE TAKEN.
 NO. 1 Make-up water.
 NO. 2 Produced water.
 NO. 3 _____
 NO. 4 _____

REMARKS: _____

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0465	1.0051		
pH When Sampled				
pH When Received	6.80	7.22		
B. carbonate as HCO ₃	964	1,830		
Supersaturation as CaCO ₃	75	120		
Undersaturation as CaCO ₃	---	---		
Total Hardness as CaCO ₃	5,400	800		
Calcium as Ca	1,400	144		
Magnesium as Mg	462	107		
Sodium and/or Potassium	23,244	2,308		
Sulfate as SO ₄	3,432	300		
Chloride as Cl	36,575	2,841		
Iron as Fe	0.27	7.5		
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids, Calculated	66,077	7,530		
Temperature °F.				
Carbon Dioxide, Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	600	325		
Resistivity, ohms/cm at 72° F	0.126	0.935		
Suspended Solids				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Calcium Carbonate Scaling Tendency	NONE	NONE		
Calcium Sulfate Scaling Tendency	NONE	NONE		

Results Reported As Milligrams Per Liter

Action: Determinations And Remarks We see no evidence in the above results that would indicate any incompatibility when mixing these two waters in any proportion. Please contact us if we can be of any additional assistance in this regard.

EXHIBIT NO. 336
 Case No. 8397
 November 7, 1984

By Waylan C. Martin, D.A.

Geological Data
Injection Zones
in the
Proposed Eunice Monument South Unit

Penrose - Approx. depth 3,400'-3,800*, approx. 170 gross feet.

The Penrose is the lower portion of the Queen formation and overlies the Grayburg. The Penrose is composed of alternating layers of hard dolomite and sand lenses. The Penrose is productive of oil and/or gas, depending on structural position.

Grayburg - Approx. depth 3,500'-3,900*, approx. 490 gross feet.

The Grayburg is a massive dolomite with thin stringers of sand interspersed within it. The majority of oil production comes from intercrystalline porosity in the dolomite.

The range in depths to the top of the Grayburg is due to an asymmetrical anticlinal structure running NW to SE through the Eunice-Monument Pool. The structure dips steeply along the western and southern flanks and therefore the Grayburg top runs deeper, approximately 3,700'-3,900'. Along the axis and the gently dipping eastern flank of the anticline the Grayburg depths run at approximately 3,500-3,700 feet.

San Andres - Approx. depth 4,100'-4,500*, approx. 1,130 gross feet.

The San Andres is a massive dolomite with intercrystalline porosity, which lies directly below the Grayburg. The contact between the Grayburg and the San Andres is gradational and there is no clear marker for the top of the San Andres which can be traced across the field. The San Andres contributes very little if any oil production to the field and serves primarily as a source for injection make-up water and as a zone for salt water disposal.

There are no known faults cutting through the San Andres and Grayburg which would act as a conduit for gas, oil or injection water to seep into fresh water horizons above the injection zones in the Grayburg and San Andres.

* Depth depends upon structural position of the well.

EXHIBIT NO. 34a

Case No. 8397

November 7, 1984

Chevron USA
0129

**Geological Data
Fresh Water Aquifers
in the Area of the
Proposed Eunice Monument South Unit
Lea County, New Mexico**

The proposed Eunice Monument South Unit is located approximately 3/4 of a mile southwest of the Mescalero Ridge on the Eunice Plain.

The fresh water zones within the proposed Eunice Monument South Unit boundaries are the Quaternary alluvium, Pliocene Ogallala, and the Triassic Chinle and Santa Rosa formations.

The Quaternary aquifers are in recent sediments and are very localized in extent. They are made up of dune sands and sands filling channels or depressions in the underlying Ogallala. The sands are unconsolidated to semiconsolidated, fine to medium grained sands. They are found at the surface to a depth of approximately 100 feet.

The Pliocene Ogallala aquifer underlies the Quaternary alluvium and is present across the entire area but is not a major water source. The Ogallala is a calcareous unconsolidated sand containing some silt, clay and gravel. The Ogallala is found at approximately 60-125 feet.

The Triassic Chinle and Santa Rosa aquifers are the principal fresh water bearing zones in this area. They are both fine to medium grained sandstones interbedded with red clays and silt stones. At the northern end of the proposed unit, the Chinle is at a depth of approximately 50 feet and the Santa Rosa is at about 675 feet. At the southern end of the unit the Chinle is at approximately 200 feet and the Santa Rosa is at about 1000 feet.

Below the Santa Rosa are un-differentiated Permian and Triassic red beds. These "red beds" consist of red shales and red silty sandstones, and are not known to produce fresh water.

At the base of the Santa Rosa and/or the un-differentiated Permian and Triassic "red beds" is the Permian Rustler. At the top of the Rustler is an impermeable anhydrite bed, approximately 60-70 feet thick which provides an excellent barrier against contamination from brine waters in the Permian oil producing formations. The Rustler anhydrite is at approximately 1000 feet at the northern end of the unit and approximately 1400 feet at the southern end of the unit. There are no known fresh water horizons below the Rustler anhydrite.

For the protection of all fresh water zones within the unit boundary, cement will be circulated to surface around casing on all new injection wells and producing wells converted to injection wells.

Reference - Ground Water Report 6, USGS, 1961.

EXHIBIT NO. 36

Case No. 8397

November 7, 1984

H

Chemical Analysis of Fresh Water
Within The
Proposed Eunice Monument South Unit
Lea County, New Mexico

See attached water analysis results.

Sample No. 1 -Unit A Section 16, T-21-S, R-36-E
Livestock Water Source
Ogallala Formation
State Engineer's Well No. CP 00505

Sample No. 2 -Unit D Section 10, T-21-S, R-36-E
Domestic and Commercial Sale Source
Triassic Chinle Formation
State Engineer's Well No. CP 00147

Sample No. 3 -Unit K Section 36, T-20-S, R-36-E
Livestock Water Source
(Not on file with State Engineer's office)

Sample No. 4 -Unit O Section 17, T-21-S, R-36-E
Livestock Water Source
Ogallala Formation
(Not on file with State Engineers Office)

EXHIBIT NO. 37

Case No. B397

November 7 Chevron USA

0131

RESULT OF WATER ANALYSES

TO: Mr. Stan Chapman LABORATORY NO. 284225
P.O. Box 670, Hobbs, NM SAMPLE RECEIVED 2-15-84
RESULTS REPORTED 2-20-84

COMPANY Gulf Oil Exploration & Production LEASE
FIELD OR POOL Company
SECTION BLOCK SURVEY COUNTY STATE

