



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

ADMINISTRATIVE ORDER NO. WFX-785

APPLICATION OF CHEVRONTEXACO TO EXPAND ITS EUNICE MONUMENT SOUTH UNIT WATERFLOOD PROJECT IN THE EUNICE MONUMENT OIL POOL IN LEA COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-7766, ChevronTexaco has made application to the Division on September 10, 2002 for permission to expand its Eunice Monument South Unit Waterflood Project in the Eunice Monument Oil Pool in Lea County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

- (1) The application has been filed in due form.
- (2) Satisfactory information has been provided that all offset operators have been duly notified of the application.
- (3) No objection has been received within the waiting period as prescribed by Rule 701(B).
- (4) The proposed injection wells are eligible for conversion to injection under the terms of Rule 701.
- (5) The proposed expansion of the above referenced Waterflood Project will not cause waste nor impair correlative rights.
- (6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, ChevronTexaco is hereby authorized to inject water into the Grayburg formation at approximately 3,703 feet to approximately 3,954 feet through plastic lined tubing set in a packer located within 100 feet of the uppermost injection intervals in the following described wells for purposes of secondary recovery to wit:

Well Name	API Number	Well Location (T21S, R36E, Lea County)	Injection Interval	Packer Depth	Maximum Injection Pressure
EMSU No. 343	30-025-04589	Unit M, Section 10	3,738' – 3,910'	3,650'	(0.2 psi/ft) 748
EMSU No. 345	30-025-29823	Unit O, Section 10	3,768' – 3,922'	3,700'	(0.2 psi/ft) 754
EMSU No. 347	30-025-04606	Unit M, Section 11	3,777' – 3,935'	3,700'	(0.2 psi/ft) 755
EMSU No. 357	30-025-04636	Unit A, Section 15	3,703' – 3,942'	3,660'	(0.2 psi/ft) 741
EMSU No. 359	30-025-04651	Unit C, Section 15	3,755' – 3,954'	3,700'	(0.2 psi/ft) 751

IT IS FURTHER ORDERED THAT:

The operator shall 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.

Prior to commencing injection operations into the well, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection wells to the pressures as specified above.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said wells that such higher pressure will not result in migration of the injected fluid from the Grayburg formation. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Hobbs district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Hobbs district office of the Division of the failure of the tubing, casing or packer in said wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

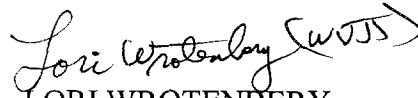
The subject wells shall be governed by all provisions of Division Order No. R-7766 and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

PROVIDED FURTHER THAT, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein.

The injection authority granted herein shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

DONE at Santa Fe, New Mexico, on this 4th day of November 2002.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY
Director

S E A L

LW/wvjj

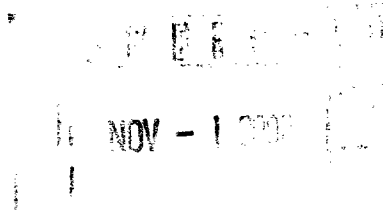
cc: Oil Conservation Division – Hobbs
Case File No.8398 (R-7766)

Chevron U.S.A. Production Company
Kevin Hickey
New Mexico Waterflood
Petroleum Engineer
15 Smith Road
Midland, Texas 79705

ChevronTexaco

October 28, 2002

**APPLICATION FOR AUTHORIZATION
TO INJECT - OCD FORM C-108
EUNICE MONUMENT SOUTH UNIT
EUNICE MONUMENT OIL POOL
LEA COUNTY, NEW MEXICO**



State of New Mexico
Energy and Minerals Dept.
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Attention: Mr. William V. Jones Jr.

Dear Sir:

In response to your letter of October 10, 2002, regarding Chevron U.S.A. Production Co. application to inject into Eunice Monument South Unit Wells 343, 345, 347, 357, and 359., please find the following information:

Wellbore schematics for the twelve wells listed.

Injection rate and pressure plots for EMSU Wells 344 and 346.

Your prompt consideration and approval of this application will be greatly appreciated. If further information is required, please contact me at (915) 687-7260.

Sincerely,

Kevin F. Hickey
Petroleum Engineer
New Mexico Waterfloods

File
Attachments



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

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Director

Oil Conservation Division

October 10, 2002

Mr. Kevin F. Hickey
ChevronTexaco
15 Smith Road
Midland, Texas 79705

Re: Administrative Application for Water Flood Expansion (WFX)
Eunice Monument South Unit 343, 345, 347, 357, and 359
Township 21 South, Range 36 East, NMPM, Lea County, New Mexico.

Dear Mr. Hickey:

The New Mexico Oil Conservation Division (OCD) received your application September 10, 2002. After review, the following information is needed to complete your order:

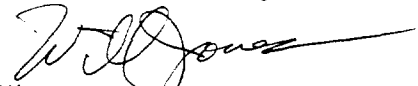
- Please provide injection rate and injection pressure vs time plots for injection wells 344 and 346 for the time period from January 1, 2002 until the present.
- Please provide cementing and casing details showing cement tops and method for obtaining the cement tops on the following twelve wells in this area of review.

API	WellName	Operator	NS	EW	UL1	Sec
30-025-20306	JOHN D KNOX #011	EXXON MOBIL	2310S	330E	I	10
30-025-04631	EMSU #389	Chevron	1980N	660W	E	14
30-025-04584	EMSU #319	Chevron	1650S	990E	I	9
30-025-04600	EMSU #315	Chevron	1980S	660E	I	10
30-025-04590	EMSU #317	Chevron	1980S	1980W	K	10
30-025-04608	EMSU #313	Chevron	1980S	1980W	K	11
30-025-04636	EMSU #355	Chevron	660N	1980W	C	14
30-025-04650	EMSU #385	Chevron	1980N	660W	E	15
30-025-04645	EMSU #387	Chevron	1980N	1980E	G	15
30-025-04655	EMSU #361	Chevron	660N	660E	A	16
30-025-20700	A J ADKINS #008	EXXON MOBIL	2310S	2260W	K	10
30-025-20662	STATE D BATTERY 2 #130	CONOCO	990S	660W	M	11

ChevronTexaco
Eunice Monument South Unit WFX
October 10, 2002
Page 2 of 2

Please reply as soon as possible and the OCD will finish processing your request. For questions or concerns, please call (505) 476-3448.

Sincerely,

A handwritten signature in black ink, appearing to read "W. Jones", with a long horizontal flourish extending to the right.

William V Jones Jr. PE

cc: Oil Conservation Division-Hobbs

CURRENT WELLBORE DIAGRAM

LEASE: JD KNOX	WELL: 11	FIELD: OIL CENTER	API: 30-025-20306
LOC: 2310 FSL & 330 FEL	SEC: 10	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL:	CTY/ST: Lea Co., NM	SPUD: 11/23/1963
CURRENT STATUS: TA	KB: 3597	DF:	TD DATE:

7-5/8", 24# H-40
Surf. Pipe set @ 1329' w/
575 SX cement
TOC @ 0' (CIRC)
11" HOLE

1329'

4.5" Csg.
set @ 6225' w/ 500 SX
TOC @ 2400' (TEMP SUR)
6.75" HOLE

CIBP @ 5745' w / 2.5 sx cmt

5812

5945

6225

TD @ 6225'

Date Completed: 12-31-1963

Initial Prod: Initial Formation: Blinbery From: 5812' To: 5945'
Workover Data:

10/1993
Frac 160K sand

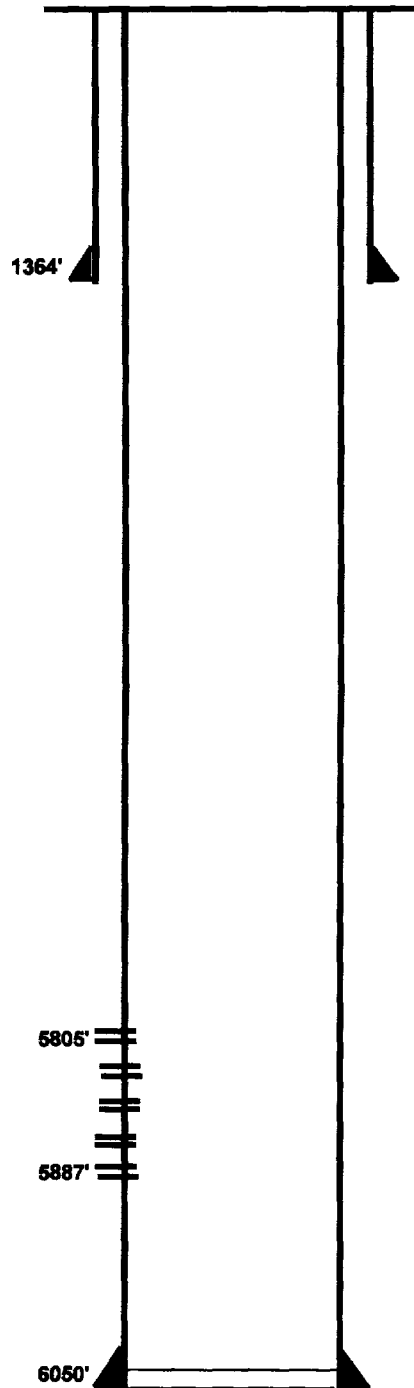
7/1995
Set CIBP @5745' capped w 2.5 sx TA well

10/28/2002

CURRENT WELLBORE DIAGRAM

LEASE: AJ ADKINS	WELL: 8	FIELD: OIL CENTER	API: 30-025-20700
LOC: 2310 FSL & 2260 FWL	SEC: 10	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL:	CTY/ST: Lea Co., NM	SPUD: 6/27/1964
CURRENT STATUS: Producer	KB: 3596	DF:	TD DATE: 7/11/1964

7-5/8", 24#
Surf. Pipe set @ 1364' w/
625 SX cement
TOC 0' circ
11' HOLE



Date Completed: 8-13-1964

Initial Prod:

Initial Formation: BLINBERY

Workover

9/66 Added Perfs 5849-64

6/66 Added Perfs 5805-5840 Frac W 25K crude

10/93 Frac 160K sand

4.5" Csg.
set @ 6050' w/ 600 SX
TOC 2600' (temp survey)
6.75" HOLE

TD @ 6050'

10/28/2002

Chevron



WELL DATA SHEET

LEASE: EMSU WELL: 313
 LOC: 1980' F S L & 1980' F W L SEC: 11
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: K ST: N.M.
 (formerly: State "D" Battery 2 #4)

FORM: Grayburg / San Andres DATE: _____
 GL: 3594' STATUS: Producer
 KB: 3594' API NO: 30-025-04608
 DF: _____ CHEVNO: FA 57490:01

Date Completed: 3/3/37
 Initial Production: 168 BOPD
 Initial Formation: Grayburg
 FROM: 3735' to 3890' / GOR 1190

10-3/4" OD
 40.5# CSG
 Set @ 271' WI 225 SX
 Cmt circ.? Yes
 TOC @ --- by calc.
 (15" hole)

7-5/8" OD
 26.4# CSG
 Set @ 1404' WI 425 SX
 Cmt circ.? Yes
 TOC @ --- by calc.
 (9-5/8" hole)

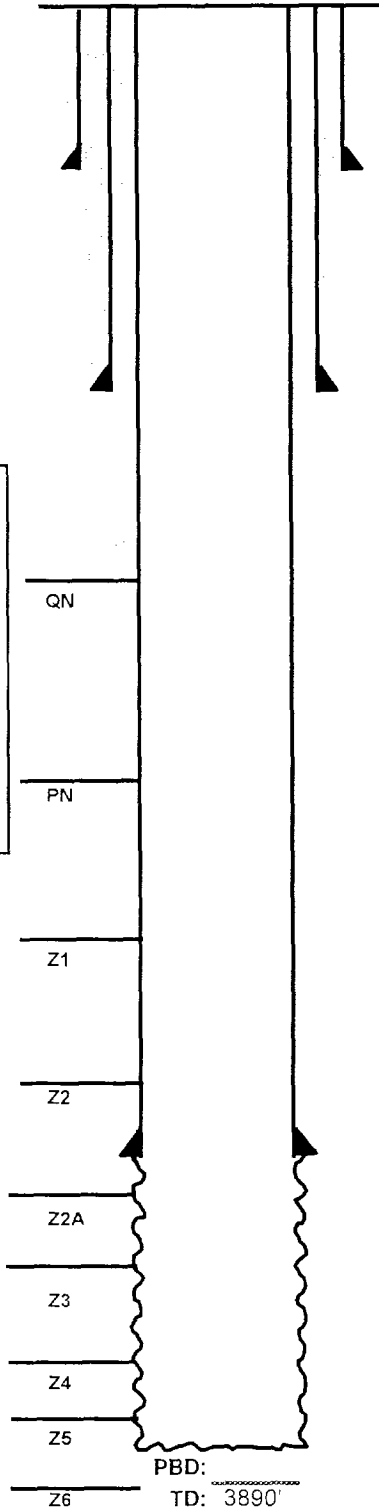
Tubing Detail: 6/7/87

Original KBTH: 0.00'
 130 Jts. 2-3/8" H-40 10V tbg: 3649.56'
 2-7/8" Seating Nipple: 1.10'
 2-3/8" Perf Sub: 4.00'
 2-7/8" H-40 BPMA: 30.41'
 Landed @: 3885.07'

Rod Detail: 6/7/87

151 - 3/4" X 25' Steel Rods
 2 - 1" K-Bars
 1-1/4" X 2" X 12' RWTC Pump

5-1/2" OD
 17# CSG
 Set @ 3735' WI 425 SX
 Cmt circ.? Yes
 TOC @ --- by calc.
 (6-3/4" hole)



Completion Data

DST 3737-3790'. Tstd 180' fluid & 560 mcf gas. Tubing set on btm w/ pkr set @ 3790'.

Subsequent Workover or Reconditioning:

3/44 Acdz OH w/ 500 gal acid.
 11/51 Trtd 3735-3890' w/ 1500 gal XR spec. acid. Test: flwg 25 BO/ 4 BWPD. B/4: 5 BO/ 0 BWPD.
 10/83 SS OH w/ 700 grain prime cord. C/O to 3890'. Acdz OH w/ 2100 gal 15% NeFeA in 5 stgs. Scale inhibit. Tst: 3 BO/ 9 BW/ 49 mcfpd.
 6/87 XOWH. C/O w/ foam to 3890'. Log. Put well on prod. Tst: 2 BO/ 3 BW/ 46 mcfg. FL = 117' ASN. B/4: 4 BO/ 4 BW/ 99 mcfg.
 3/96 Tag btm - no fill. Pickle tbg w/ 300 gals 15% Acid. Acdz OH w/ 4000 gals Resisol in 4 stages. RIH w/ PE. TOTP.

Additional Data:

T/Queen Formation @ 3377'
 T/Penrose Formation @ 3506'
 T/Grayburg Zone 1 @ 3692'
 T/Grayburg Zone 2 @ 3722'
 T/Grayburg Zone 2A @ 3753'
 T/Grayburg Zone 3 @ 3785'
 T/Grayburg Zone 4 @ 3817'
 T/Grayburg Zone 5 @ 3862'
 T/Grayburg Zone 6 @ 3903'
 T/San Andres @ 3904'
 KB @ 3594'

FILE: EMSU313WB.XLS



WELL DATA SHEET

LEASE: EMSU
LOC: 1980' F S L & 1980' F W L
TOWNSHIP: 21S
RANGE: 36E UNIT: K
WELL: 317
SEC: 10
CNTY: Lea
ST: N.M.

FORM: Grayburg / San Andres
GL: 3592'
KB: 3584'
DF:
DATE:
STATUS: Producer
API NO: 30-025-04590
CHEVNO: FA 5/31:01

10-3/4" OD
32.75# CSG
Set @ 260' W/ 150 SX
Cmt circ.? yes
TOC @ surf. by calc.

Tubing & Rod Detail: 5/6/97

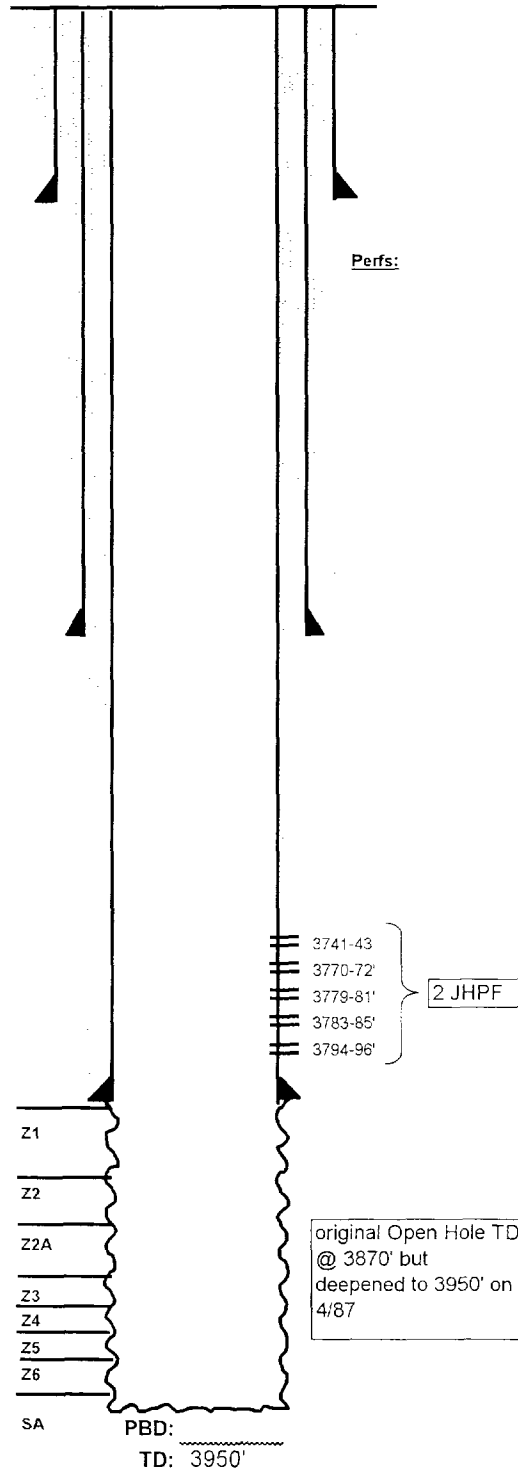
Original KB to THF: 0.00'
116 Jts. 2-7/8" J-55 Bare EUE 8rd
tbg: 3636.20'
1 5.5" X 2-7/8" TAC 3.10'
7 Jts. 2-7/8" J-55 EUE 8rd Bare
tbg: 217.33'
1 2.25 Working Barrel #469-B 25.00'
4' 2.874" Perf Sub 4.00'
2-7/8" EUE 8rd BPMAJ 33.10'
Landed @: 3918.73'

7-5/8" OD
26.4# CSG
Set @ 1363' W/ 525 SX
Cmt circ.? yes
TOC @ surf. by calc.

Rod Detail: 5/6/97

1.250" SM Polished Rod
131 3/4" N-97 Rods
4' X 1" Pony Rod w/ Rod Guides
3 3/4" N-97 Rods
13 1-1/2" X 25' K-Bars
4' X 1" Pony Rod w/ Rod Guides
3 1-1/2" X 25' K-Bars
4' X 1" Pony Rod w/ Rod Guides
3 1-1/2" X 25' K-Bars w/ Plngr

5-1/2" OD
17# CSG
Set @ 3797' W/ 150 SX
Cmt circ.? no
TOC @ 2137' by calc.



Date Completed: 4/30/1936
Initial Production: 7 648 BOPD / 3 BWPB / GOR 715
Initial Formation: Grayburg
FROM: 3797' to 3880'

Completion Data

4/36 Natural completion.

Subsequent Workover or Reconditioning:

3/51 Acdz OH w/ 2000 gals 15% acid & 750 gals gel acid. Test: 43 BO / 9 BW / 1329 GOR.
3/59 Dump 300 gals acid. Test: 16 BO / 16 BW.
8/74 Temporarily abandoned.
4/85 Tst csg to 500 psi - OK. CO to TD (Exxon). Turned over to Gulf.
9/85 XO WH. Acdz OH w/ 3500 gals 15% NeFeA in 3 stgs. Swb 2 BO / 10 BW. Swb 2 BO / 3 BW & dry. Chemical squeezed. Put on prod. Tst: 4 BO / 27 BW / 6 TSTM. B/4 - TAd.
4/87 CO & deepened to 3950'. Perf 3741-43, 3770-72, 3779-81, 3783-85 & 3794-96 (2 JHPF). Acdz perms & OH w/ 4000 gals 15% NeFeA in 2 stgs w/ 3000# GRS as diverter. Swb 0 BO / 31 BW FeR = 1 BPH. Put on prod. Test: 5 BO / 80 BW / 5 MCFG. FL @ 154' ASN. B/4 - 4 BO / 15 BW / 17 MCFPD.
8/87 Chemical squeeze.
3/89 Chemical squeeze.
2/92 Upsize pumping equipment. Tst: 30 BO / 282 BW / 7 MCFG.
11/92 Dump acid (1000 gals?) Tst: 36 BO / 279 BW / 5 MCF.
2/94 CO f/ 3930 to 3950'. ACDZ perms & OH w/ 5000 gals 15% acid. Swb 50 BBLS. Tst: B - 25 BO / 211 BW / 4 MCFG. A - 26 BO / 288 BW / 6 MCFG. FL @ 63' ASN.
5/5/97 ACDZ w/ 1000 gals. Resisol II+.

Additional Data:

T/Queen Formation @ 3419'
T/Penrose Formation @ 3548'
T/Grayburg Zone 1 @ 3736'
T/Grayburg Zone 2 @ 3774'
T/Grayburg Zone 2A @ 3811'
T/Grayburg Zone 3 @ 3837'
T/Grayburg Zone 4 @ 3875'
T/Grayburg Zone 5 @ 3929'
T/Grayburg Zone 6 @ 3979'
T/San Andres Formation @ 3982'
KB @ 3584'

FILE: EMSU317WB.XLS



WELL DATA SHEET

LEASE: EMSU WELL: 319
LOC: 1650' F S L & 990' F E L SEC: 9
TOWNSHIP: 21S CNTY: Lea
RANGE: 36E UNIT: T ST: N.M.
(formerly: ARCO E.C. Adkins #7)

FORM: Grayburg / San Andres DATE:
GL: 3590' STATUS: Producer
KB: 3590' API NO: 30-025-04584
DF: CHEVNO: FA 57250:01

Date Completed: 5/3/36
Initial Production: 7/1056 BOPD
Initial Formation: Grayburg
FROM: 3770' to 3890' / GOR ---

Completion Data

No information given.

Subsequent Workover or Reconditioning:

2/57 Acdz OH w/ 500 gals acid.
7/78 Acdz OH w/ 3000 gals 15% acid.
12/86 COWH. CO & deepen w/ 6-1/8" bit to 3970'. Log w/
CNL, GR, CCL, caliper. Perf @ 3705-07, 3712-14, 3729-31,
3737-39 3745-47, 3750-52, 3755-57 (2 JHPF). ACDZ w/
1500 gals 15% NeFe. ACDZ OH w/ 4000 gals 15% NeFe. RIH
w/ PE. TOTP. AWW: 1 BO/ 83 BWPD GOR 13500. B/4: 0 BO/
88 BW/ 9.7 MCFG.
8/87 Chem treat.
4/89 Chem treat.
2/90 Chem treat.

Additional Data:

T/Queen Formation @ 3392'
T/Penrose Formation @ 3522'
T/Grayburg Zone 1 @ 3697'
T/Grayburg Zone 2 @ 3732'
T/Grayburg Zone 2A @ 3767'
T/Grayburg Zone 3 @ 3792'
T/Grayburg Zone 4 @ 3830'
T/Grayburg Zone 5 @ 3883'
T/Grayburg Zone 6 @ 3934'
T/San Andres @ 3970'
KB @ 3590'

12-1/2" OD
50# CSG
Set @ 268' W/ 300 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(15-1/2" hole)

9-5/8" OD
CSG
Set @ 1423' W/ 400 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(11-1/2" hole)

Tubing Detail:

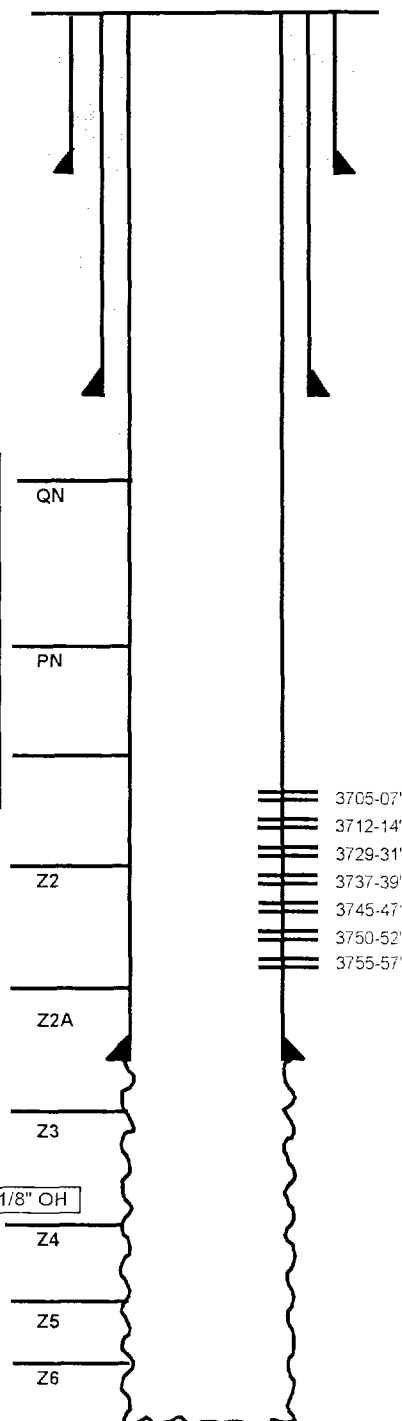
Original KBTH: 0.00'

Landed @:

Rod Detail:

NONE GIVEN

7" OD
24# CSG
Set @ 3778' W/ 250 SX
Cmt circ.? No
TOC @ 2241' by calc.
(8-3/4" hole)



PBD:
TD: 3970'

FILE: EMSU319WB.XLS



WELL DATA SHEET

LEASE: EMSU WELL: 315
LOC: 1980' F S L & 660' F E L SEC: 10
TOWNSHIP: 21S CNTY: Lea
RANGE: 36E UNIT: I ST: N.M.

FORM: Grayburg / San Andres DATE:
GL: 3587' STATUS: Producer
KB: 3599' API NO: 30-025-04600
DF: CHEVNO: FA 5741:01

Date Completed: 10/2/1936
Initial Production: 17674 BOPD / 0 BWPD / GOR 555
Initial Formation: Grayburg
FROM: 3775' to 3890'

Completion Data

10/36 ACDZ OH w/2000 gal HCl; oil gravity 35.2 @ 60 deg

Subsequent Workover or Reconditioning:

11/47 Acdz OH w/ 2500 gals HCl acid.
7/57 Log w/ OH caliper. Frac OH 3820-3874' w/ 10,000 gals oil & 15,000# sand, using 600# moth balls. Swb test 10 BO / 10 hrs. Run PE. Test. 33 BO / 38 BW. B/4 - 16 BO / 1 BW.
4/81 CO to 3858'. Hit iron in hole - possible OH pkr left in hole on 7/57. Perf 3478-70 (2 SPF). ACDZ 3748-3890' w/ 6400 gals 15% NEHCl + 125# BAF to divert. ISIP - vac. Swb test. SFL = 3100'. EFL = 3100'. Chemical treat. RTP. Test 11 BO / 47 BW. B/4 - 3 BO.
4/87 CO WH. CO to 3890'. Deepen w/ foam to 3925'. Run 2-3/8" PE. RTP. Test: 1 BO / 32 BW / 25 MCFG. B/4 - 3 BO / 11 BW / 1 MCFG.
8/89 Chemical squeezed.
2/90 Dump acid - 750 gals 15% NeFe. Test 19 BO / 82 BW / 33 MCFG. B/4 - 14 BO / 50 BW / 33 MCFG.
4/90 Chemical squeezed.
9/90 Dump acid - 1000 gals 15% NeFe. Test 13 BO / 125 BW / 35 MCFG. B/4 - 9 BO / 53 BW / 25 MCFG.
4/91 Install 228 PU - upsize.
9/91 Log w/ GR, CCL, CNL. Acdz 3748-3925' w/ 1500 gals 15% NeFe. Swb SFL = 3750', EFL = 3700'. FeR - 0 BPH. Perf 3724-3736 (2 JHPF). ACDZ perf 3724-3736' w/ 1250 gals 15% NeFe. Swb test - SFL @ 2600'. EFL @ 3700'. Rec'd 2 BW / run PE. RTP.
7/96 Tag @ 3925'. Acdz w/ 6000 gals Resisol II + 2000# salt. RIH w/ KUDU pump. RTP.

Additional Data:

T/Queen Formation @ 3386'
T/Penrose Formation @ 3525'
T/Grayburg Zone 1 @ 3713'
T/Grayburg Zone 2 @ 3750'
T/Grayburg Zone 2A @ 3789'
T/Grayburg Zone 3 @ 3812'
T/Grayburg Zone 4 @ 3842'
T/Grayburg Zone 5 @ 3878'
T/Grayburg Zone 6 @ 3918'
T/San Andres Formation @ 3921'
KB @ 3599'

10-3/4" OD
35.75# CSG
Set @ 229' W/ 100 SX
Cmt circ.? yes
TOC @ surf. by calc.
(13-3/4" hole)

Tubing Detail: 4/30/87

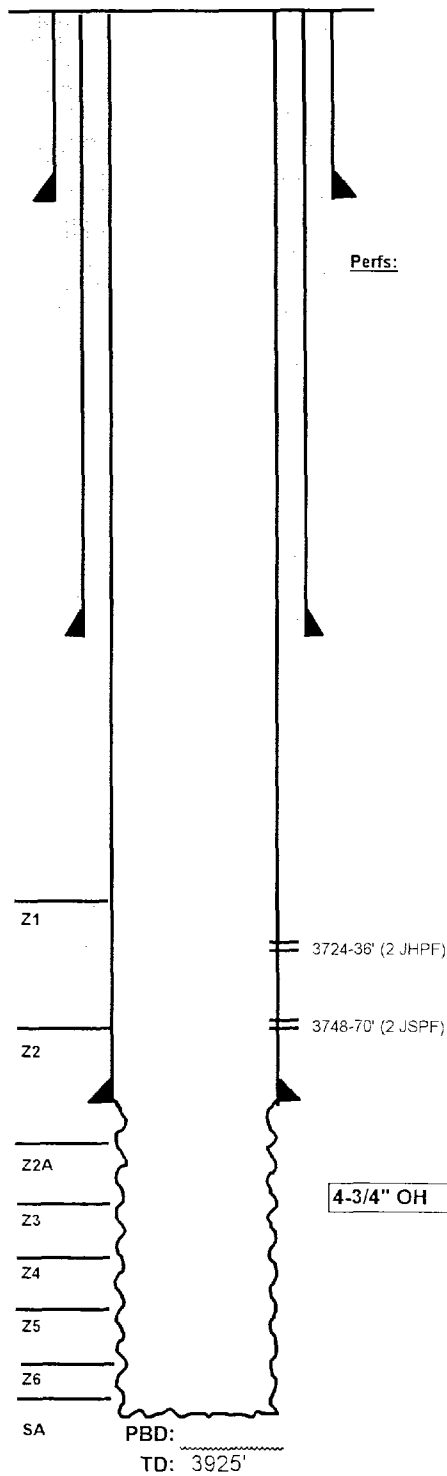
Original KB to THF: 12 00'
126 Jts 2-3/8" H-40 4.7# EUE 10V
tbg: 3863.21'
1 X-O 10V X 8rd Collar 0.58'
1 2-3/8" Std. SN 0.74'
1 2-3/8" Perf Sub 3.10
2-3/8" J-55 4.7# EUE BPMAJ 31.75'
Landed @: 3911.38'

7-5/8" OD
26.4# CSG
Set @ 1449' W/ 400 SX
Cmt circ.? yes
TOC @ surf. by calc.
(9-7/8" hole)

Rod Detail: 4/30/87

1.250" X 12' Polished Rod w/
1-1/2" X 5' liner
1 3/4" X 2' Sub
154 3/4" X 25" "K" Rods
3/4" X 2' Sub
1 2 X 1-1/4 X 8 X 10 X 12 RHBC
pump

5-1/2" OD 10rd
17# CSG
Set @ 3775' W/ 100 SX
Cmt circ.? no
TOC @ 2668' by calc.
(6-3/4" hole)



FILE: EMSU315WB.XLS



WELL DATA SHEET

LEASE: EMSU

WELL: 361

FORM: Grayburg / San Andres

DATE:

LOC: 660' F N L & 660' F E L

SEC: 16

GL: 3589'

STATUS: Producer

TOWNSHIP: 21S

CNTY: Lea

KB: 3589'

API NO: 30-025-04655

RANGE: 36E UNIT: A

ST: N.M.

DF:

CHEVNO: FA 57960.01

(formerly: State "AW" #1)

Date Completed: 12/31/1935

Initial Production:

Initial Formation: Grayburg

FROM:

Completion Data

12/35 Natural completion.

Subsequent Workover or Reconditioning:

4/42 ACDZ w/ 8000 gals acid.

10/45 Perf 7" csg @ 3636, 3644, 3650' (1 JHPF).

8/54 C/O hole. SQZD perfs 3636, 3644, 3650' w/ 95 SX cmt. D/O to 3840'. Csg collapsed @ 3701'. Looks like bit went out of old hole @ 3815' & cut new hole next to old hole (fr 3815' to 3840'). ACDZ OH (3761-3840') w/ 500 gals MA.

12/60 ACDZ OH w/ 1000 gals regular acid.