SOURCE OF SAMPLE AND DATE TAKEN.
NO. 1 Fresh water (sample #1).
NO. 2 Fresh water (sample #2).
NO. 3 Fresh water (sample #3).
NO. 4

REMARKS:

CHEMICAL AND PHYSICAL PROPERTIES				
	NO. 1	NO. 2	NO. 3	NO. 4
Specific Gravity at 60° F.	1.0047	1.0020	1.0022	
pm When Sampled				
pm When Received	7.56	8.20	8.27	
Bicarbonate as HCO ₃	212	494	476	
Supersaturation as CaCO ₃				
Undersaturation as CaCO ₃				
Total Hardness as CaCO ₃	1,680	75	68	
Calcium as Ca	376	16	15	
Magnesium as Mg	180	8	7	
Sodium and/or Potassium	744	289	413	
Sulfate as SO ₄	1,492	186	300	
Chloride as Cl	1,115	60	138	
Iron as Fe	0.31	1.3	1.3	
Barium as Ba				
Turbidity, Electric				
Color as Pt				
Total Solids Calculated	4,119	1,065	1,391	
Temperature °F				
Carbon Dioxide Calculated				
Dissolved Oxygen, Winkler				
Hydrogen Sulfide	0.0	0.0	0.0	
Resistivity, ohms/m at 77° F	1.60	8.10	5.50	
Suspended Solids				
Filtrable Solids as mg/l				
Volume Filtered, ml				
Carbonate, as CO ₃	0	12	42	

Results Reported As Milligrams Per Liter

Additional Determinations And Remarks Please contact us if we can be of any assistance in interpretation of the above results.

By Waylan C. Martin, M.A.

UNICHEM INTERNATIONAL

401 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

COMPANY : GULF OIL
 DATE : 9-28-84
 FIELD LEASE & WELL : SECTION 17-T215-R36E, UNIT O
 SAMPLING POINT : WELLHEAD - FRESH WATER SAMPLE
 DATE SAMPLED : 9-27-84

SPECIFIC GRAVITY = 1
 TOTAL DISSOLVED SOLIDS = 1055
 PH = 7.21

		ME/L	MG/L
CATIONS			
CALCIUM	(CA)+2	4.4	88.1
MAGNESIUM	(MG)+2	3.8	46.1
SODIUM	(NA).CALC.	7.2	167.
ANIONS			
BICARBONATE	(HCO3)-1	4.6	280
CARBONATE	(CO3)-2	0	0
HYDROXIDE	(OH)-1	0	0
SULFATE	(SO4)-2	5.8	282.
CHLORIDES	(CL)-1	5	190
DISSOLVED GASES			
CARBON DIOXIDE	(CO2)	NOT RUN	
HYDROGEN SULFIDE	(H2S)	NOT RUN	
OXYGEN	(O2)	NOT RUN	
IRON (TOTAL)	(FE)		1.4
BARIUM	(BA)+2	0	.4
MANGANESE	(MN)	NOT RUN	

IONIC STRENGTH (MOLAL) = .023

Proposed Eunice Monument South Unit
Lea County, New Mexico

Affirmative Statement

Gulf Oil Corporation has examined available geological and engineering data and finds no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

**EMSU Nos. 210, 212, 222, 252, and 258
Conversion to Injection
Eunice Monument South Unit
Lea County, NM**

Surface Land Owners

MS. BILLIE SARTIN
223 MOORE ST.
SULFUR SPRINGS, TX 75480

STATE OF NEW MEXICO
C/O STATE LAND OFFICE
P.O. BOX 1148
SANTE FE, NM 87504-1148

MILLARD DECK ESTATE
C/O RONALD RAWDON
1ST REPUBLIC BANK
P.O. BOX 1479
FORT WORTH, TX 76101-1479

GPM GAS CORPORATION
P.O. BOX 50020
MIDLAND, TX 79710

**EMSU Nos. 210, 212, 222, 252, and 258
Conversion to Injection
Eunice Monument South Unit
Lea County, NM**

Offset Operators

CONOCO, INC.
ONE POST OAK CENTRAL
2000 POST OAK BLVD., SUITE 100
HOUSTON, TX 79705-4500

ARCO PERMIAN
P.O. BOX 1610
MIDLAND, TX 79702

TEXACO E&P, INC.
P.O. BOX 3900
MIDLAND, TX 79702

COLLINS & WARE, INC.
508 W. WALL, SUITE 1200
MIDLAND, TX 79701

D. HARTMAN
500 N. MAIN ST.
MIDLAND, TX 79701

BURLINGTON RESOURCES
3300 N. "A" ST
MIDLAND, TX 79702

ALTURA ENERGY LTD
P. O. BOX 4294
HOUSTON, TX 77210-4294

AMERADA HESS
500 DALLAS ST
HOUSTON, TX 77002

November 10, 1999

**REQUEST TO PUBLISH
LEGAL NOTICE**

Hobbs News-Sun
201 N. Thorp
Hobbs, NM 88240

Attention: Classified Department

Chevron U.S.A. Production Company requests that you publish the attached notice in your newspaper, one time only, as soon as possible.

Please mail the invoice to the letterhead address, attention Tracy Love. Also please attach a copy of the notice as run in your newspaper and an affidavit certifying publication of the attached notice and the date of publication.

Your prompt assistance in this matter will be greatly appreciated. Questions may be directed to Tracy Love at (915) 687-7645.

Sincerely,

A handwritten signature in black ink that reads "Tracy Love". The signature is written in a cursive, flowing style.

Tracy Love

TL
Attachment

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

Publisher

of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, do solemnly swear that the clipping attached hereto was published once a week in the regular and entire issue of said paper, and not a supplement thereof for a period.

of 1 weeks.

Beginning with the issue dated November 23 1999

and ending with the issue dated November 23 1999

Kathi Bearden
Publisher

Sworn and subscribed to before

me this 23rd day of

November 1999

Joan Benson
Notary Public.

My Commission expires
October 18, 2000
(Seal)

LEGAL NOTICE

November 23, 1998

Chevron U.S.A. Production Co. has applied to Oil Conservation Division of the State of New Mexico for approval to convert the EMSU #210, #212, #222, #252, and #258 to injection in their Eunice Monument South Unit. These wells are designed to improve recovery efficiency of the waterflood patterns and enhance production of the EMSU secondary recovery project. The wells are located in the following locations: #210-Section 4, Unit K, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #212-Section 5, Unit I, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #222-Section 6, Unit O, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #252-Section 6, Unit W, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #258-Section 4, Unit U, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico. Water will be injected into the unitized interval of the Eunice Monument Grayburg-San Andres Pool which has an upper limit of 100 feet below mean sea level or the top of the Grayburg formation, whichever is higher, to a lower limit being the base of the San Andres formation. Injection will at an expected maximum rate of 1500 barrels of water per day and an expected maximum pressure of 750 pounds per square inch. Persons wanting to contact Chevron U.S.A. should direct their inquiries to Tracy Love, Chevron, U.S.A. Production Co., P.O. Box 1150, Midland, TX 79702, phone (915) 687-7645.