2/65 ACDZ OH w/ 250 gals 15% NeA.

5/87 COWH. C/O fill to 3840'. Deepened to 3859'.

ACDZ OH 3753-3959' w/ 3500 gals 15%. RIH w/ PE. TOTP.

3/87 Test: 2 BOPD/ 46 BWPDI/ 187 MCFGPD.

9/87 Chemical treat.

7/88 Chemical treat.

Additional Data:

T/Queen Formation @ 3430'

T/Penrose Formation @ 3559'

T/Grayburg Zone 1 @ 3729'

T/Grayburg Zone 2 @ 3769'

T/Grayburg Zone 2A @ 3805'

T/Grayburg Zone 3 @ 3830'

T/Grayburg Zone 4 @ 3871'

T/Grayburg Zone 5 @ 3919'

T/Grayburg Zone 6 @ 3958'

T/San Andres @ 3961'

KB @ 3589'

Lost in hole on 4/42: 1 - 7' X 2" Halliburton Drillable Pkr. 1 - Wash Tool Jar 4-1/2'. 1 - 2" EUE X 4' Tbg Sub. 90' 6" - 2" SS 8rd tubing

13" OD
CSG
Set @ 250' W/ 175 SX
Cmt circ.? Yes
TOC @ surf. by calc.

9-5/8" OD
36# CSG 8rd
Set @ 1393' W/ 525 SX
Cmt circ.? Yes
TOC @ surf. by calc.

Tubing Detail:

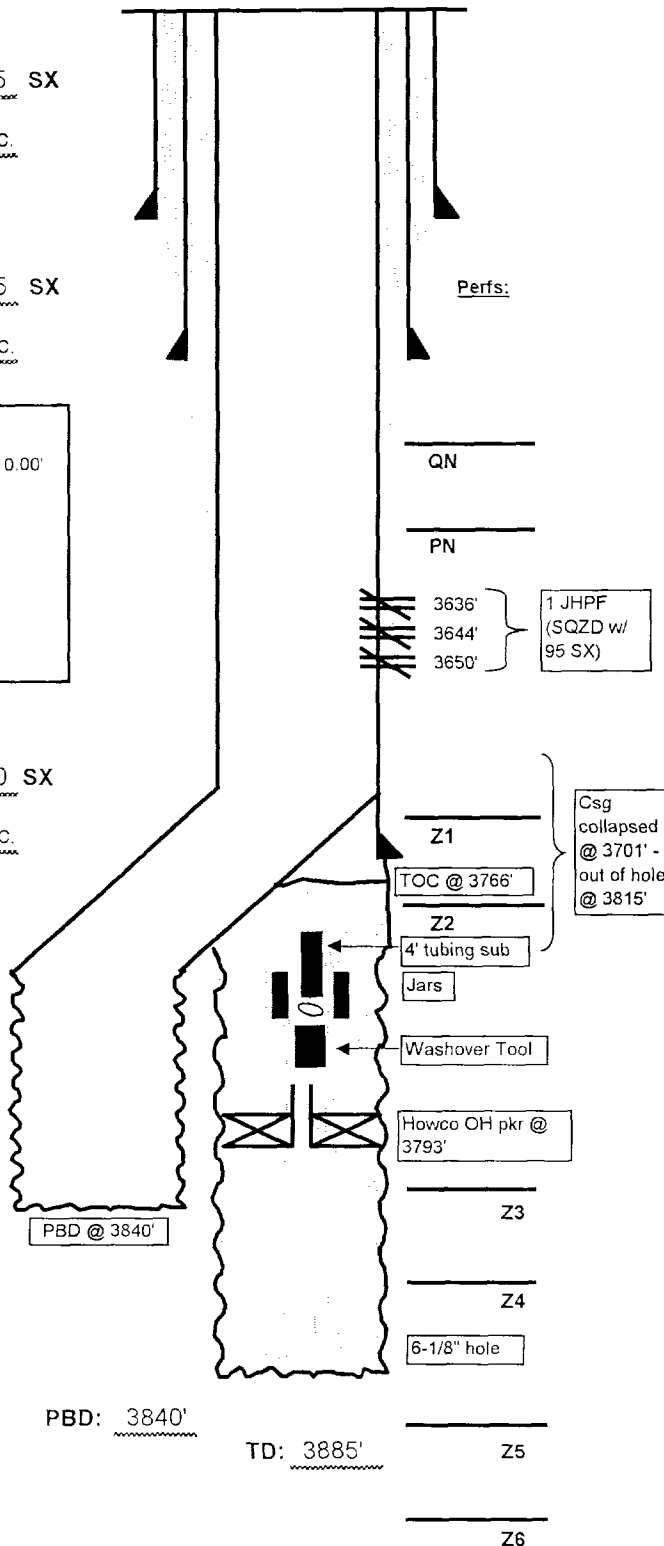
Original KBTH: 0.00'

Landed @:

NONE GIVEN

7" OD
24# CSG 10rd
Set @ 3761' W/ 260 SX
Cmt circ.? No
TOC @ 1935' by calc.

Out of old hole -
from 3815' to
3840'





WELL DATA SHEET

LEASE: EMSU WELL: 355
 LOC: 660' F N L & 1980' F W L SEC: 14
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: ST: N.M.
 (formerly: Arnott Ramsey NCT-C #14)

FORM: Grayburg / San Andres DATE:
 GL: 3584' STATUS: Producer
 KB: 3594' API NO: 30-025-04636
 DF: CHEVNO: FA 5777:01

Date Completed: 8/26/1936
 Initial Production: F/254 BOPD
 Initial Formation: Grayburg
 FROM: 3698' to 3883' GOR 17460

Completion Data

ACDZ OH w/ 2000 gals Dowell X sol'n. ACDZ OH w/ 5000 gals
 50/50 non-inhib. solution.

Subsequent Workover or Reconditioning:

2/39 Set OH pkr @ 3787'. Tst: f/ 105 BO/ 0 BW/ 320
 MCFGPD.
 2/59 Well SI - TA'd.
 6/60 Cut tbg @ 3564'. Left tbg & OH pkr in well. Set cement retr
 @ 3551' and SQZD 3551' to TD (3883') w/ 150 SX cmt. Filled
 hole w/ mud. Spot 10 SX cmt in top of 5-1/2" csg. Well P&A'd.
 4/85 D/O surface plug. C/O to 3551'. Test csg - OK. D/O
 cement retr. D/O, wash over and retr. OH pkr. CO to 3885'. Log
 well. ACDZ OH w/ 3500 gals 15% NeFeA w/ GRS as block.
 Swb 0 BO/ 17 BW - 1 hr. EFL - 1500'. Swb SFL - 2900'. EFL @
 SN. Rec'd 23 BBLS. Fid w/ slight oil cut. Chem sqzd. Put on
 prod. Well SI - waiting on ppg equip (until 1987?)
 7/87 CO & deepen to 3944'. Put on prod. Tst - 1 BO/ 13 BW/ 55
 MCFG. FL - 187' ASN. B/4 - 2 BO/ 1 BW/ 1 MCFGPD.
 12/95 Tag @ 3941' WL. Pickle tbg w/ 500 gals 15% NeFe pickle
 acid. ACDZ w/ 5000 gals viscosified Pentol 200 in 4 stages.
 Swb, RIH w/ PE. RTP.
 12/17/97 BJ pump 5000 gals mini-frac @ 30 BPM @ 2350 psig.
 FRAC'D OH 3698-3750' w/ 12,000 gals Viking I-30 fluid.
 Carrying 42,000# 16/30 sand. TOTP on 12/24.
 8/2000 acid 6000 gal 50Q CO2

Additional Data:

T/Queen Formation @ 3409'
 T/Penrose Formation @ 3536'
 T/Grayburg Zone 1 @ 3723'
 T/Grayburg Zone 2 @ 3755'
 T/Grayburg Zone 2A @ 3788'
 T/Grayburg Zone 3 @ 3812'
 T/Grayburg Zone 4 @ 3843'
 T/Grayburg Zone 5 @ 3885'
 T/Grayburg Zone 6 @ 3923'
 T/San Andres Formation @ 3924'
 KB @ 3594'

10-3/4" OD
 32# CSG
 Set @ 300' W/ 250 SX
 Cmt circ.? Yes
 TOC @ surf. by calc.
 (13-3/4" hole)

7-5/8" OD
 22# CSG
 Set @ 1430' W/ 300 SX
 Cmt circ.? No
 TOC @ 130' by calc.
 (9-7/8" hole)

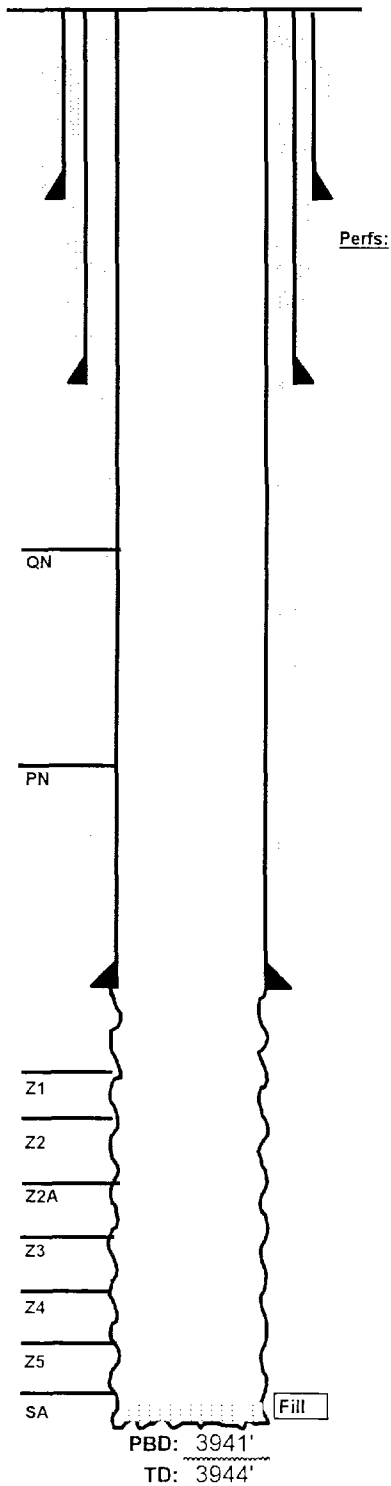
Tubing Detail: 12/24/97

Original KBTH: 10 00'
 108 Jts. 2-7/8" J-55 6.5# EUE 8rd
 tbg: 3405.15'
 2-7/8" X 5-1/2" TAC: 2.70'
 1 Jt. 2-7/8" J-55 6.5# EUE 8rd: 31.50'
 12 Jts. 3-1/2" J-55 9.3# EUE 8rd:
 376.41'
 2-1/2" X 2-1/4" Pump Barrel: 25.12'
 2-7/8" Perf Sub: 4 10'
 2-7/8" 6.5# J-55 8rd EUE tbg BPMA:
 31.10'
 Landed @: 3876 08'

5-1/2" OD
 17# CSG
 Set @ 3698' W/ 300 SX
 Cmt circ.? No
 TOC @ 379' by calc.
 (6-3/4" hole)

Rod Detail: 12/24/97

1 - 1-1/2" X 26' Polished Rod
 3 - 7/8" Norris 97 Pony Rods (6'-8'-4")
 55 - 7/8" Norris 97 Sucker Rods
 84 - 3/4" Norris 97 Sucker Rods
 12 - 1-1/2" K-Bars
 7/8" Norris 97 Pony Rods (2')
 2-1/4" X 48" Pump Plunger



FILE: EMSU355WB.XLS



WELL DATA SHEET

LEASE: EMSU WELL: 385
 Loc: 1980' F N L & 660' F W L SEC: 15
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: E ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3562' STATUS: Producer
 KB: 3582' API NO: 30-025-04650
 DF: _____ CHEVNO: FA 5791.01

Date Completed: 4/21/1936
 Initial Production: 171520 BOPD
 Initial Formation: Grayburg
 FROM: 3776' to 3869' GOR 822

Completion Data

Natural OH well completion.

Subsequent Workover or Reconditioning:

9/51 Trtd w/ 1000 GAL 15% NeA & 500 GAL MA. REACDZ W/ 2500 gal 15% NeA. Tst: 114 BO/ 16 BW/ GOR=1675. B/4 - 10 BO/ 2 BWPD.
 11/52 Install ppg eq. Tst: 60 BO/28 BWPD/GOR = 1990. B/4 - 13 BO/ 5 BWPD.
 3/55 Ran GR&N log. Fnd csg lk @ 2035'. Perf 2040' (2 JHPF). Set rtr @ 1694'. SQZD lk w/ 500 SX. TS/TC @ 1475'. D/O to 2155'. Tst csg OK. Drld cmt 3646-58'. Drld/push CIBP f/ 3658-3860', left BP @ 3860'. Tst: 62 BO/ 10 BW/ GOR = 1065.
 11/60 C/O to TD, tst: 19 BO/ 3 BW.
 8/66 Replace tbg.
 2/71 Dump acid 750 gal 15% NeA. Tst: 28 BO/ 30 BW/ GOR = 1607. B/4 - 11 BO/ 14 BW.
 6/81 Tag bottom. 10' fill. ACDZ w/ 3000 gal 15% NeA @ 5 - 7.7 BPM w/ 200# GRS block. Tst - 26 BO/ 7 BW/ 7 MCFPD. B/4 - 6 BO/ 8 BWPD.
 7/82 Dump acid 1000 gal 15% NeA. Tst 4 BO/ 6 BW. B/4 - 3 BO/ 6 BW.
 6/87 XO WH. CO fill 3854-69'. Drld uo BP on btm. Deepened to 3962' w/ air. Log, put on prod. Tst 2 BO/ 64 BW/ 70 MCFGPD. FL@285' ASN. B/4 - 5 BO/ 23 BW/ 11 MCF.
 4/89 Scale squeezed.
 11/90 Full scale sqzd & directed. Note that normal scale squeeze is not effective. Set pkr @ 3650'. Ppd 4 stg chem sqz w/ 750# RS as diverter. Got good block action. Used T133 & TS923 scale chemical.
 5/91 Upsize ppg. equip. Conv. 228 unit. Tst: 10 BO/ 224 BW/ FL = 943' ASN.
 4/92 Install larger ppg. equip. (456). Tst: 50 BO/ 579 BW/ FL = 756' ASN.
 10/92 Install larger ppg. equip. Tst: 68 BO/ 922 BW. FL = 274' ASN.
 11/93 Tag btm - 2' fill. ACDZ OH w/ 5000 gal HCl w/ 1st 5000 gal using anti-sludge additive & last 2000 gal NeFe in 5 stg. w/ 2500# GRS as block. Tag salt bridge @ 3836'. Pmp FW. RTP. Tst: 182 BO/743 BW/ 2 MCF. FL = 785' ASN.
 12/93 Install ESP. Tst 186 BO/ 1051 BW/ 7 MCF. FL = 62' above pump intake.
 7/94 GIH, tag fill / bridge @ 3829'. Left sub pump tubed w/ btm @ 3829' (?). 8/1/94 Tag @ 3834'. Hit 3' solid bridge. Sidewall buildup worse 3860-3910'. CO to 3962'. Replace subpump. Tst: B - 102 BO/ 929 BW/ 9 MF. A - 93 BO/ 729 BW/ 14 MCF. FL @ 0' ASN.
 9/95 Tag @ 3852'. Drill bridge 3852-3885'. Fell thru to 3962'. Pickle tbg., ACDZ OH w/ 5000 gal Pertol 200 (20% xylene, 80% 0.15 HCl) & 5000# 1000 mesh salt in 5 stgs. RTP. Tst: 135 BO/ 1532 BW/ 25 MCF. FL = 500' above pump. B/4 = 108 BO/ 991 BW/ 19 MCF.
 8/96 Tag @ 3872'. D/O to 3893' & CO to 3962'. Pickle tbg w/ 300 gals. ACDZ w/ 5000 gals - swb. Chemical treat. RTP.
 11/2/98 RU Weatherford foam unit, CO to 3953'. TIH w/ Baker infl. pkr, set @ 3910'. SQZD OH fr 3910' to TD w/ 150 SX Cl C + additives. 26 SX in form. Drill cmt fr 3479' to 3900'. Spot acid, swb & run sub pump. TOTP.
 2/22/99 Release pkr and lower tbg 1 jt. (TP @ 3894'). Pump 300 gals 15% NeFe & flush w/ 10 BW. RIH w/ 3-1/8 HSCG loaded w/ 3 SPF @ 120 deg phasing. Perf 3889-95, 3873-81, 3864-72, 3842-54, 3828-38, 3806-16, 3790-3800 & 3770-82. Reset RBP @ 2974'. Isolate csg leak - btm leak @ 2479'. (See NOTE at left) Swb csg & tbg down to SN @ 2593'. ACDZ OH w/ 3000 gals 15% NeFe HCl foamed to 50Q w/ CO2. Run subpump on 119 jts. 2-7/8" tbg. EOP @ 3780'.