Interested Parties must file objections or requests for hearing with the Oil Conservation Division, P.O. Box 2088, Santa Fe, NM 87501, within 15 days of this notice.
#17001

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937, and payment of fees for said publication has been made.

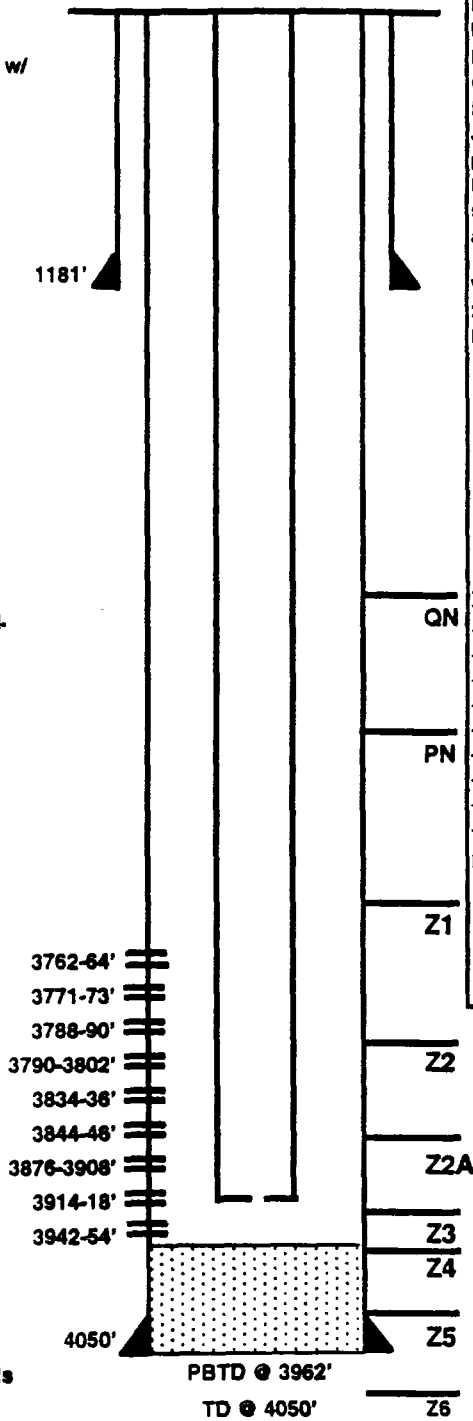
01102480000 02532992
Chevron U.S.A. Production Comp
P.O. Box 1150
MIDLAND, TX 79702

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 620	FIELD: Eunice-Monument	API: 30-025-30511
LOC: 1330 FEL & 2360 FSL, Unit R	SEC: 6	BLK: T21S, R36E	REF NO: IP4397:01
SVY: N.M.P.M.	GL: 3569	CTY/ST: Lea Co., NM	SPUD: 12/3/1988
CURRENT STATUS: <u>Producer</u>	KB: 3582	DF:	TD DATE:

8-5/8", 24#/ft M-50
Surf. Pipe set @ 1181' w/
800 SX cement
TOC @ surf. by circ.
(12-1/4" hole)

5.5", 15.5#/ft K-55 Csg.
set @ 4050' w/ 800 SX
TOC @ surf. by circ.
(7-7/8" hole)



Date Completed: 1-31-89
Initial Prod: 75 BOPD/ 31 BWPD/ GOR 680
Initial Formation: Grayburg From: 3762' To: 3848'
Completion Data:
 Perf 3762-64, 3771-73, 3788-90, 3800-02, 3828-28, 3834-36 & 3844-46 (2 JHPF). ACDZ perms w/ 750 gal 15% NeFeA & 56 RCNBs. ACDZ each set of perms w/ 50 gal 15% NeFeA per ft. Put on pump test- 7 BO/ 4 BW/ TSTM gas.
 Perf 3790-3800, 3823-26, 3876-3908, 3914-18, 3942-54 w/ 2 JHPF. ACDZ ea set of perms w/ 50 gal 15% NeFeA per ft & RCNBs. Swb 1 BO/ 24 BW for 1.5 hrs. all perms.
Workover History:
 2/92 ACDZ Zn 2 thru Zn 4 w/ 3000 gal 28% NeFeA & 30 Tons CO2 - test: 48 BO/ 110 BW/ 48 MCF. FL=SN.
Additional Data:
 T/Queen Formation @ 3401'
 T/Penrose Formation @ 3554'
 T/Grayburg Zone 1 @ 3743'
 T/Grayburg Zone 2 @ 3805'
 T/Grayburg Zone 2A @ 3869'
 T/Grayburg Zone 3 @ 3921'
 T/Grayburg Zone 4 @ 3965'
 T/Grayburg Zone 5 @ 4038'
 T/Grayburg Zone 6 @ 4105'
 T/San Andres Formation @ 4134'
 KB @ 3582'

FILE: EMSU620WB.xls
DKTS: 11/3/98

PBTD @ 3962'
TD @ 4050' Z6

10/28/1999

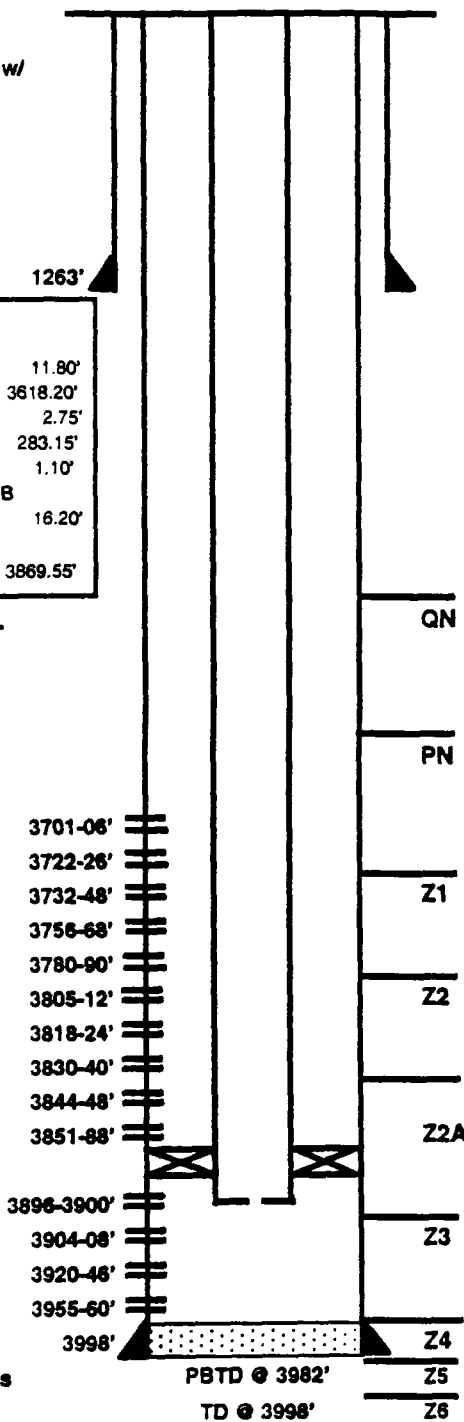
CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 621	FIELD: Eunice-Monument	API: 30-025-33186
LOC: 185 FEL & 2800 FSL, Unit P	SEC: 6	BLK: T21S, R36E	REF NO: BD6709:01
SVY: N.M.P.M.	GL: 3583	CTY/ST: Lea Co., NM	SPUD: 12/19/1996
CURRENT STATUS: Producer	KB: 3595	DF: 3594	TD DATE:

8-5/8", 23#/ft M-50
Surf. Pipe set @ 1187' w/
600 SX cement
TOC @ surf. by circ.
(12-1/4" hole)

Tubing Detail: 5/3/96	
KBTH:	11.80'
115 Jts. 2-7/8" 6.5# J-55:	3618.20'
1 5-1/2" X 2-7/8" TAC	2.75'
9 2-7/8" Ditto Tbg	283.15'
2-7/8" API SN	1.10'
1 2-7/8" Slotted MAJ OPOB	16.20'
Landed @	3869.55'

5.5", 15.5#/ft K-55 Csg.
set @ 3998' w/ 900 SX
TOC @ surf. by circ.
(7-7/8" hole)



Date Completed: 1-2-96
Initial Prod: 17 BOPOD/ 120 BWPD/ 17 MCFGPD
Initial Formation: Grayburg From: To:
Completion Data:
 Drill out cmt to 3892' (PBD). Perf 3896-3900, 3904-08 & 3920-46 (3 JHPF). Pickle tbg. 500 gal 15% HCl. Breakdown & ACDZ perms w/ 3000 gal 15% HCl w/ iron control. 105 RCNBs & 1050# salt. ISIP=828 psi. Swb 21 BW, EFL=2900'. Swb 20 BBL, 1% OC. EFL=3200'. TOTP. Test 1/25/96 = 8 BO/ 58 BW/ 9 MCFG. FL = 122'.
Workover History:
 2/96 Perf w/ 3 JHPF @ 3818-24, 3830-40, 3844-48 & 3851-88 (Zn 2&2A), set RBP @ 3892'. ACDZ 3818-3888 w/ 4000 gals 15% HCl w/ BJ's ferretrol system in 9 stages. Swb - 11 runs. IFL=1800', EFL=3300'. Rec'd 32 BW. RIH w/ prod tbg 4/96 Perf 3701-06, 3722-26, 3732-48, 3756-68, 3780-90, 3805-12 & 3955-60' (3 JHPF). ACDZ 3701-3960 w/ 8500 gals 15% USA-B HCl in 14 stages. Swb - 6 runs, IFL=1800', EFL=3200'. Rec'd 35 BW. Selectively swb, RIH w/ PE. TOP.
Additional Data:
 T/Queen Formation @ 3397'
 T/Penrose Formation @ 3550'
 T/Grayburg Zone 1 @ 3742'
 T/Grayburg Zone 2 @ 3798'
 T/Grayburg Zone 2A @ 3848'
 T/Grayburg Zone 3 @ 3908'
 T/Grayburg Zone 4 @ 3973'
 T/Grayburg Zone 5 @ 4048'
 T/Grayburg Zone 6 @ 4096'
 T/San Andres Formation @ 4142'
 KB @ 3583'

Tubing Detail: 5/3/96	
1 4', 6' & 8' 7/8" Sub	
62 7/8" T-90 Rods	
92 3/4" T-90 Rods	
2-1/2" X 2" X 20' Pmp	

FILE: EMSU625WB.xls
DKTS: 11/3/96

10/28/1999

WELL DATA SHEET

FIELD: EMSU

WELL NAME: EMSU 642

FORMATION: Grayburg

LOC: 1370' FSL & 25' FEL
TOWNSHIP: 21S
RANGE: 36E Unit O

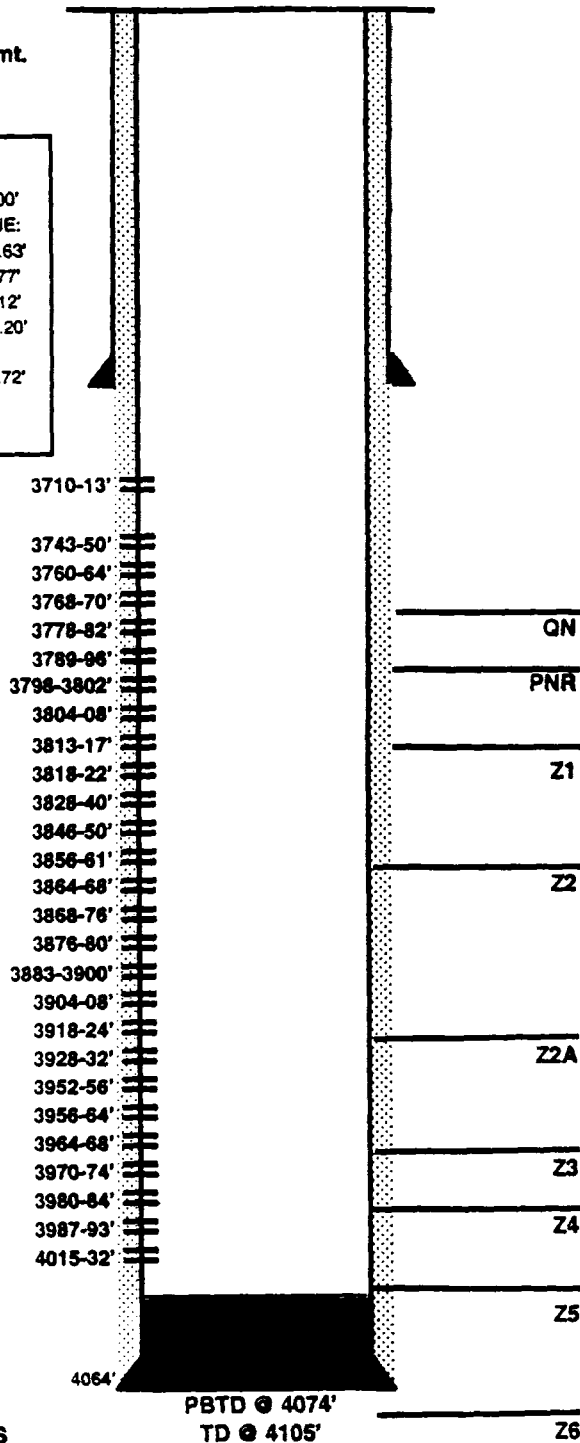
SEC: 6
COUNTY: Lea
STATE: NM

GL: 3578'
KB: 3589'
DF to GL:

CURRENT STATUS: Producer
API NO: 30-025-30958
CHEVNO: KU95340:01

8-5/8", 32#/ft, Surf. Pipe
set @ 1206' w/ 800 SX cmt.
Cmt Circ.? Yes
TOC @ Surf' by circ.

Tubing Detail: 4/30/97	
KBTH:	0.00'
117 Jts. 2-7/8" 6.5# J-55 8rd EUE:	3658.63'
2-7/8" X 2-3/8" X 0:	0.77'
2-3/8" Sub	4.12'
1 ODI R-14 Sub Pump	44.20'
Landed @	3707.72'
#4 Round Poly Cable	



Date Completed: 11-28-90
Initial Prod: 23 BOPD/ 107 BWPD/ GOR 2522
Initial Formation: Grayburg From: 3760' To: 3984'
Completion Data:
 Perf 3952-56, 3964-68, 3980-84 (2 JHPF). ACDZ w/ 1200 gal 15% NeFeA. Swb 12 BO/37 BW FeR 1.7 BPH. Perf 3760-64, 3778-82, 3798-3802, 3813-17, 3846-50, 3864-68, 3876-80, 3904-08, 3928-32 (2 JHPF). ACDZ all perfs using PPI tool w/ 150 gal per set. ACDZ perfs 3760-3932 w/ 1250 gal 15% NeFeA & 88 RCNBs. Put on prod.
Workover History:
 11/90 Chemical squeeze.
 2/91 Chemical squeeze.
 7/93 Perf 3710-13, 3743-50, 3789-98, 3804-08, 3818-22, 3828-40, 3856-61, 3868-76 & 3883-3900. D/O fill, scale & cmt to 4070'. Tag PBD @ 4074'. Perf 3768-70, 3918-24, 3956-64, 3970-74, 3987-93, 4015-32. ACDZ all perfs w/ 250 bbls 15% NeFe HCl w/ 14750 # salt. Swb IFL 2100', FFL 2900'. Trace of oil. EFR 10 BPH. SWIFN. Swb IFL 2700' FFL 2900'. Rec 19 BBL. 1st Run: 5% - final OC 0%. SN @ 4022'. TST: B - 19 BO/ 76 BW/ 10 MCF. A - 101 BO/ 1323 BW/ 32 MCF.
 11/95 Tag @ 4071'. Pickle tbg. ACDZ w/ 6250 gals Viscosified Mutual Solvent & acid. RIH w/ PE. Test A - 25 BO/ 678 BW/ 6 MCF. B - 12 BO/ 445 BW/ 3 MCF.
 4/30/97 Stimulate w/ 6000 gals Resisol II.
Additional Data:
 T/Queen Formation @ 3400'
 T/Penrose Formation @ 3546'
 T/Grayburg Zone 1 @ 3737'
 T/Grayburg Zone 2 @ 3784'
 T/Grayburg Zone 2A @ 3847'
 T/Grayburg Zone 3 @ 3940'
 T/Grayburg Zone 4 @ 3995'
 T/Grayburg Zone 5 @ 4071'
 T/Grayburg Zone 6 @ 4143'
 T/San Andres Formation @ 4200'
 KB @ 3589'

5-1/2", 15.5#/ft, csg set @
4105' w/ 840 SX cmt.
Cmt Circ.? Yes
TOC @ 720' by TS

FILE: EMSU642WB.XLS
RLM: 8/24/98

WELL DATA SHEET

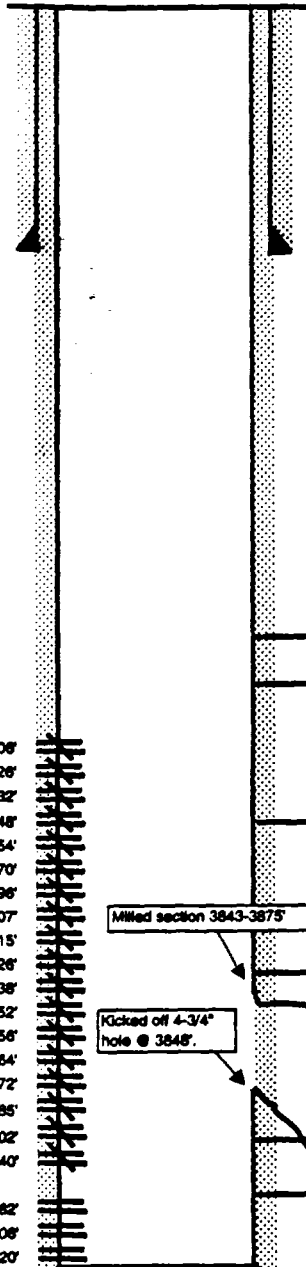
FIELD: EMSU
 LOC: 1275' FSL & 1275' FEL
 TOWNSHIP: 21S
 RANGE: 36E Unit B

WELL NAME: EMSU 643
 SEC: 6
 COUNTY: Lea
 STATE: NM

FORMATION: Grayburg
 CURRENT STATUS: Producer
 API NO: 30-025-30512
 CHEVNO: IQ5854:01

8-5/8", 24#/ft, Surf. Pipe
 set @ 1224' w/ 800 SX
 CMT. TOC @ Surf' by circ.
 Cmt. Circ.? Yes

5-1/2", 15.5#/ft, csg set @
 4050' w/ 800 sxs cmt.
 TOC @ Surf. by calc.
 Cmt. Circ.? Yes



S	3697-3708'
q	3710-28'
u	3728-32'
e	3742-48'
e	3750-64'
d	3768-70'
w/	3778-98'
3	3800-07'
B	3810-15'
B	3822-28'
B	3834-38'
L	3848-52'
S	3854-56'
C	3860-64'
M	3870-72'
T	3781-85'
	3898-3902'
	3906-40'
	3968-82'
	4002-08'
	4010-20'

Tubing Detail: 8/22/98

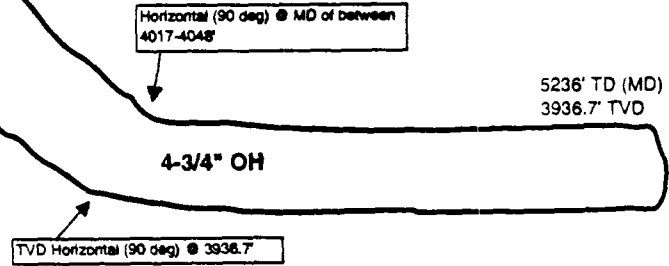
KBTH:	13.00'
116 Jts. 2-7/8" 6.5#:	3592.48'
2-7/8 SUB	4.10'
3-1/2 SUB	4.15'
4" SUB	6.16'
KUDU PUMP BARREL	30.13'
ANCHOR	4.65'
8 Jts. 2-3/8" Tbg 4.7# J-55 8RD Tbg	248.41'
2-3/8" SMAJ Op on Bsm	18.02'
Landed @	3919.11'

NOTE: Drilled ratihole in vertical hole to 3955' when RIH, watch for top of csg.
 @ 3875' May need to rotate U 3843-48 to get thru horizontal window.

Rod Detail: 8-22-98

1 1-1/2 X 26' Polish Rod
143 1" rods w/ 3 rod guides per rod
KUDU Pump

Date Completed: 6-89
Initial Production: 4 BOPD / 104 BWPD / GOR 15,000
Initial Formation: Grayburg From: 3848' To: 4020'
Completion Data:
 Perf 4002-06 & 4010-20 w/ 2 JHPF. Trid w/ 400 gal 15% NeFeA. Swb 0 BO/24 BW 1 hr., 8 hr. swb 2 BO/23 BW. FFER = 1.1 BPH. Perf 3898-3902, 3908-40, 3944-48, 3968-82 w/ 2 JHPF. ACZD 3898-3948 w/ 3150 gal 15% NeFeA & 224 RCNBS. Swb bot part 3898-3982, rec 5 BO/ 128 BW FER 16 BPH. Put on pump. Test 5 BO/ 82 BW 51 MCFPD. REACDZ perf 4002-22, 3968-82 in conn. w/ upper parts. Ran temp. & tracer survey. Indicated channel fr bottom. SQZ 3890-4020 w/ 50 SX. D/O cmt. ACZD all open parts w/ 3250 gal 15% NeFeA in 4 stages using GRS block. Test 3 BO/ 83 BW 51 MCFPD.
Workover History:
 5/88 Set RBP @ 3985', pkr @ 3954'. Swb z4 (3968-82), rec 105 BW, 5 runs EFL 3900'. Swb 9 BW 5 runs. EFL=3900'. Set RBP 3954', pkr @ 3879'. Swb z3 (3898-3948) 5 BW 3 runs. EFL=3900'. FER=3 BPH. Set RBP @ 3985', pkr @ 3954'. Pmp 100 BBL red dye wtr in ann. Swb z4, rec 10 BBL red water. Ran prod. tubing.
 6/88 PB w/ sd to 3990'. Set CIBC @ 3848'. SQZD z3 (3898-3948) w/ 200 SX. CO, D/O to 4040'. Perf 3848-52, 3854-56, 3860-64, 3870-72, 3881-85, 3898-3902, 3906-28, 3968-82, 4002-06 & 4010-22 (2 JHPF). Selectively ACZD parts 3898-4022 w/ 1550 gal 15% NeFeA. swb - Fe=0. ReACDZ w/ 1600 gal gelled 15% NaA & RCNBS. Swb 39 BW FER = 8 BPH. Swb 9 BW. EFL=3600' FER = 0. ACZD 3845-85 w/ 1200 gal 15% NeFeA & RCNBS. Swb 35 BW, EFL=3500, swb 28 BW 4 hrs. EFL=3600'. Put on prod. Test 4 BO/104 BW/ 60 MCFPD FL=0. Chemical squeeze on 7/88 and on 3/98.
 4/91 Perf 3778-88, 3822-28, 3834-38 w/ 2 JHPF. ACZD new parts w/ 1500 gal 15% NeFeA. Final swb 5 BBL in 3 runs. IFC=15% oil FFC=Tr oil. Rat. to prod. Test 1 BO/ 136 BW/ 21 MCFPD. FL @ 3N.
 12/92 Install larger pumping unit. Test 0 BO/225 BW/ 11 MCFPD. FL=0. SI w/o well study.
 8/93 Perf 3697-3708, 3710-28, 3728-32, 3742-48, 3750-54, 3768-70, 3778-88, 3788-98, 3800-07, 3810-15 (2 JHPF). ACZD w/ 4250 gal 15% NeFeA & 428 RCNBS. Swb 64 BW & 77 BW; test 15 BO/ 697 BW/ 36 MCFPD. B14 = SI.
 6/98 Run gauge ring 3400-3980. Set CIBC @ 3958'. Set CIBC @ 3879'. SQZD parts 3697-3948 w/ 38 BBL CMT. SQZD to 1200 psi & 150 SX. D/O cmt to 3958, no cmt last 16'. Cut 5-1/2" csg w/ section mill @ 3843' (top) - 3875' w/ Enterra C-75 section mill. Set kick-off plug w/ 3939-3888. Drill/dress off plug w/ 3688-3848'. GIH w/ gyro, run surveys. Time drill 3848-3812' 4-3/4" hole (curved section outside the csg.) (42 degree incline @ 3910'). GIH w/ pkr, set @ 3808'. Attempt to pmp in to OH. Inj rate = 0.33 BBL @ 1000 gal. Did not pmp Marascal for perm streaks in band z2. Cont'd drilling curve. Horiz. @ -4017-4048' (incl=88.4-91.8 degrees). MD TVD = 3936.7'. Cont'd drilling 4314' horiz. to 5236' MD (TVD=3871.9'). STM horiz. sect. w/ 5000 gal Reacol II & 6000 gal 15% NeFeA w/ Rotojet wash tool on coil tbg. Retrn in 3 wks. N2 jetted 5-1/2" csg @ 500 acf/m, hit ledge w/ coil tbg going thru bend. Work, no success. GIH w/ 10' stiff straight bar & 90g jet tool. Went thru bend OK, trid horiz. w/ 1000 gal 30% methanol & water. Put on prod. w/ KUDU.
 8/98 Pump 450 bbls clean plug to plug horizontal section. Drill out kickoff 3842-48. DRLG cmt to 3955. D/O CIBC. ACZD w/ 1500 gals 15% AntSludge HCl, swb. RIH w/ PE. RTP.
 PROD LOG: 4/89 - major oil & water entry 3935-40, 88 BFPD up, 290 BFPD crossflow down to 3968-82'. Major gas entry @ 3900'.
Additional Data:
 T/Queen Formation @ 3420'
 T/Penrose Formation @ 3568'
 T/Grayburg Zone 1 @ 3754'
 T/Grayburg Zone 2 @ 3824'
 T/Grayburg Zone 3 @ 3898'
 T/Grayburg Zone 4 @ 3992'
 T/Grayburg Zone 5 @ 4057'
 T/Grayburg Zone 6 @ 4108'
 T/San Andrew Formation @ 4172'
 KB @ 3590'