Additional Data:

T/Queen Formation @ 3407'
 T/Penrose Formation @ 3535'
 T/Grayburg Zone 1 @ 3716'
 T/Grayburg Zone 2 @ 3758'
 T/Grayburg Zone 2A @ 3791'
 T/Grayburg Zone 3 @ 3820'
 T/Grayburg Zone 4 @ 3859'
 T/Grayburg Zone 5 @ 3912'
 T/Grayburg Zone 6 @ 3956'
 T/San Andres Formation @ 3957'
 KB @ 3582'

10-3/4" OD
 32# CSG
 Set @ 312' W/ 250 SX
 Cmt circ.? yes
 TOC @ surf. by calc.

7-5/8" OD
 26# CSG
 Set @ 1469' W/ 300 SX
 Cmt circ.? no
 TOC @ 178' by calc.

Tubing Detail: 3/1/99

KBTH: 0 00'
 119 Jts. 2-7/8" 6.5# J-55 8rd EUE tbg: 3727.05'
 2-7/8 Subw/ X/O: 4.65'
 1 156 STG RA-16 pump w/ 67.5 HP
 Motor 49 05'
 Landed @ 3780 75'

NOTE: Perf & ACDZ OH. Bad csg fr 2105-2479'. Suspected casing leak fr 2105-2479' but unable to pump into it. Circulated redbed out.

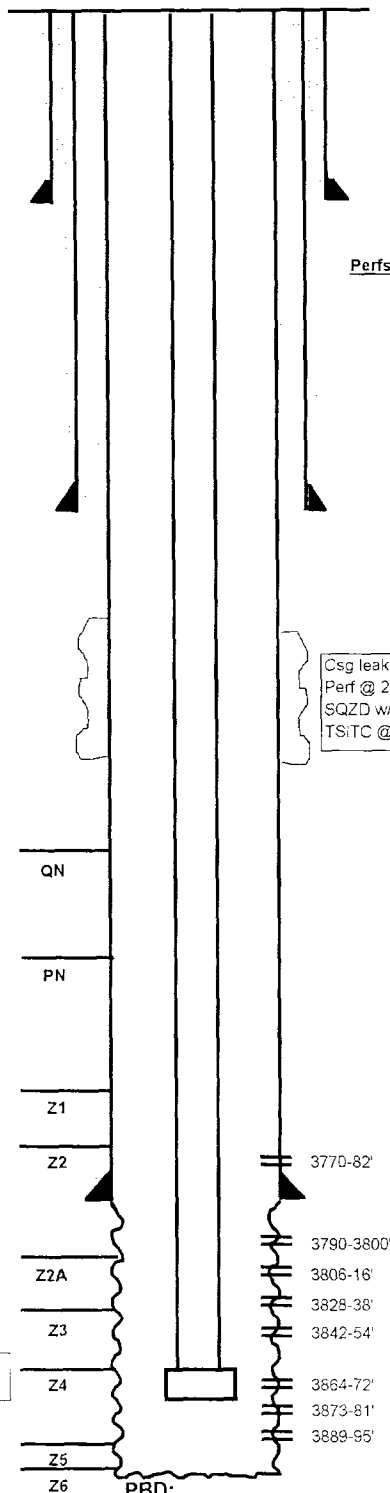
Perfs:

Csg leak @ 2035'
 Perf @ 2040' &
 SQZD w/ 500 SX.
 TS/TC @ 1475'

5-1/2" OD
 17# CSG
 Set @ 3776' W/ 300 SX
 Cmt circ.? no
 TOC @ 2040' by est.

Submersible pump
 @ 3870'

4-3/4" O-H



FILE: EMSU385WB.XLS

TD: 3962'



WELL DATA SHEET

LEASE: EMSU WELL: 387
LOC: 1980' F N L & 1980' F E L SEC: 15
TOWNSHIP: 21S CNTY: Lea
RANGE: 36E UNIT: G ST: N.M.

FORM: Grayburg / San Andres DATE: _____
GL: 3580' STATUS: Producer
KB: 3580' API NO: 30-025-04645
DF: _____ CHEVNO: FA 57860:01

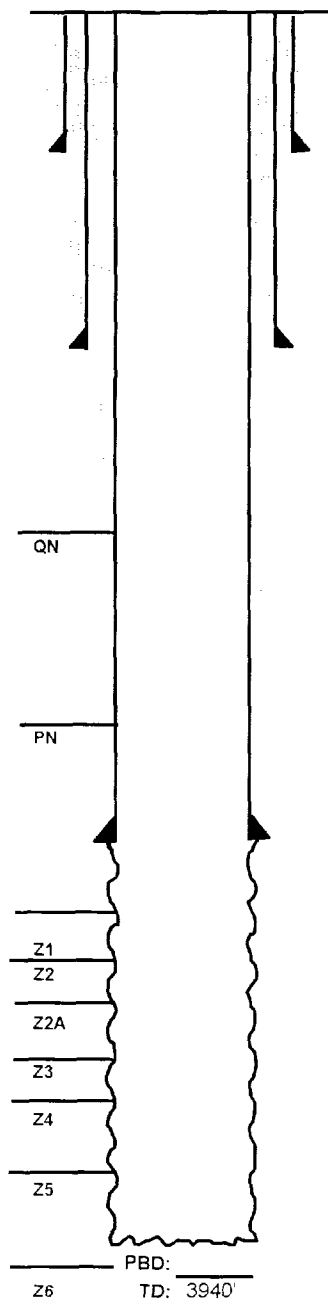
Date Completed: 12/6/36
Initial Production: F/ 1536 BOPD
Initial Formation: Grayburg
FROM: 3699' to 3880'

10-3/4" OD
CSG
Set @ 286' W/ 250 SX
Cmt circ.? Yes
TOC @ surf. by calc

7-5/8" OD
CSG
Set @ 1394' W/ 425 SX
Cmt circ.? Yes
TOC @ surf. by calc

5-1/2" OD 10rd K-55
17# CSG
Set @ 3699' W/ 425 SX
Cmt circ.? YES
TOC @ 0 by calc.

Underream open hole to 5"
3728-3940'



Completion Data

Natural.

Subsequent Workover or Reconditioning:

10/51 ACDZ w/ 1500 gals.
8/53 ACDZ w/ 1500 gals.
7/86 CO to TD. ACDZ w/ 750 gals acid.
11/86 Deepened from 3890-3940'. Log and acidized W/
5000 gals 15% NE HCL + GRS
1/87 Underream OH @ 3728'-3940' to 6". Acidized OH w/
1300 gals 15% NEFE + 1000 gal 10 # GBW + 1000# GRS
8/92 Upsize pump
9/1992 Upsize to ESP.
9/1995 Acidized w/4800 gals Pentol w rock salt for diversion

Additional Data:

T/Penrose @ 3540'
T/Grayburg Zone 1 @ 3731'
T/Grayburg Zone 2 @ 3764'
T/Grayburg Zone 3 @ 3822'
T/Grayburg Zone 4 @ 3862'
T/Grayburg Zone 5 @ 3912'

KB @ 3580'



WELL DATA SHEET

LEASE: EMSU WELL: 389
LOC: 1980' F N L & 660' F W L SEC: 14
TOWNSHIP: 21S CNTY: Lea
RANGE: 36E UNIT: E ST: N.M.
(formerly: Lockhart "B-14" #1)

FORM: Grayburg / San Andres DATE: _____
GL: 3566' STATUS: Producer
KB: 3566' API NO: 30-025-04631
DF: _____ CHEVNO: FA 57720:01

Date Completed: 6/13/36
Initial Production: F/ 1080 BOPD
Initial Formation: Grayburg
FROM: 3662' to 3870' / GOR 847

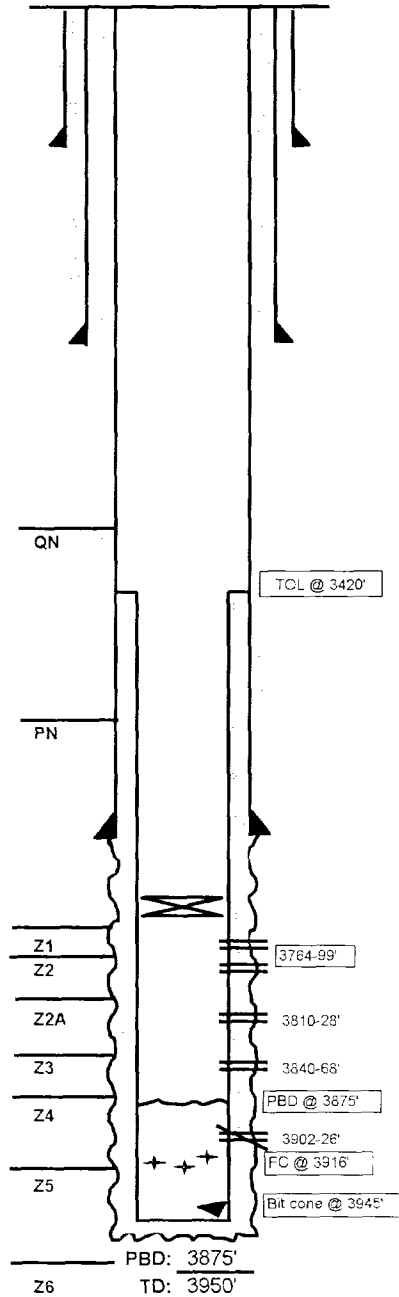
10-3/4" OD
CSG
Set @ 374' W/ 200 SX
Cmt circ.? Yes
TOC @ surf. by calc

7-5/8" OD
CSG
Set @ 2664' W/ 900 SX
Cmt circ.? Yes
TOC @ surf. by calc

Plugging Detail:
CIBP @ 3725' with 35' cmt cap

5-1/2" OD 10rd K-55
17# CSG
Set @ 3662' W/ 150 SX
Cmt circ.? No
TOC @ 1765' by calc.

4" 12.93# L80/K-55 Liner w/
RFC conn. Set @ 3950' w/
50 SX cmt.



Completion Data

Natural.

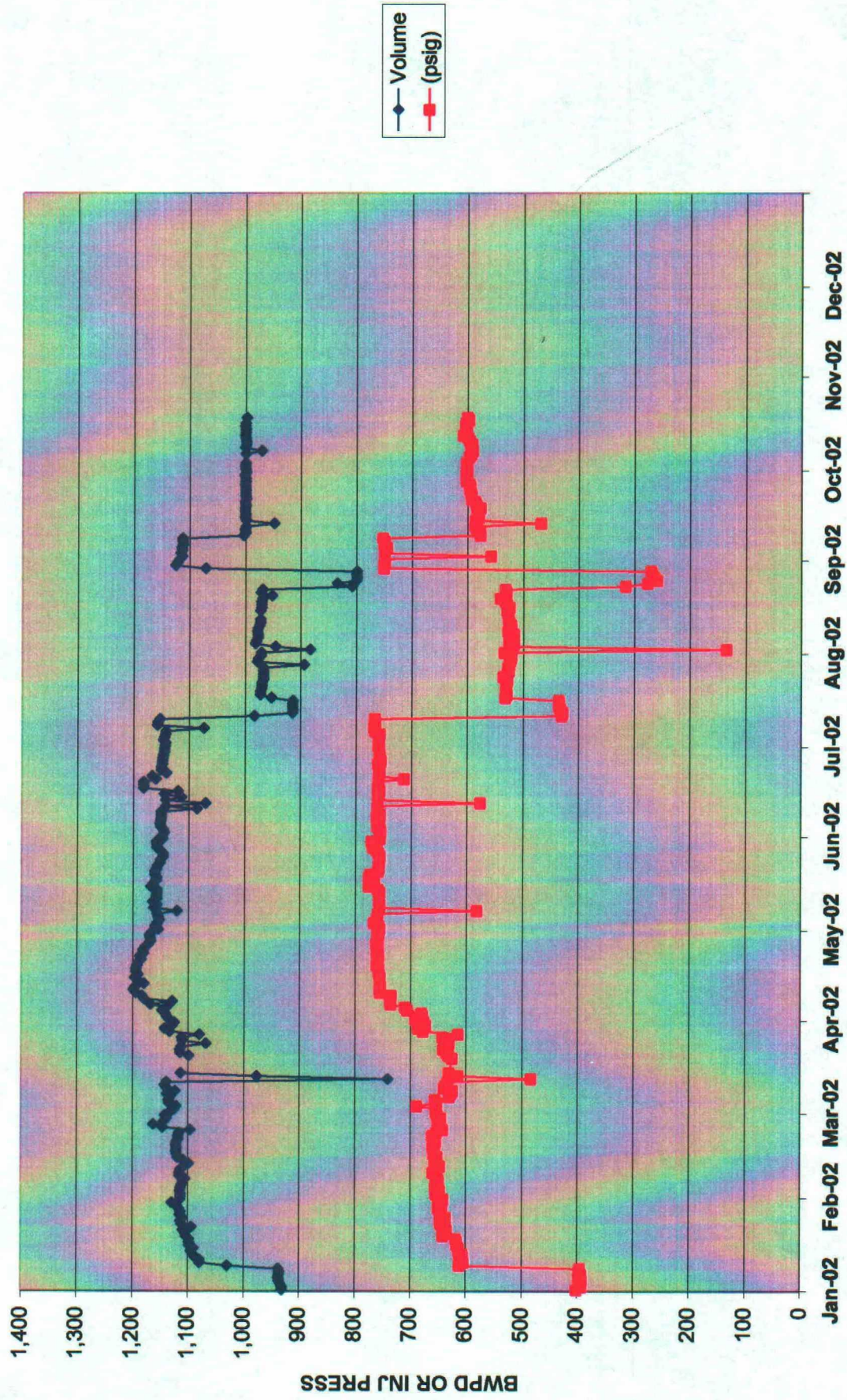
Subsequent Workover or Reconditioning:

10/7/43 ACDZ w/ 1000 gals.
10/27/43 ACDZ w/ 2000 gals.
5/28/51 ACDZ w/ 750 gals gelled acid + 3000 gals 15% HCl.
8/52 Installed pumping equipment.
3/16/54 Frac w/ 6000 gals crude and 6000# sand.
1/1/65 TA'd.
2/85 C/O to 3870'.
8/85 Installed new 7-1/16" 3M WH. C/O to 3842'. Ran CNL/GR/CCL - Spectralog. ACDZ w/ 3500 gals 15% HCl + 1000# GRS.
7/87 Deepened from 3870-3950'. Ran 4" liner f/ 3420-3950'. Drilled out to 3945' (left one cone in hole). Ran CNL/CCL/GR. Perfed 4" liner @ 3764-99, 3810-28, 3840-68 & 3902-26'. ACDZ w/ 7500 gals 15% HCl.
8/87 Production: 0 BO/ 126 BWPD. FL - 1578' F.S.
9/23/87 SQZD perfs @ 3764-3926' w/ 300 SX CL C cmt. D/O & re-perf fr 3764-99, 3810-28 and 3840-68' (1 JHPF - 81 holes). ACDZ w/ 4100 gals 15% NeFe. Run PE.
4/19/2002 TA'd well

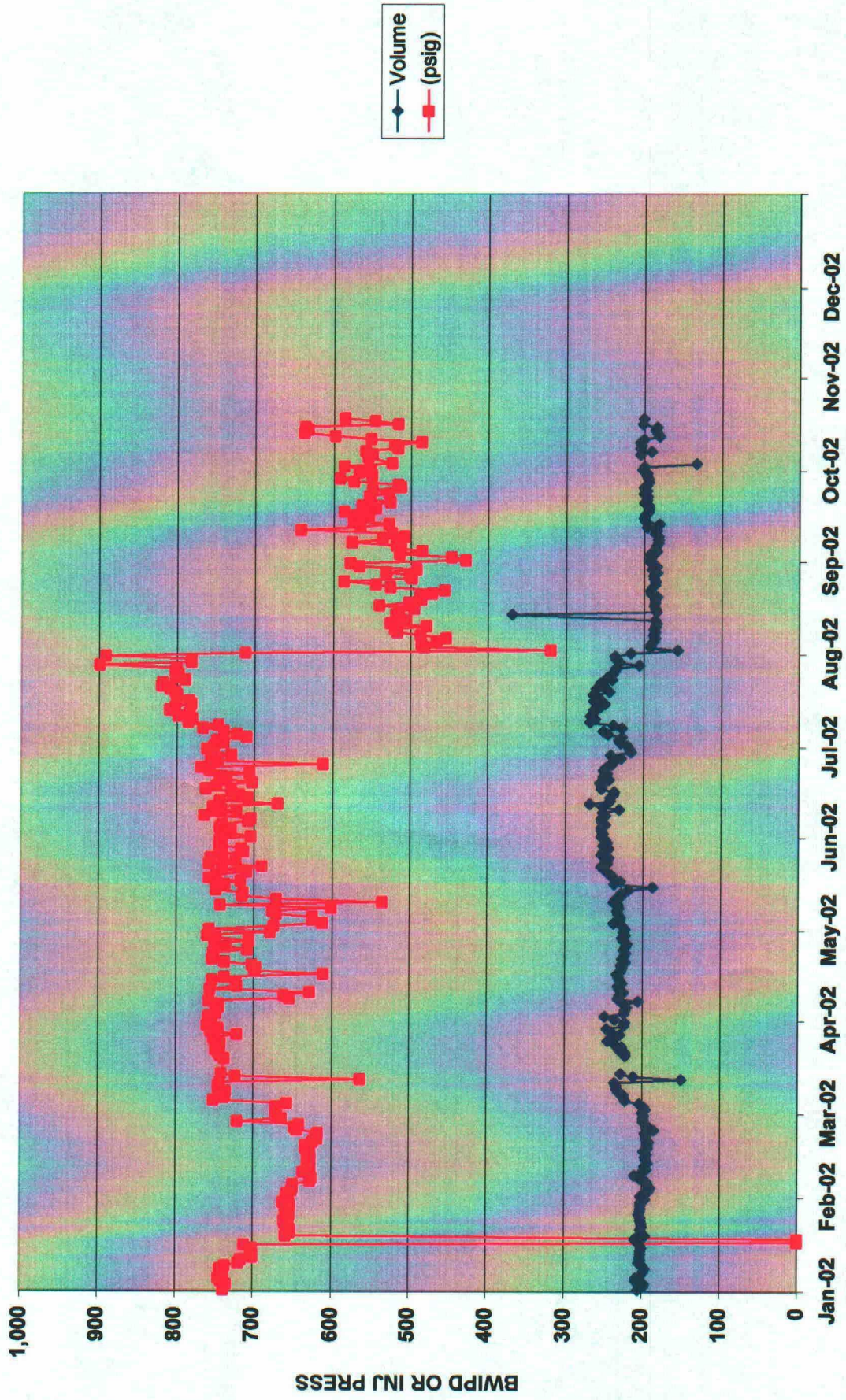
Additional Data:

T/Queen @ 3404'
T/Penrose @ 3525'
T/Grayburg Zone 1 @ 3726'
T/Grayburg Zone 2 @ 3758'
T/Grayburg Zone 2A @ 3798'
T/Grayburg Zone 3 @ 3831'
T/Grayburg Zone 4 @ 3869'
T/Grayburg Zone 5 @ 3924'
T/Grayburg Zone 6 @ 3961'
T/San Andres @ 3963'
KB @ 3566'

EMSU 344



EMSU 346



225427201

WFX

9/25/02

Chevron U.S.A. Production Company
 Kevin Hickey
 New Mexico Waterflood
 Petroleum Engineer
 15 Smith Road
 Midland, Texas 79705

ChevronTexaco

September 3, 2002

**APPLICATION FOR AUTHORIZATION
 TO INJECT - OCD FORM C-108
 EUNICE MONUMENT SOUTH UNIT
 EUNICE MONUMENT OIL POOL
 LEA COUNTY, NEW MEXICO**



State of New Mexico
 Energy and Minerals Dept.
 Oil Conservation Division
 1220 South St. Francis Drive
 Santa Fe, NM 87505

Attention: Ms. Lori Wrotenbery, Director

Ladies and Gentlemen:

Chevron U.S.A. Production Co. requests your approval of the subject application to inject water into the following Eunice Monument South Unit Wells:

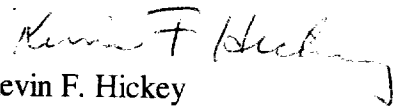
- EMSU No. 343 located in Unit M, Sec. 10, T21S-R36E, Lea County, NM ^{Some other H2O} ~~3,738~~ ^{GBS only} - 3,910
- EMSU No. 345 located in Unit O, Sec. 10, T21S-R36E, Lea County, NM ~~3,768~~ ^{GBS only} - 3,922 GBS only
- EMSU No. 347 located in Unit M, Sec. 11, T21S-R36E, Lea County, NM ~~3,777~~ - 3,935 "
- EMSU No. 357 located in Unit A, Sec. 15, T20S-R37E, Lea County, NM ~~3,703~~ - 3,942 "
- EMSU No. 359 located in Unit C, Sec. 15, T20S-R37E, Lea County, NM ~~3,755~~ - 3,954 "

Chevron plans on converting these producers to an injection as part of an ongoing infill drilling and pattern re-alignment program. These conversions will provide the much needed injection support in this area and enhance the production of the EMSU secondary recovery unit.

Attached is an OCD Form C-108 with information relative to the water injection conversion of the referenced wells. A copy of this application is being sent to applicable surface land owners and offset operators by certified mail as their notice as well as a legal notice was placed in the Hobbs Sun-Times. A copy of this application will also be sent to the OCD Hobbs District Office.

Your prompt consideration and approval of this application will be greatly appreciated. If further information is required, please contact me at (915) 687-7260.

Sincerely,

A handwritten signature in cursive script, appearing to read "Kevin F. Hickey". The signature is written in dark ink and is positioned above the printed name.

Kevin F. Hickey
Petroleum Engineer
New Mexico Waterfloods

File
Attachments

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: X Secondary Recovery Pressure Maintenance Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: ChevronTexaco Inc.
ADDRESS: 15 Smith Road Midland TX 79705
CONTACT PARTY: Kevin Hickey - Petroleum Engineer PHONE: 915-687-7260
- 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? X 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: Kevin F. Hickey TITLE: Petroleum Engineer
SIGNATURE: Kevin F. Hickey DATE: 8/22/2002
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal:

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, 1220 South St. Francis Dr., 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. 343, 345, 347, 357, and 359
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 schematic.

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 conversions are attached. Attached also are four tables. Table 1 is a list of all the wells in the area of review. Table 2 is a list of all new completions in wells that penetrated the injection interval in the area of review since the effective date of the original order (12-27-84). Table 2A is a list of all wells that are plugged and abandoned in the area of review. Detailed wellbore schematics are included for those wells in Tables 2 and 2A as part of Item VI. Finally Table 3 is a list of all wells that are in the in the shallower Eumont field. This is for information only.

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. Included are also the wells that have been plugged and abandoned since the time of the original Order.

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

All wells will be restimulated with 15% Hydrochloric HCl acid prior to injection.

ITEM X

Logging and test data have been filed with the OCD.

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. 343, 345, 347, 357, and 359
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 was mailed on . The actual newspaper ad and an affidavit of publication will be forwarded to the OCD as soon as it is obtained.

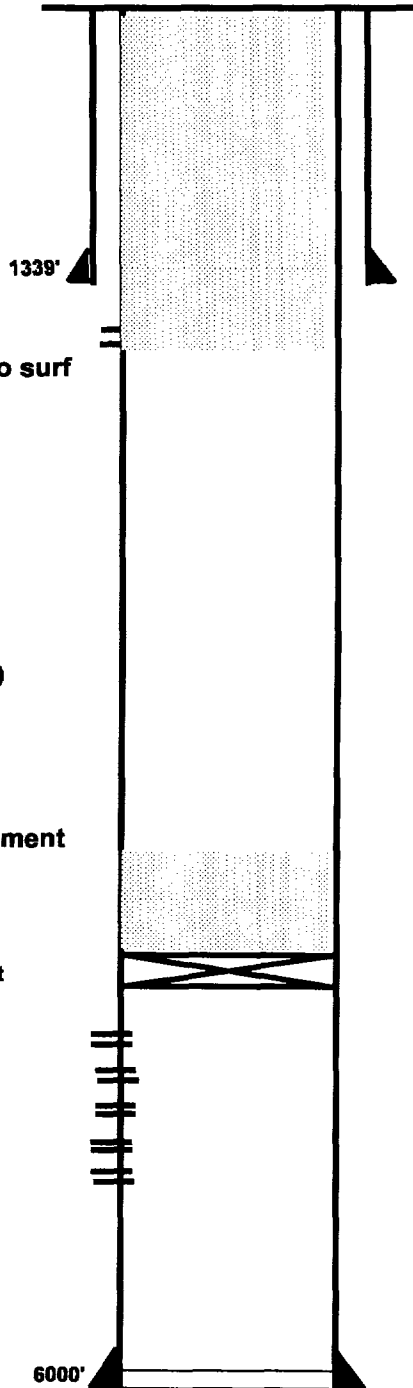
EMSU Nos. 343, 345, 347, 357, and 359
Conversion to Injection
Eunice Monument South Unit
Lea County, NM

Well No.	Max Inj. Rate (BWPD)	Avg. Inj. Rate (BWPD)	Max Inj. Press. (PSI)	Avg. Inj. Press. (PSI)	System Open	System Closed
EMSU #343	1500	750	750	650		X
EMSU #345	1500	750	750	650		X
EMSU #347	1500	750	750	650		X
EMSU #357	1500	750	750	650		X
EMSU #359	1500	750	750	650		X

CURRENT WELLBORE DIAGRAM

LEASE: State D	WELL: 13	FIELD: Oil Center	API: 30-025-20662
LOC: 990 FSL & 660 FWL	SEC: 11	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL:	CTY/ST Lea Co., NM	SPUD: 8/28/1964
CURRENT STATUS: P&A	KB: 3600'	DF:	TD DATE:

7-5/8",
Surf. Pipe set @ 1339' w/
375 SX cement
TOC @ 0' (circ)
11" HOLE



4.5" Csg.
set @ 6000' w/ 370 SX
TOC @ 2450' (Temp Sur)
6.75" HOLE

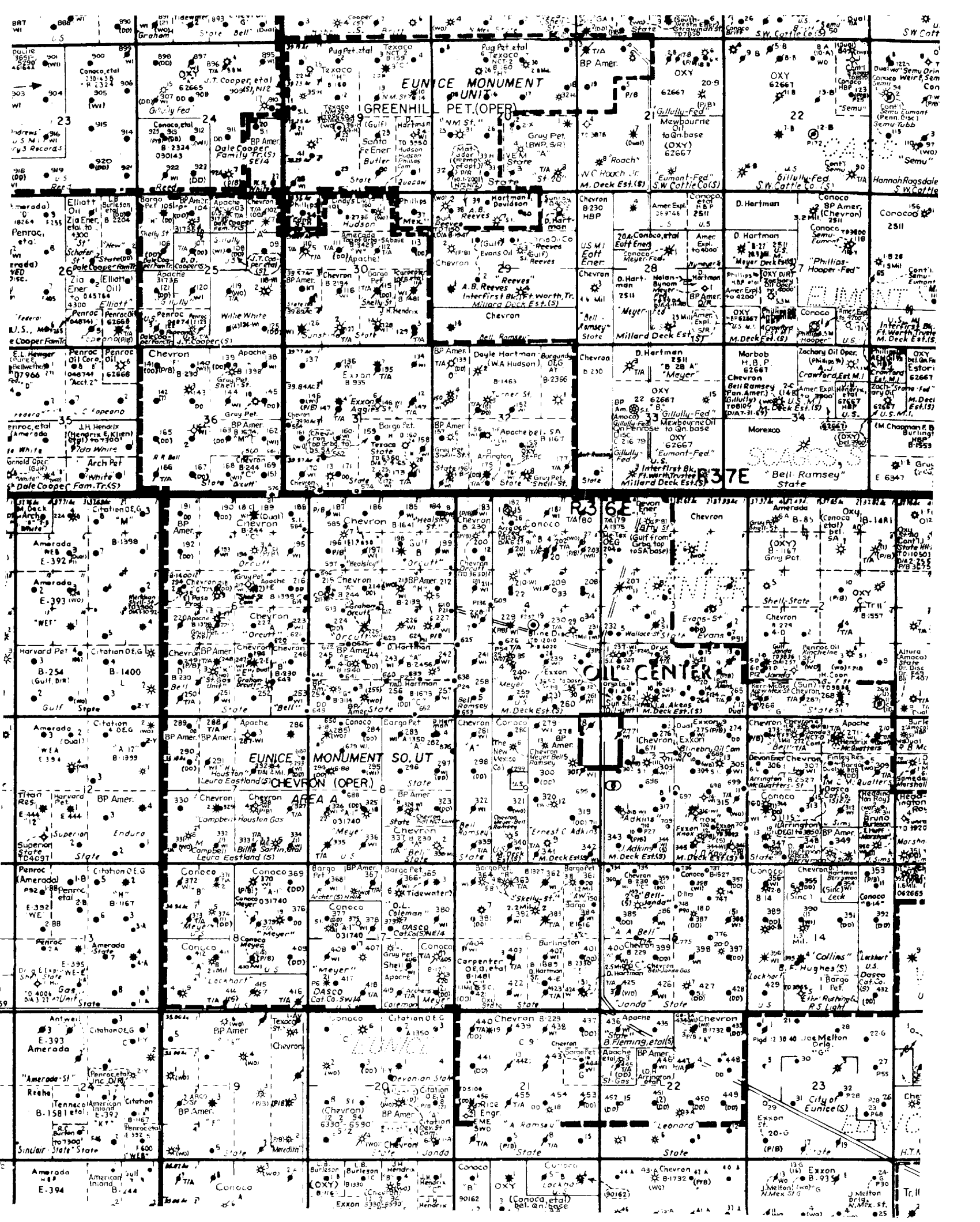
Date Completed: 09-13-1964

Initial Formation: Blinbery From: 5889' To: 5956'
Workover Data:

11/21/1990
Well P&A'd

10/28/2002

TD @ 6000'



Chevron USA

New Mexico Waterflood

EMSU proposed conversions

Area of Review

Wells penetrating injection interval

0 4,862 9,724

FEET

POSTED WELL DATA

Well Number

WELL SYMBOLS

- Location Only
- Oil Well
- ⊙ Gas Well
- ⊖ Dry Hole
- ⊕ Converted Injection Well
- ⊗ Unknown Status
- ▲ Injector Well

July 3, 2002

22 Eunice Monument South Unit



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WELL DATA SHEET

LEASE: EMSU WELL: 343 FORM: Grayburg / San Andres DATE: _____
LOC: 660' F S L & 660' F W L SEC: 10 GL: 3578' STATUS: Producer
TOWNSHIP: 21S CNTY: Lea KB: 3578' API NO: 30-025-04589
RANGE: 36E UNIT: M ST: N.M. DF: _____ CHEVNO: FA 57300.01
(formerly: EXXON A.J. Adkins #2)

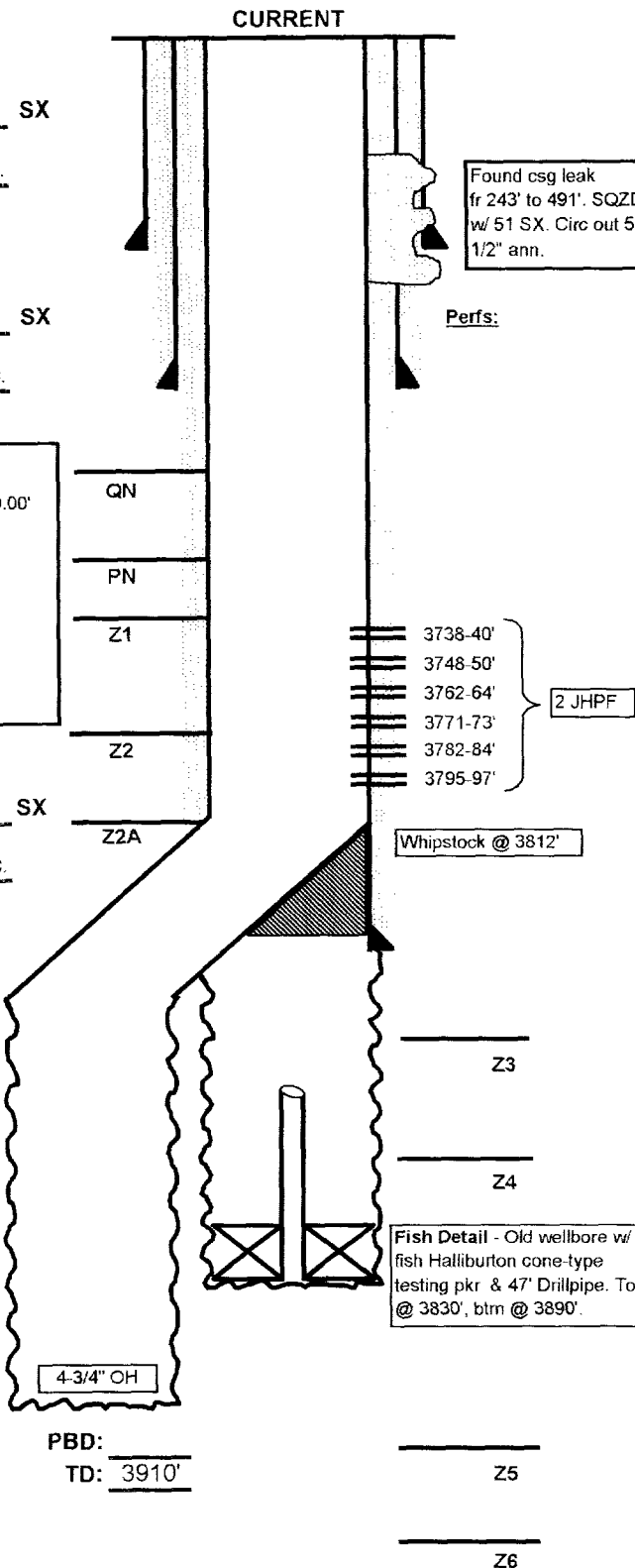
10-3/4" OD
35.75# CSG
Set @ 293' W/ 175 SX
Cmt circ.? No
TOC @ 22' by calc.
(15" hole)

7-5/8" OD
26.4# CSG
Set @ 1529' W/ 400 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(9-7/8" hole)

Tubing Detail:
Original KBTH: 0.00'
Landed @:
NONE GIVEN

5-1/2" OD
17# CSG
Set @ 3834' W/ 165 SX
Cmt circ.? No
TOC @ 2008' by calc.
(6-3/4" hole)

Sidetracked hole -
from 3812' to
3910'



Date Completed: 2/11/1936
Initial Production: 1704 BOPD / 0 BWPD
Initial Formation: Grayburg
FROM: 3834' to 3863' / GOR 538

Completion Data

Left Halliburton cone-type testing tool & 47' of drill pipe in hole. TOF @ 3830', bottom @ 3890'. Set whipstock @ 3812' & sidetracked to TD of 3910'. ACDZ OH w/ 1000 gals - swab and encountered 95% sulfur water fr TD 3910' to 3834'. PB w/ 10 SX, 15 SX & 20 SX to 3888'. Unsuccessful. Set Robinson 3-1 Rubber Pkr @ 3863' in OH to shut off water - OK. ACDZ w/ 500 gals.