FILE: EMSU643WB.XLS
 RLM: 8/24/98

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY AND MINERALS
OIL CONSERVATION COMMISSION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION FOR THE PURPOSE OF
CONSIDERING:

CASE No. 8398
Order No. R-7766

APPLICATION OF GULF OIL CORPORATION
FOR A WATERFLOOD PROJECT, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This case came on for hearing at 9:00 A.M. on November 7, 1984, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 27th day of December, 1984, the Commission, a quorum having been present, having considered the testimony and the record and being otherwise fully advised in the premises,

FINDS THAT:

(1) Due public notice has been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Gulf Oil Corporation, in Commission Case 8398, seeks authority to institute a waterflood project in its Eunice Monument South Unit, by the injection of water into the unitized interval which shall include the formations which extend from an upper limit of 100 feet below mean sea level or the top of the Grayburg formation, whichever is higher, to a lower limit being the base of the San Andres formation in the proposed unitized area, all as shown on Exhibit "A" attached to this order.

(3) The subject Commission Case 8398 was consolidated for hearing with Commission Cases 8397 and 8399.

(4) Gulf proposes to utilize an 80-acre five spot injection pattern using a well number system and proposed

Unit injection wells all as shown and identified on Exhibit "B" attached hereto.

(5) Said injection wells shall be conversions of existing wells or newly drilled wells as noted on said Exhibit "B".

(6) The proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(7) The producing formations in the proposed project area are in an advanced stage of depletion and the area is suitable for waterflooding.

(8) There are five wells within or adjacent to the proposed project which may not have been completed or plugged in a manner which will assure that their wellbores will not serve as a conduit for movement of injected fluid out of the injection interval.

(9) The five possible problem wells are identified and described on Exhibit "C" attached hereto.

(10) Prior to instituting injection within one-half mile of any of the five possible "problem wells" Gulf shall first contact the Oil Conservation Division's District Supervisor at Hobbs to develop a plan acceptable to the Director of said Division for repairing or replugging such wells, for monitoring for determination of fluid movement from the injected interval, or for the drilling of replacement producing wells to lower reservoir pressure and fluid levels in order to protect neighboring properties and to protect other oil or gas zones or fresh water.

(11) The operator should otherwise take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(12) The injection wells or injection pressurization system should be so equipped as to limit injection pressure at the wellhead to no more than 0.2 psi per foot of depth from the surface to the top injection perforation in any injection well, but the Division Director should have authority to increase said pressure limitation, should circumstances warrant.

(13) The subject application should be approved and the project should be governed by the provisions of Rule 701 through 708 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Gulf Oil Corporation, is hereby authorized to institute a waterflood project in the Eunice Monument South Unit Area for the acreage described on Exhibit "A" attached hereto and made a part hereof, by the injection of water into the unitized interval which shall include the formations which extend from an upper limit described as 100 feet below mean sea level or at the top of the Grayburg formation, whichever is higher, to a lower limit being the base of the San Andres formation said geologic markers having been as found to occur at 3,666 feet to 5,283 feet, respectively, in the Continental Oil Company's Meyer B-4 Well No. 23 located 660 feet from the South line and 1980 feet from the East line of Section 4, Township 21 South, Range 36 East, Lea County, New Mexico.

(2) Applicant, Gulf Oil Corporation, is hereby authorized to utilize for injection purposes the wells identified and described on Exhibit "B" attached hereto and made a part hereof.

(3) The injection wells herein authorized and/or the injection pressurization system shall be so equipped as to limit injection pressure at the wellhead to no more than 0.2 psi per foot of depth from the surface to the top injection perforation, provided however, the Division Director may authorize a higher surface injection pressure upon satisfactory showing that such pressure will not result in fracturing of the confining strata.

(4) Injection into each of said wells shall be through plastic or cement-lined tubing, set in a packer which shall be located as near as practicable to the uppermost perforations, or, in the case of open-hole completions, as near as practicable to the casing-shoe; that the casing-tubing annulus shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention attracting leak detection device.

(5) Prior to injection into any well located within one-half mile of any of the five wells listed on Exhibit "C" attached to this order, the applicant shall consult with the supervisor of the Oil Conservation Division's district office at Hobbs to develop a plan acceptable to

the Director of said Division, for the repairing, plugging, or replugging of said wells or for the monitoring for determination of fluid movement from the injected interval or for the drilling of producing wells to lower reservoir pressure and fluid levels in the vicinity of said wells in order to protect neighboring properties and to protect other oil or gas zones or fresh water.

(6) The operator shall immediately notify the supervisor of the Division's Hobbs District Office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area, and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(7) The authorized subject waterflood project is hereby designated the Eunice Monument South Unit Waterflood Project and shall be governed by the provisions of Rules 701 through 708 of the Commission Rules and Regulations.

(8) Monthly progress reports of the waterflood projects herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(9) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-5-
Case No. 8398
Order No. R-7766

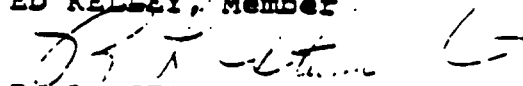
DONE at Santa Fe, New Mexico, on the day and year
hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

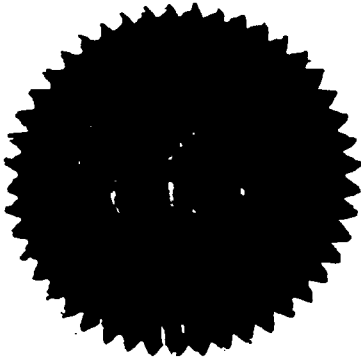
JIM BACA, Member



ED KELLEY, Member



R. L. STAMETS, Chairman and
Secretary



S E A L

LEA COUNTY, NEW MEXICO

TOWNSHIP 20 SOUTH, RANGE 36 EAST, NMPM

Section 25: All

Section 36: All

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPM

Section 30: S/2, S/2 N/2, NE/4 NW/4 and NW/4 NE/4

Section 31: All

Section 32: All

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM

Section 2: S/2 S/2

Section 3: Lots 3, 4, 5, 6, 11, 12, 13, and 14
and S/2

Sections 4 through 11: All

Section 12: W/2 SW/4

Section 13: NW/4 NW/4

Sections 14 through 18: All

Section 21: N/2 and N/2 S/2

Section 22: N/2 and N/2 S/2

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EXHIBIT "A"