Subsequent Workover or Reconditioning:

3/59 ACDZ w/ 300 gals 15% HCl.
4/87 XOWH. Tag fill @ 3794'. Mill on fish fr 3799-3806'. Ream thru window @ 3806-11'. Wash fr 3829-41'. Cut over fish pkr @ 3841-44'. Rec'd Robinson pkr. C/O to 3910'. Log w/ CNL, GR, cal, CCL. Perf 3795-97, 3738-40, 3748-50, 3762-64, 3771-73 & 3782-84' (2 JHPF). ACDZ perfs w/ 2400 gals 15% NeFeA & 38 7/8" RCNBs. Swb perfs, SFL -3500', EFL - 3655'. Rec'd tr water & dry. Wait 30 min. 1 run dry to SN. Put well on prod. Tst: 0 BO/ 132 BW/ 1 mcfg. FL - 370' ASN. B/4: 1 BO/ 94 BW/ 3 mcfg.
7/89 Chemical squeeze.
5/90 Upsized to 456 ppg unit. Tst: 14 BO/ 494 BW/ 5 mcfg. FL - not pumped off per rpt. B/4: 0 BO/ 145 BW/ 1 mcfg.
4/91 Ran prod. log - rate: 23 BO/ 597 BW/ 5 mcfg. Log indicated 23% 3873-94', 4% - 3857-73', 3% - 3839-57', 21% - 3795-97', 9% - 3768-86', 11% - 3762-64', 20% - 3748-50', 9% - 3738-40'.
10/92 Set RBP @ 3809'. Pump tst: 10 BO/ 800+ BWPD. B/4 - 25 BO/ 784 BWPD. POH w/ RBP. RIH w/ VSD ESP test. Tst: 63 BO/ 2440 BWPD. Install perm ESP. Tst 63 BO/ 2440 BWPD.

Additional Data:

T/Queen Formation @ 3390'
T/Penrose Formation @ 3514'
T/Grayburg Zone 1 @ 3713'
T/Grayburg Zone 2 @ 3753'
T/Grayburg Zone 2A @ 3788'
T/Grayburg Zone 3 @ 3821'
T/Grayburg Zone 4 @ 3855'
T/Grayburg Zone 5 @ 3905'
T/Grayburg Zone 6 @ 3950'
T/San Andres @ 3952'
KB @ 3578'



WELL DATA SHEET

LEASE: EMSU WELL: 359
LOC: 660' F N L & 1980' F W L SEC: 15
TOWNSHIP: 21S CNTY: Lea
RANGE: 36E UNIT: C ST: N.M.

FORM: Grayburg / San Andres DATE:
GL: 3579' STATUS: Producer
KB: 3579' API NO: 30-025-04651
DF: CHEVNO: FA 5792.01

Date Completed: 9/22/1936
Initial Production: 7/ 750 BOPD / 0 BWPD / GOR 9860
Initial Formation: Grayburg
FROM: 3755' to 3881'

Completion Data

ACDZ OH w/ 2000 gals acid.

Subsequent Workover or Reconditioning:

10/54 Install pumping equipment. Tst: 78 BO/ 0 BW/ 1560 GOR. B/4 - 24 BO / 2 BW.
12/70 750 gals 15% NeA dump acid job. Tst: 25 BO/ 3 BW. B/4 - 14 BO / 9 BW.
5/81 750 gals 15% NeA dump acid job. Tst: 38 BO/ 11 BW/ 65 MCF. B/4 - 23 BO / 7 BW/ 80 MCF.
12/81 Tag bottom - 11' fill. Acdz w/ 1000 gals 15% NeA. Tst: 19 BO/ 25 BW/ 106 MCF. B/4 - 6 BO / 3 BW/ 108 MCF.
9/82 1000 gals 15% NeA dump acid job. Tst: 19 BO/ 4 BW. B/4 - 10 BO / Tr wtr.
2/83 1000 gals 15% NeA dump acid. Tst 17 BO/ 3 BW B/4 - 17 BO/ 4 BW.
6/87 XO WH. CO & deepen to 3954'. Run logs. Put back on prod. Tst 1 BO/ 67 BW/ 22 MCF. FL = 121' ASN. B/4 - 10 BO/ 11 BW/ 112 MCF GPD.
7/89 Chemical squeezed.
9/90 Chemical squeezed.
7/91 Upsize pumping equip.
10/92 Upsize pumping equip. Tst: 73 BO/ 458 BW/ 7 MCF. FL @ 0' ASN.
1/93 Acdz OH w/ 3500 gals 15%. Swb 77 bbls. EFL @ 3200'. Rec 12 bbls. Tst: B - 58 BO/ 367 BW/ 9 MCF. A - 67 BO/ 535 BW / 7 MCF. FL @ 30' ASN.
4/97 Acdz w/ 5000 gals Resisol II. RIH w/ PE. TOTP.
9/8/98 RIH w/ bit, tag @ 3914'. Wash, D/O fill to 3954'. Circ clean. ACDZ OH w/ 4800 gals 15% NeFe HCl & 2000 gals VAS diverter. RIH w/ PE, TOTP.

Additional Data:

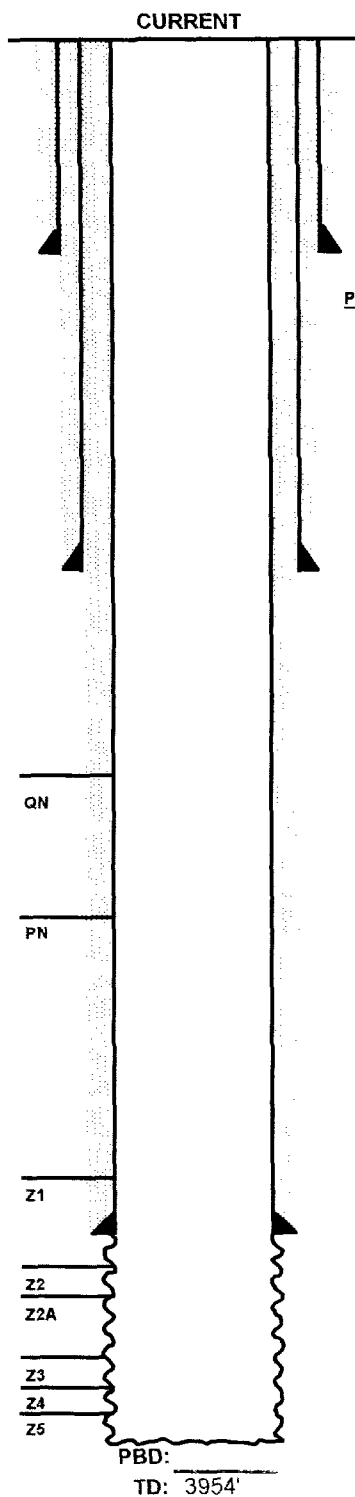
T/Queen Formation @ 3427'
T/Penrose Formation @ 3552'
T/Grayburg Zone 1 @ 3742'
T/Grayburg Zone 2 @ 3780'
T/Grayburg Zone 2A @ 3816'
T/Grayburg Zone 3 @ 3847'
T/Grayburg Zone 4 @ 3878'
T/Grayburg Zone 5 @ 3930'
T/Grayburg Zone 6 @ 3967'
T/San Andres Formation @ 3969'
KB @ 3579'

16" OD
70# CSG
Set @ 34' W/ 60 SX
Cmt circ.? yes
TOC @ surf. by calc

7-5/8" OD
22# CSG
Set @ 1408' W/ 773 SX
Cmt circ.? yes
TOC @ surf. by calc

5-1/2" OD
17# CSG
Set @ 3755' W/ 275 SX
Cmt circ.? no
TOC @ 712' by calc

FILE: EMSU359WB.XLS





WELL DATA SHEET

LEASE: EMSU WELL: 343 FORM: Grayburg / San Andres DATE: _____
LOC: 660' F S L & 660' F W L SEC: 10 GL: 3578' STATUS: Producer
TOWNSHIP: 21S CNTY: Lea KB: 3578' API NO: 30-025-04589
RANGE: 36E UNIT: M ST: N.M. DF: _____ CHEVNO: FA 57300:01
(formerly: EXXON A.J. Adkins #2)

10-3/4" OD
35.75# CSG
Set @ 293' w/ 175 SX
Cmt circ.: No
TOC @ 22' by calc.
(15" hole)

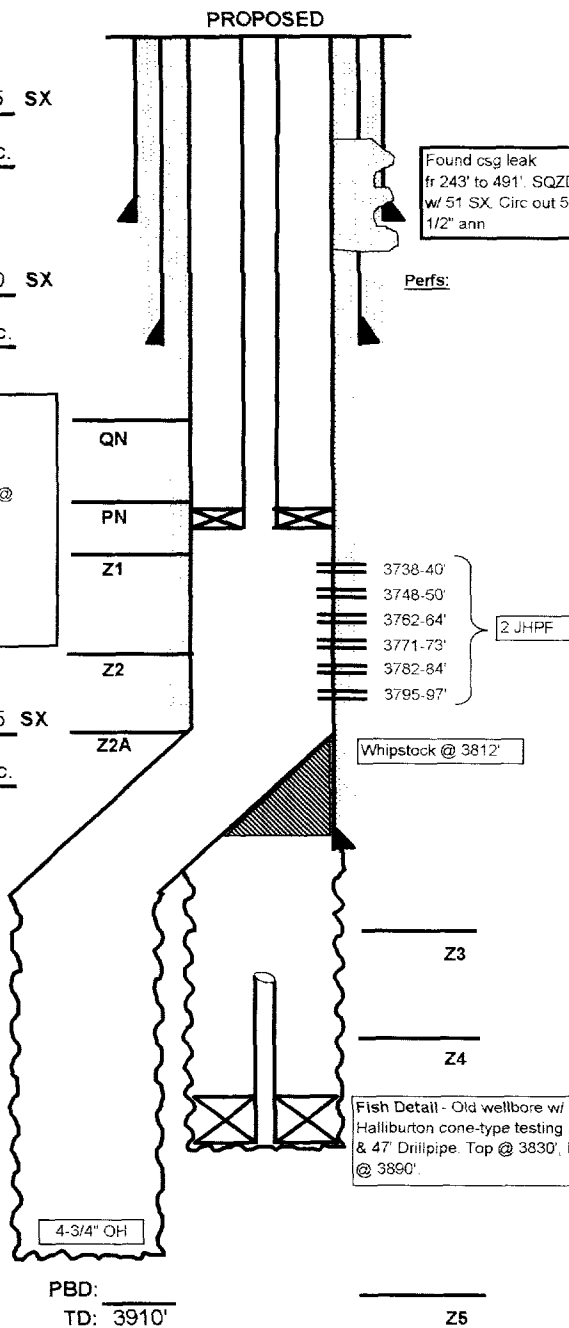
7-5/8" OD
26.4# CSG
Set @ 1529' w/ 400 SX
Cmt circ.: Yes
TOC @ surf. by calc.
(9-7/8" hole)

Tubing Detail:
2 3/8" 4.70 #/ft IPC
Landed @ 3650'

5-1/2" Weatherford 1-XS packer @
3650'

5-1/2" OD
17# CSG
Set @ 3834' w/ 165 SX
Cmt circ.: No
TOC @ 2008' by calc.
(6-3/4" hole)

Sidetracked hole -
from 3812' to
3910'



Date Completed: 2/11/1936
Initial Production: 1704 BOPD / 0 BWPD
Initial Formation: Grayburg
FROM: 3834' to 3863' / GOR 538

Completion Data

Left Halliburton cone-type testing tool & 47" of drill pipe in hole. TOF @ 3830', bottom @ 3890'. Set whipstock @ 3812' & sidetracked to TD of 3910'. ACDZ OH w/ 1000 gals - swab and encountered 95% sulfur water fr TD 3910' to 3834'. PB w/ 10 SX, 15 SX & 20 SX to 3888'. Unsuccessful. Set Robinson 3-1 Rubber Pkr @ 3863' in OH to shut off water - OK. ACDZ w/ 500 gals.

Subsequent Workover or Reconditioning:

3/59 ACDZ w/ 300 gals 15% HCl.
4/87 XOWH. Tag fill @ 3794'. Mill on fish fr 3799-3806'. Ream thru window @ 3806-11'. WASH fr 3829-41'. Cut over fish pkr @ 3841-44'. Rec'd Robinson pkr. C/O to 3910'. Log w/ CNL, GR, cal, CCL. Perf 3795-97, 3738-40, 3748-50, 3762-64, 3771-73 & 3782-84' (2 JHPF). ACDZ perfs w/ 2400 gals 15% NeFeA & 38 7/8" RCNBs. Swb perfs, SFL - 3500', EFL - 3655'. Rec'd tr water & dry. Wait 30 min. 1 run dry to SN. Put well on prod. Tst: 0 BO/ 132 BW/ 1 mcg. FL - 370' ASN. B/4: 1 BO/ 94 BW/ 3 mcg.
7/89 Chemical squeeze.
5/90 Upsized to 456 ppg unit. Tst: 14 BO/ 494 BW/ 5 mcg. FL - not pumped off per rpt. B/4: 0 BO/ 145 BW/ 1 mcg.
4/91 Ran prod. log - rate: 23 BO/ 597 BW/ 5 mcg. Log indicated 23% 3873-94', 4% - 3857-73', 3% - 3839-57', 21% - 3795-97', 9% - 3768-86', 11% - 3762-64', 20% - 3748-50', 9% - 3738-40'.
10/92 Set RBP @ 3809'. Pump tst: 10 BO/ 800+ BWPD. B/4 - 25 BO/ 784 BWPD. POH w/ RBP. RIH w/ VSD ESP test. Tst: 63 BO/ 2440 BWPD. Install perm ESP. Tst 63 BO/ 2440 BWPD.

Additional Data:

T/Queen Formation @ 3390'
T/Penrose Formation @ 3514'
T/Grayburg Zone 1 @ 3713'
T/Grayburg Zone 2 @ 3753'
T/Grayburg Zone 2A @ 3788'
T/Grayburg Zone 3 @ 3821'
T/Grayburg Zone 4 @ 3855'
T/Grayburg Zone 5 @ 3905'
T/Grayburg Zone 6 @ 3950'
T/San Andres @ 3952'
KB @ 3578'



WELL DATA SHEET

LEASE: EMSU WELL: 345
 LOC: 760' F S L & 1880' F E L SEC: 10
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: O ST: N.M.

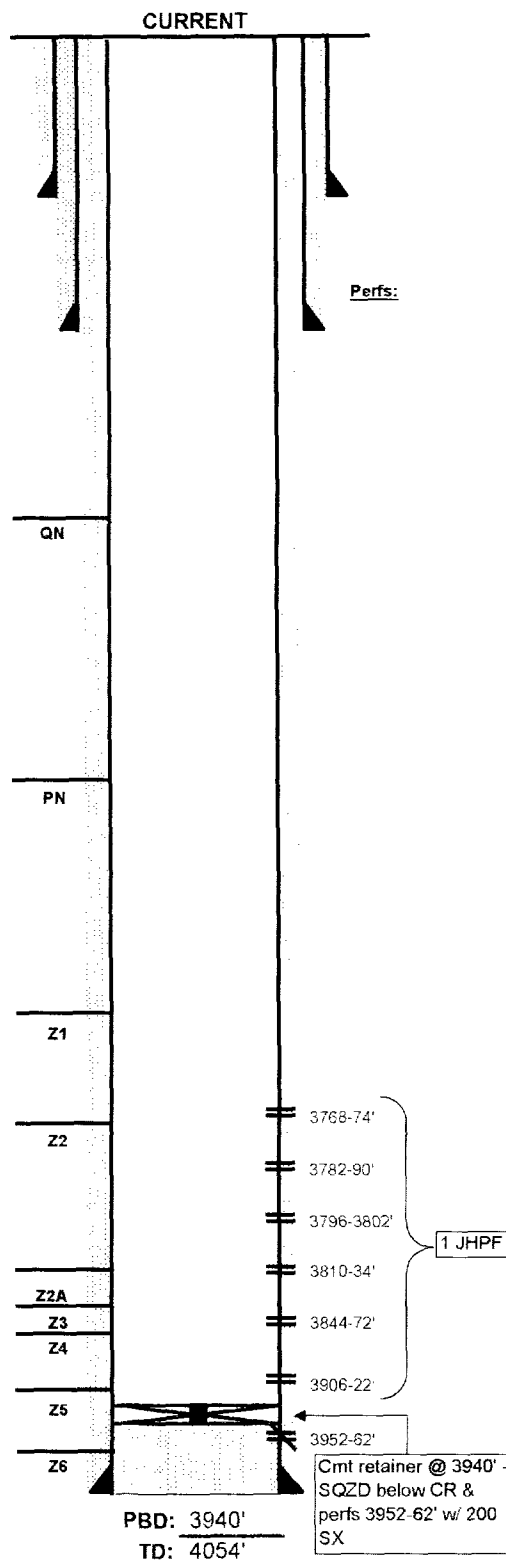
FORM: Grayburg / San Andres DATE: _____
 GL: 3567.4' STATUS: Producer
 KB: 3585' API NO: 30-025-29823
 DF: _____ CHEVNO: 1H 4143:01

Date Completed: 9/22/1987
 Initial Production: 5 BOPD / 38 BWPD
 Initial Formation: Grayburg
 FROM: 3768' to 3922' / GOR 4800

11-3/4" OD
 42 # CSG
 Set @ 370' W/ 350 SX
 Cmt circ.? yes
 TOC @ surf. by calc.
 (14-3/4" hole)

8-5/8" OD K-55 ST&C
 24 & 32 # CSG
 Set @ 2655' W/ 700 SX
 Cmt circ.? yes
 TOC @ 111' by calc.
 (11" hole)

5-1/2" OD K-55 ST&C
 15.5 & 17 # CSG
 Set @ 4054' W/ 615 SX
 Cmt circ.? yes
 TOC @ surf. by calc.



Completion Data

Perf Zone 5 fr 3952-62'. ACDZ w/ 1100 gals 15% NeFe HCl.
 SQZD w/ 200 SX. Perf 3768-74, 3782-90, 3796-3802, 3810-34,
 3844-72 & 3906-22 (1 JHPF - 88 holes). ACDZ w/ 6500 gals
 15% NeFe HCl.

Subsequent Workover or Reconditioning:

9/19/87 From 3952-62' interval: swabbed 70 BW / 0 oil in 2.5 hrs
 (5 BLW).
 9/20/87 From 3952-62' interval: swabbed 21 BW / 0 oil (FER 21
 BPH).
 4/95 Upsize pumping equipment.
 5/7/97 ACDZ perfs 3768-3922' w/ 6000 gals Resisol II+. Swb,
 IFL = 2200', EFL = 2400'. Rec'd 68 BW w/ trace oil. RIH KUDU
 pump, TOTP.

Additional Data:

T/Queen Formation @ 3413'
 T/Penrose Formation @ 3543'
 T/Grayburg Zone 1 @ 3737'
 T/Grayburg Zone 2 @ 3775'
 T/Grayburg Zone 2A @ 3810'
 T/Grayburg Zone 3 @ 3838'
 T/Grayburg Zone 4 @ 3875'
 T/Grayburg Zone 5 @ 3927'
 T/Grayburg Zone 6 @ 3971'
 T/San Andres Formation @ 3973'
 KB @ 3585'



WELL DATA SHEET

LEASE: EMSU WELL: 345
LOC: 760' F S L & 1880' F E L SEC: 10
TOWNSHIP: 21S CNTY: Lea
RANGE: 36E UNIT: O ST: N.M.

FORM: Grayburg / San Andres DATE: _____
GL: 3567.4' STATUS: Producer
KB: 3585' API NO: 30-025-29823
DF: _____ CHEVNO: TH 4143:01

Date Completed: 9/22/1987
Initial Production: 5 BOPD / 38 BWPD
Initial Formation: Grayburg
FROM: 3768' to 3922' / GOR 4800

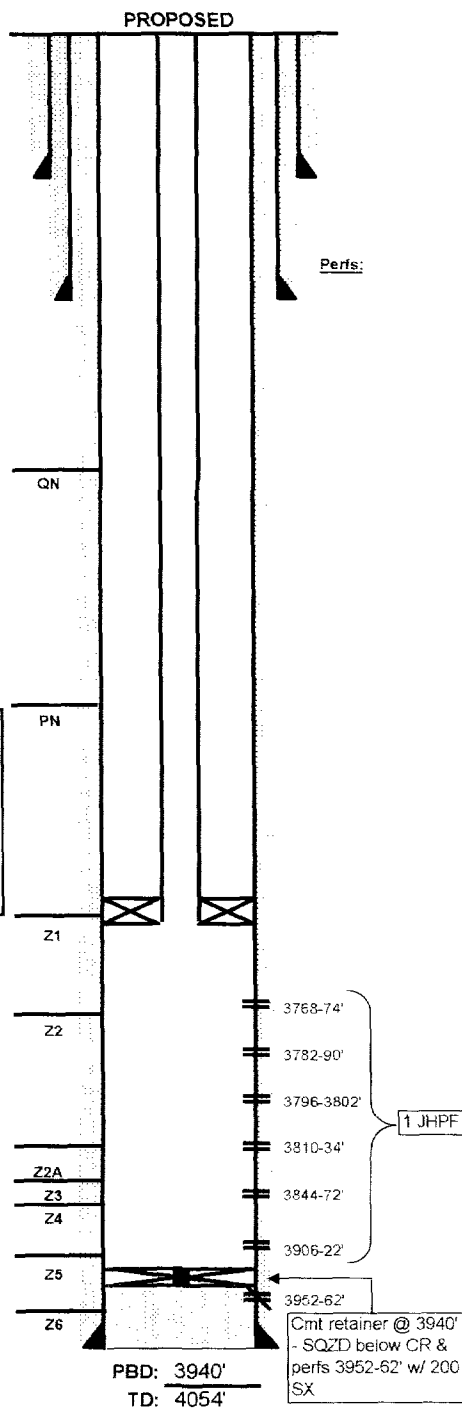
11-3/4" OD
42 # CSG
Set @ 370' W/ 350 SX
Cmt circ.? yes
TOC @ surf. by calc.
(14-3/4" hole)

8-5/8" OD K-55 ST&C
24 & 32 # CSG
Set @ 2655' W/ 700 SX
Cmt circ.? yes
TOC @ 111' by calc.
(11" hole)

Tubing Detail:

KBTH: 0.00'
2-3/8" 4 70# J-55 IPC Tbg 3700'
Weatherford I-XS Packer @ 3700'

5-1/2" OD K-55 ST&C
15.5 & 17 # CSG
Set @ 4054' W/ 615 SX
Cmt circ.? yes
TOC @ surf. by calc.



Completion Data

Perf Zone 5 fr 3952-62'. ACDZ w/ 1100 gals 15% NeFe HCl.
SQZD w/ 200 SX. Perf 3768-74, 3782-90, 3796-3802, 3810-34,
3844-72 & 3906-22 (1 JHPF - 88 holes). ACDZ w/ 6500 gals
15% NeFe HCl.

Subsequent Workover or Reconditioning:

9/19/87 From 3952-62' interval: swabbed 70 BW / 0 oil in 2.5
hrs (5 BLW).
9/20/87 From 3952-62' interval: swabbed 21 BW / 0 oil (FER 21
BPH).
4/95 Upsize pumping equipment.
5/7/97 ACDZ perfs 3768-3922' w/ 6000 gals Resisol II+. Swb,
IFL = 2200', EFL = 2400'. Rec'd 68 BW w/ trace oil. RIH KUDU
pump, TOTP.

Additional Data:

T/Queen Formation @ 3413'
T/Penrose Formation @ 3543'
T/Grayburg Zone 1 @ 3737'
T/Grayburg Zone 2 @ 3775'
T/Grayburg Zone 2A @ 3810'
T/Grayburg Zone 3 @ 3838'
T/Grayburg Zone 4 @ 3875'
T/Grayburg Zone 5 @ 3927'
T/Grayburg Zone 6 @ 3971'
T/San Andres Formation @ 3973'
KB @ 3585'



WELL DATA SHEET

LEASE: EMSU WELL: 347
LOC: 660' F S L & 660' F W L SEC: 11
TOWNSHIP: 21S CNTY: Lea
RANGE: 36E UNIT: M ST: N.M.
(formerly: H.T. Orcutt NCT-A #6)

FORM: Grayburg / San Andres DATE:
GL: 3597' STATUS: Producer
KB: 3587' API NO: 30-025-04606
DF: CHEVNO: FA 5747-01

Date Completed: 10/18/1936
Initial Production: 720 BOPD / 0 BWPD
Initial Formation: Grayburg
FROM: 3777' to 3900' / GOR 1389

Completion Data

Natural OH completion.

Subsequent Workover or Reconditioning:

11/43 ACDZ OH w/ 1000 gals. Tst 45 BO/ 162 MCFGPD. B/4 - 18 BO/ 76 MCFGPD.
3/52 ACDZ w/ 2000 gals 20% HCl. Tst: 11 BO - 8 hrs swbg. B/4 - flwd 18 BO/ 124 MCFGPD.
7/52 Install ppg. equipment. Tst: 38 BO/ 293 MCFGPD.
12/77 Tag for fill @ 3808'. ACDZ w/ 500 gals 15% NeA.
5/87 XO WH. C/O & deepend to 3935'. Log Put on prod. Tst: 5 BO/ 17 BW/ 11 MCFGPD. FL = 22' ASN. B/4 - 4 BO/ 5 BW/ 28 MCFGPD.
4/96 Tag TD @ 3935'. Pickle tbq. Pump 5000 gals Resisol II in 5 stages. Swab. RIH w/ PE. RTP.
9/2/98 TD tagged @ 3925'. Set pkr @ 3590' w/ TP @ 3758'. Pickle tbq. Pump 5000 gals 15% NeFe HCl & 2000 gal VES diverter in 5 stages. Swab. IFL - 1500, EFL - 2300' (11 runs). RIH w/ prod tbq. RTP.

Additional Data:

T/Queen Formation @ 3394'
T/Penrose Formation @ 3519'
T/Grayburg Zone 1 @ 3710'
T/Grayburg Zone 2 @ 3745'
T/Grayburg Zone 2A @ 3780'
T/Grayburg Zone 3 @ 3805'
T/Grayburg Zone 4 @ 3840'
T/Grayburg Zone 5 @ 3888'
T/Grayburg Zone 6 @ 3928'
T/San Andres Formation @ 3931'
KB @ 3587'

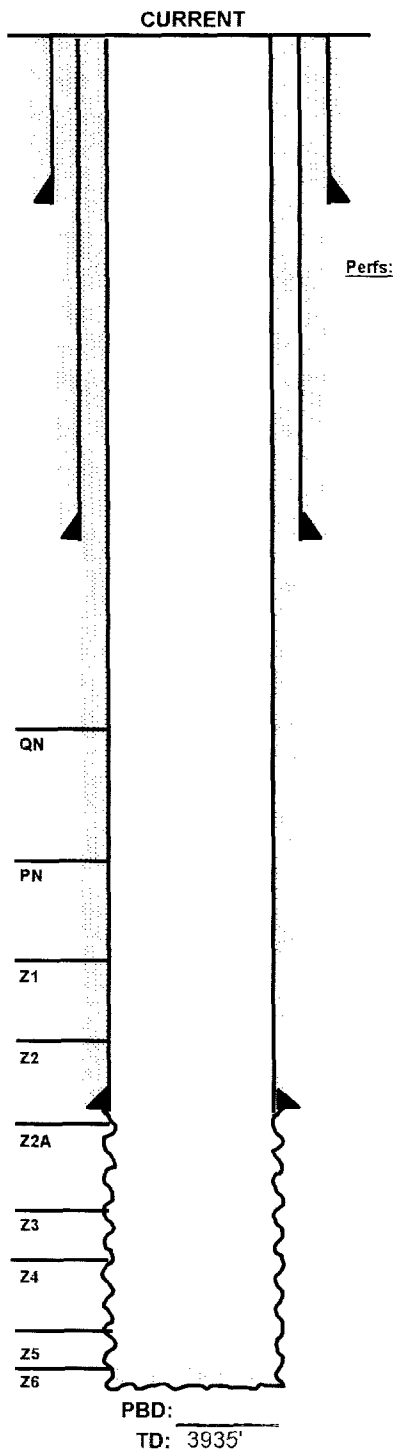
10-3/4" OD
40.5# CSG
Set @ 317' w/ 250 SX
Cmt circ.? yes
TOC @ surf. by calc.

7-5/8" OD
26.4# CSG
Set @ 1386' w/ 425 SX
Cmt circ.? Yes
TOC @ surf. by calc.

Rod Detail: 9/3/98

1-1/4" Polished Rod
2-7/8" N-97 Sub
141- 7/8" N-97 Rods
12 - 1/2" K-Bars w/ 1" X 4' Sub
w/ guides spaced betw every
third K-Bar

5-1/2" OD
17# CSG
Set @ 3777' w/ 425 SX
Cmt circ.? Yes
TOC @ surf. by calc.



FILE: EMSU347WB.XLS



WELL DATA SHEET

LEASE: EMSU WELL: 347
LOC: 660 F S L 8 660 F W L SEC: 6
TOWNSHIP: 21S CNTY: Lea
RANGE: 36E UNIT: N.M.
(formerly: H.T. Orcutt NCT-A #6)

FORM: Grayburg / San Andres DATE:
GL: 3597' STATUS: Producer
KB: 3587' API NO: 30-025-04606
DF: CHEVNO: FA 5747/01

Date Completed: 10/18/1936
Initial Production: 720 BOPD / 0 BWPD
Initial Formation: Grayburg
FROM: 3777' to 3900' / GOR 1389

Completion Data

Natural OH completion.

Subsequent Workover or Reconditioning:

11/43 ACDZ OH w/ 1000 gals. Tst 45 BO/ 162 MCFGPD. B/4 - 18 EO/ 76 MCFGPD.
3/52 ACDZ w/ 2000 gals 20% HCl. Tst: 11 BO - 8 hrs swbg.
B/4 - flwd 18 BO/ 124 MCFGPD.
7/52 Install ppg. equipment. Tst: 38 BO/ 293 MCFGPD.
12/77 Tag for fill @ 3808'. ACDZ w/ 500 gals 15% NeA.
5/87 XO WH. C/O & deepend to 3935'. Log Put on prod. Tst: 5 BO/ 17 BW/ 11 MCFGPD. FL = 22' ASN. B/4 - 4 BO/ 5 BW/ 28 MCFGPD.
4/96 Tag TD @ 3935'. Pickle tbq. Pump 5000 gals Resisol II in 5 stages. Swab. RIH w/ PE. RTP.
9/2/98 TD tagged @ 3925'. Set pkr @ 3590' w/ TP @ 3758'. Pick e tbq. Pump 5000 gals 15% NeFe HCl & 2000 gal VES diverter in 5 stages. Swab. IFL - 1500, EFL - 2300' (11 runs). RIH w/ prod tbq. RTP.

Additional Data:

T/Queen Formation @ 3394'
T/Penrose Formation @ 3519'
T/Grayburg Zone 1 @ 3710'
T/Grayburg Zone 2 @ 3745'
T/Grayburg Zone 2A @ 3780'
T/Grayburg Zone 3 @ 3805'
T/Grayburg Zone 4 @ 3840'
T/Grayburg Zone 5 @ 3888'
T/Grayburg Zone 6 @ 3928'
T/San Andres Formation @ 3931'
KB @ 3587'

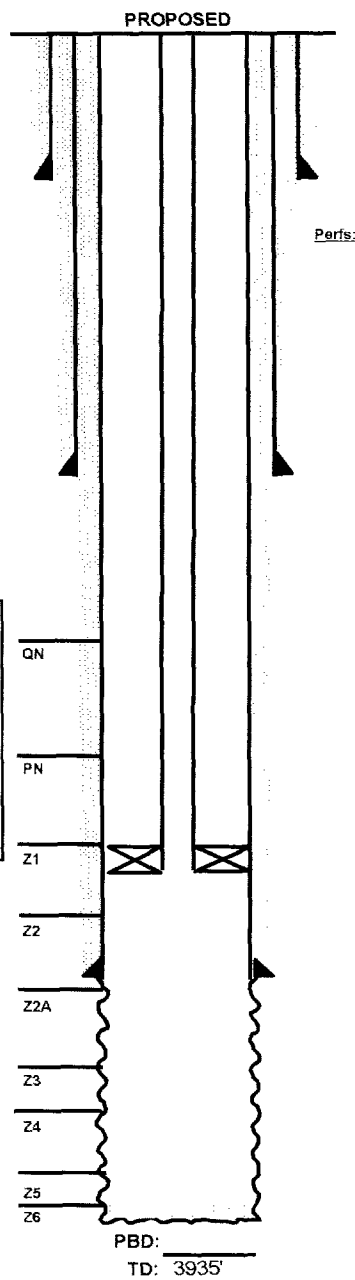
10-3/4" OD
40.5# CSG
Set @ 317' w/ 250 SX
Cmt circ.? yes
TOC @ surf. by calc.