LEA COUNTY, NEW MEXICO

UNIT WELL NO.	UNIT LETTER	SECTION-TOWNSHIP-RANGE			NEW WELL
			SOUTH	EAST	
101	C	30	20	37	N
102	A	25	20	36	
104	C	25	20	36	
106	E	25	20	36	
108	G	25	20	36	
110	E	30	20	37	
112	G	30	20	37	
114	I	30	20	37	
116	K	30	20	37	
118	I	25	20	36	
120	K	25	20	36	
122	M	25	20	36	
124	O	25	20	36	
126	M	30	20	37	
128	O	30	20	37	
130	A	32	20	37	N
132	C	32	20	37	
134	A	31	20	37	
136	C	31	20	37	
138	A	36	20	36	
140	C	36	20	36	
142	E	36	20	36	
144	G	36	20	36	
146	E	31	20	37	
148	G	31	20	37	
150	E	32	20	37	
152	G	32	20	37	
154	I	32	20	37	N
156	K	32	20	37	
158	I	31	20	37	
160	K	31	20	37	
162	I	36	20	36	
164	K	36	20	36	
166	M	36	20	36	
168	O	36	20	36	
170	M	31	20	37	
172	O	31	20	37	
174	M	32	20	37	
176	O	32	20	37	

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EXHIBIT "B"

LEA COUNTY, NEW MEXICO

179	D	3	21	36
181	B	4	21	36
183	D	4	21	36
185	B	5	21	36
187	D	5	21	36
189	B	6	21	36
191	D	6	21	36
193	F	6	21	36
195	H	6	21	36
197	F	5	21	36
199	H	5	21	36
201	F	4	21	36
203	H	4	21	36
205	F	3	21	36
207	L	3	21	36
209	J	4	21	36
211	L	4	21	36
213	J	5	21	36
215	L	5	21	36
217	J	6	21	36
219	L	6	21	36
221	N	6	21	36
223	P	6	21	36
225	N	5	21	36
227	P	5	21	36
229	N	4	21	36
231	P	4	21	36
233	N	3	21	36
235	R	3	21	36
237	T	3	21	36
239	R	4	21	36
241	T	4	21	36
243	R	5	21	36
245	T	5	21	36
247	R	6	21	36

N

N

N

CASE NO. 8398
ORDER NO. R-7766
EXHIBIT "B"

LEA COUNTY, NEW MEXICO

249	T	6	21	36
251	V	6	21	36
253	X	6	21	36
255	V	5	21	36
257	X	5	21	36
259	V	4	21	36
261	X	4	21	36
263	V	3	21	36
265	X	3	21	36
267	V	2	21	36
269	X	2	21	36
271	B	11	21	36
273	D	11	21	36
275	B	10	21	36
277	D	10	21	36
279	B	9	21	36
281	D	9	21	36
283	B	8	21	36
285	D	8	21	36
287	B	7	21	36
289	D	7	21	36
291	F	7	21	36
293	H	7	21	36
295	F	8	21	36
297	H	8	21	36
299	F	9	21	36
301	H	9	21	36
303	F	10	21	36
305	H	10	21	36
307	F	11	21	36
309	H	11	21	36
310	L	12	21	36
312	J	11	21	36
314	L	11	21	36
316	J	10	21	36
318	L	10	21	36
320	J	9	21	36
322	L	9	21	36
324	J	8	21	36

CASE NO. 8398
ORDER NO. R-7766
EXHIBIT "B"

LEA COUNTY, NEW MEXICO

325	L	8	21	36
328	J	7	21	36
330	L	7	21	36
332	N	7	21	36
334	F	7	21	36
336	N	8	21	36
338	F	8	21	36
340	N	9	21	36
342	F	9	21	36
344	N	10	21	36
346	F	10	21	36
348	N	11	21	36
350	F	11	21	36
352	D	13	21	36
354	B	14	21	36
356	D	14	21	36
358	B	15	21	36
360	D	15	21	36
362	B	16	21	36
364	D	16	21	36
366	B	17	21	36
368	D	17	21	36
370	B	18	21	36
372	D	18	21	36
374	F	18	21	36
376	H	18	21	36
378	F	17	21	36
380	H	17	21	36
382	F	16	21	36
384	H	16	21	36
386	F	15	21	36
388	H	15	21	36
390	F	14	21	36
392	H	14	21	36
394	J	14	21	36
396	L	14	21	36
398	J	15	21	36
400	L	15	21	36
402	J	16	21	36
404	L	16	21	36

N

CASE NO. 8398
ORDER NO. R-7766
EXHIBIT "B"

LEA COUNTY, NEW MEXI.

406	J	17	21	36
408	L	17	21	36
410	J	18	21	36
412	L	18	21	36
414	N	18	21	36
416	P	18	21	36
418	N	17	21	36
420	P	17	21	36
422	N	16	21	36
424	P	16	21	36
426	N	15	21	36
428	P	15	21	36
430	N	14	21	36
432	P	14	21	36
434	B	22	21	36
436	D	22	21	36
438	B	21	21	36
440	D	21	21	36
442	F	21	21	36
444	H	21	21	36
446	F	22	21	36
448	H	22	21	36
450	J	22	21	36
454	J	21	21	36
456	L	21	21	36
452	L	22	21	36

CASE 8398
ORDER NO. R-8398
EXHIBIT "B"

- (1) Amoco Production Co. State "C" Tr. 11 Well No. 3
located 1980 feet from the South line and 1980 feet from
the East line of Section 2, Township 21 South, Range 36
East;
- (2) Amoco Production Co. State "C" Tr. 11 Well No. 4
located 3300 feet from the South line and 1980 feet from
the East line of Section 2, Township 21 South, Range 36
East;
- (3) Texas Crude Oil Co. Kincheloe 2 State Well No. 1
located 1980 feet from the South line and 1980 feet from
the West line of Section 2, Township 21 South, Range 36
East;
- (4) El Paso Natural Gas Co. Coleman Well No. 1
located 2310 feet from the South line and 2310 feet from
the East line of Section 17, Township 21 South, Range 36
East;
- (5) Texaco Inc. New Mexico "H" NCT-1 Well No. 28, a dry
hole, located 990 feet from the South line and 660
feet from the East line of Section 31, Township 20 South,
Range 37 East;

all in Lea County, New Mexico.

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Order No. R-7766
EXHIBIT "C"