7-5/8" OD
26.4# CSG
Set @ 1386' w/ 425 SX
Cmt circ.? Yes
TOC @ surf. by calc.

Tubing Detail:

2-3/8" 4.7# J-55 IPC tbq: 3700'
Weatherford I-XS Packer @ 3700'

5-1/2" OD
17# CSG
Set @ 3777' w/ 425 SX
Cmt circ.? Yes
TOC @ surf. by calc.





WELL DATA SHEET

LEASE: EMSU WELL: 357
LOC: 660' F N L & 660' F E L SEC: 15
TOWNSHIP: 21S CNTY: Lea
RANGE: 36E UNIT: A ST: N.M.

FORM: Grayburg / San Andres DATE:
GL: 3584' STATUS: Producer
KB: 3577' API NO: 30-025-04636
DF: CHEVNO: FA 5777:01

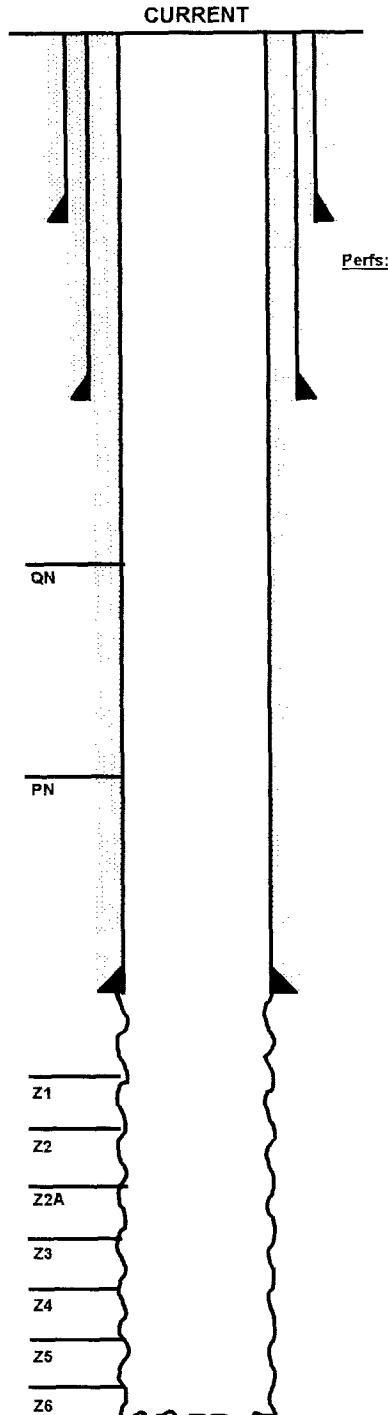
10-3/4" OD
40.5# CSG
Set @ 289' W/ 200 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(13" hole)

7-5/8" OD
26.4# CSG
Set @ 1388' W/ 425 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(9" hole)

Tubing Detail: 1/28/94
Original KBTH: 7.00'
120 Jts. 2-3/8" J-55EUE 8rd tbg: 3622.65'
5-1/2" TAC: 2.75'
8 Jts. 2-3/8" J-55 EUE 8rd tbg: 245.51'
Tubing Pump 1-3/4": 21.15'
2-3/8" Slotted Org. Peeled Mud Jt. 16.60'
Landed @: 3905.91'

5-1/2" OD
17# CSG
Set @ 3703' W/ 425 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(6-3/4" hole)

Rod Detail: 12/24/97
1 - Polished Rod
2' X 3/4" Sub
95 - 3/4" X 25' Rods
59 - 7/8" X 25' Rods
2 - 2' X 7/8" Subs
1-3/4" Plunger



Date Completed: 9/16/1936
Initial Production: F/ 1488 BOPD
Initial Formation: Grayburg
FROM: 3703' to 3875' / GOR 1452

Completion Data

Natural OH completion.

Subsequent Workover or Reconditioning:

5/46 ACDZ OH w/ 500 gals Tst: F/ 62 BO/ 384 MCFGPD.
2/52 ACDZ w/ 1500 gals 20% LT acid. Tst 45 BOPD/ B-4: 11 BOPD.
8/54 C/O well & installed ppg. unit. Tst 45 BOPD.
12/75 ACDZ w/ 1000 gals.
9/79 Dump acid 1000 gals. Tst 6 BO/ 9 BW/ 47 MCFGPD. 9/82 CO 7' of fill. SS OH w/ 700 grain prima cord. C/O to TD. ACDZ OH w/ 2535 gals 15% NeFeA in 2 stages. Scale squeezed. Test: 2 BO/ 13 BW/ 5 MCFGPD.
6/87 XO WH. C/O & deepened to 3942'. ran logs. Put on prod. Test: 4 BO/ 46 BW/ 9 MCFG. FL @ 211' ASN. B/4 - 1 BO/ 72 BW/ 6 MCFGPD.
4/91 Upsize ppg. equipment. Tst 29 BO/ 170 BW/ 14 MCFG. B/4 - 17 BO/ 144 BW/ 16 MCF.
1/94 ACDZ OH w/ 4000 gals 15%. Flush w/ 25 bbls. Swb 21 bbls acid residue. EFL - 3300'. Recover 10 bbls fluid. Test: B - 10 BO/ 167 BW/ 9 MCFG. A - 7 BO/ 254 BW/ 11 MCFG. FL - 498' ASN.
8/95 Pickle tbg w/ 250 gals. ACDZ w/ 5000 gals viscosified Pentol 200 in 5 stages.

Additional Data:

T/Queen Formation @ 3424'
T/Penrose Formation @ 3541'
T/Grayburg Zone 1 @ 3722'
T/Grayburg Zone 2 @ 3758'
T/Grayburg Zone 2A @ 3795'
T/Grayburg Zone 3 @ 3823'
T/Grayburg Zone 4 @ 3855'
T/Grayburg Zone 5 @ 3900'
T/Grayburg Zone 6 @ 3934'
T/San Andres Formation @ 3935'
KB @ 3577'

FILE: EMSU357WB.XLS



WELL DATA SHEET

LEASE: EMSU WELL: 357
LOC: 660' F N L & 660' F E L SEC: 15
TOWNSHIP: 21S CNTY: Lea
RANGE: 36E UNIT: A ST: N.M.

FORM: Grayburg / San Andres DATE: _____
GL: 3584' STATUS: Producer
KB: 3577' API NO: 30-025-04636
DF: _____ CHEVNO: FA 5777:01

Date Completed: 9/16/1936
Initial Production: F/ 1488 BOPD
Initial Formation: Grayburg
FROM: 3703' to 3875' / GOR 1452

Completion Data

Natural OH completion.

Subsequent Workover or Reconditioning:

5/46 ACDZ OH w/ 500 gals Tst: F/ 62 BO/ 384 MCFGPD.
2/52 ACDZ w/ 1500 gals 20% LT acid. Tst 45 BOPD/ B-4: 11 BOPD.
8/54 C/O well & installed ppg. unit. Tst 45 BOPD.
12/75 ACDZ w/ 1000 gals.
9/79 Dump acid 1000 gals. Tst 6 BO/ 9 BW/ 47 MCFGPD.
9/82 CO 7' of fill. SS OH w/ 700 grain prima cord. C/O to TD.
ACDZ OH w/ 2535 gals 15% NeFeA in 2 stages. Scale squeezed. Test: 2 BO/ 13 BW/ 5 MCFGPD.
6/87 XO WH. C/O & deepened to 3942'. ran logs. Put on prod. Test: 4 BO/ 46 BW/ 9 MCFG. FL @ 211' ASN. B/4 - 1 BO/ 72 BW/ 6 MCFGPD.
4/91 Upsize ppg. equipment. Tst 29 BO/ 170 BW/ 14 MCFG. B/4 - 17 BO/ 144 BW/ 16 MCF.
1/94 ACDZ OH w/ 4000 gals 15%. Flush w/ 25 bbls. Swb 21 bbls acid residue. EFL - 3300'. Recover 10 bbls fluid. Test: B - 10 BO/ 167 BW/ 9 MCFG. A - 7 BO/ 254 BW/ 11 MCFG. FL - 498' ASN.
8/95 Pickle tbq w/ 250 gals. ACDZ w/ 5000 gals viscosified Pentol 200 in 5 stages.

Additional Data:

T/Queen Formation @ 3424'
T/Penrose Formation @ 3541'
T/Grayburg Zone 1 @ 3722'
T/Grayburg Zone 2 @ 3758'
T/Grayburg Zone 2A @ 3795'
T/Grayburg Zone 3 @ 3823'
T/Grayburg Zone 4 @ 3855'
T/Grayburg Zone 5 @ 3900'
T/Grayburg Zone 6 @ 3934'
T/San Andres Formation @ 3935'
KB @ 3577'

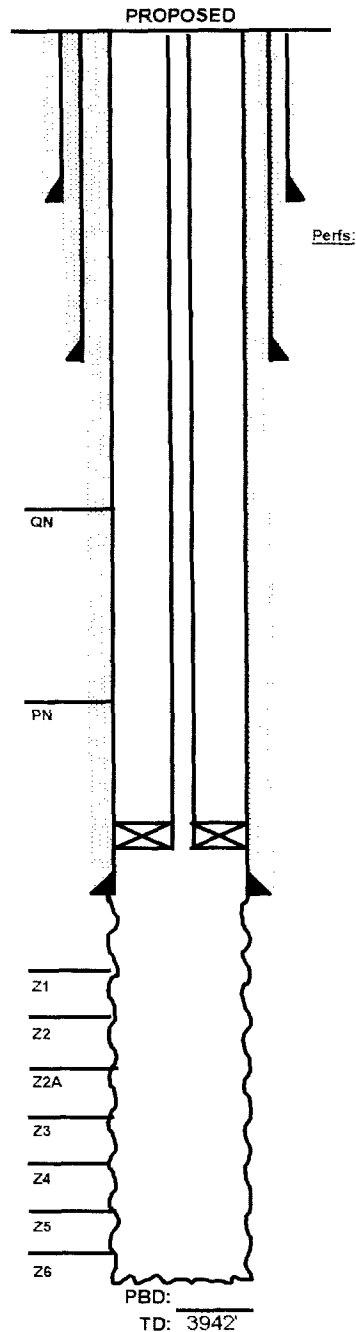
10-3/4" OD
40.5# CSG
Set @ 289' W/ 200 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(13" hole)

7-5/8" OD
26.4# CSG
Set @ 1388' W/ 425 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(9" hole)

Tubing Detail:

2-3/8" 4.7# J-55 IPC tbq: 3660'
Weatherford I-XS Packer @ 3660'

5-1/2" OD
17# CSG
Set @ 3703' W/ 425 SX
Cmt circ.? Yes
TOC @ surf. by calc.
(6-3/4" hole)





WELL DATA SHEET

LEASE: EMSU WELL: 359
LOC: 660' F N L & 1980' F W L SEC: 15
TOWNSHIP: 21S CNTY: Lea
RANGE: 36E UNIT: C ST: N.M.

FORM: Grayburg / San Andres DATE:
GL: 3579' STATUS: Producer
KB: 3579' API NO: 30-025-04651
DF: CHEVNO: FA 5792:01

Date Completed: 9/22/1936
Initial Production: 17 750 BOPD / 0 BWPD / GOR 9860
Initial Formation: Grayburg
FROM: 3755' to 3881'

Completion Data

ACDZ OH w/ 2000 gals acid.

Subsequent Workover or Reconditioning:

10/54 Install pumping equipment. Tst: 78 BO/ 0 BW/ 1560 GOR. B/4 - 24 BO / 2 BW.
12/70 750 gals 15% NeA dump acid job. Tst: 25 BO/ 3 BW. B/4 - 14 BO / 9 BW.
5/81 750 gals 15% NeA dump acid job. Tst: 38 BO/ 11 BW/ 65 MCF. B/4 - 23 BO / 7 BW/ 80 MCF.
12/81 Tag bottom - 11' fill. Acdz w/ 1000 gals 15% NeA. Tst: 19 BO/ 25 BW/ 106 MCF. B/4 - 6 BO / 3 BW/ 108 MCF.
9/82 1000 gals 15% NeA dump acid job. Tst: 19 BO/ 4 BW. B/4 - 10 BO / Tr wtr.
2/83 1000 gals 15% NeA dump acid. Tst 17 BO/ 3 BW B/4 - 17 BO/ 4 BW.
6/87 XO WH. CO & deepen to 3954'. Run logs. Put back on prod. Tst 1 BO/ 67 BW/ 22 MCF. FL = 121' ASN. B/4 - 10 BO/ 11 BW/ 112 MCF GPD.
7/89 Chemical squeezed.
9/90 Chemical squeezed.
7/91 Upsize pumping equip.
10/92 Upsize pumping equip. Tst: 73 BO/ 458 BW/ 7 MCF. FL @ 0' ASN.
1/93 Acdz OH w/ 3500 gals 15%. Swb 77 bbls. EFL @ 3200'. Rec 12 bbls. Tst: B - 58 BO/ 367 BW/ 9 MCF. A - 67 BO/ 535 BW / 7 MCF. FL @ 30' ASN.
4/97 Acdz w/ 5000 gals Resisol II. RIH w/ PE. TOTP.
9/8/98 RIH w/ bit, tag @ 3914'. Wash, D/O fill to 3954'. Circ clean. ACDZ OH w/ 4800 gals 15% NeFe HCl & 2000 gals VAS diverter. RIH w/ PE, TOTP.

Additional Data:

T/Queen Formation @ 3427'
T/Penrose Formation @ 3552'
T/Grayburg Zone 1 @ 3742'
T/Grayburg Zone 2 @ 3780'
T/Grayburg Zone 2A @ 3816'
T/Grayburg Zone 3 @ 3847'
T/Grayburg Zone 4 @ 3878'
T/Grayburg Zone 5 @ 3930'
T/Grayburg Zone 6 @ 3967'
T/San Andres Formation @ 3969'
KB @ 3579'

16" OD
70# CSG
Set @ 34' w/ 60 SX
Cmt circ.: yes
TOC @ surf. by calc

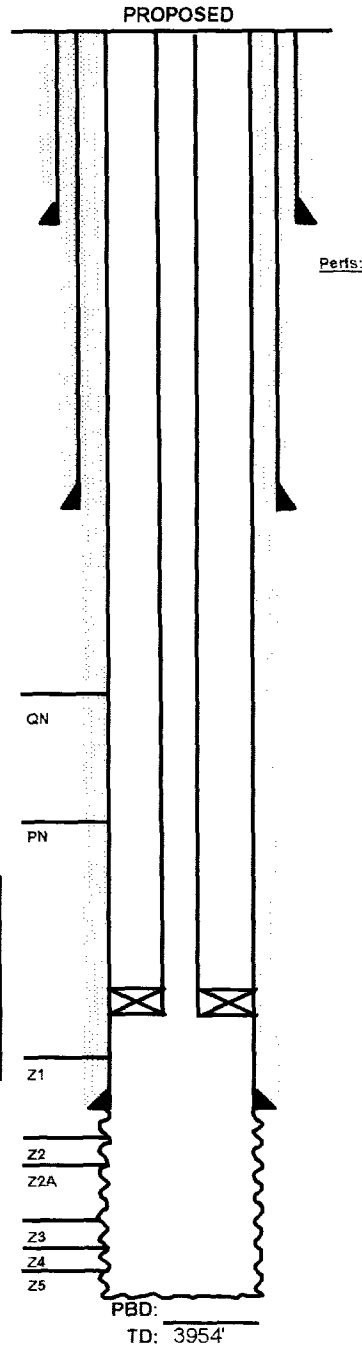
7-5/8" OD
22# CSG
Set @ 1408' w/ 773 SX
Cmt circ.: yes
TOC @ surf. by calc

Tubing Detail:

KBTH: 0.00'
2-3/8" 4.70# J-55 IPC Tbg. 3700'
Weatherford I-XS Packer @ 3700'

5-1/2" OD
17# CSG
Set @ 3755' w/ 275 SX
Cmt circ.: no
TOC @ 712' by calc

FILE: EMSU359WB.XLS



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

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		
Bicarbonate 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				
Filtrate 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

Additional 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

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.

P O BOX 1488
MONAHANS TEXAS 79758
PH 943-3234 OR 943-1040

Martin Water Laboratories, Inc.

709 W INDIANA
MIDLAND TEXAS 79701
PHONE 982-4821

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	
pH When Sampled				
pH 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 Oil				
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.

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 0
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	

ONIC STRENGTH (MOIAL) = .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.

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

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. 8397

November 7, 1984.

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

(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

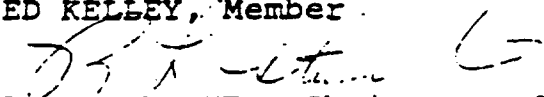
-5-
Case No. 8398
Order No. R-7766

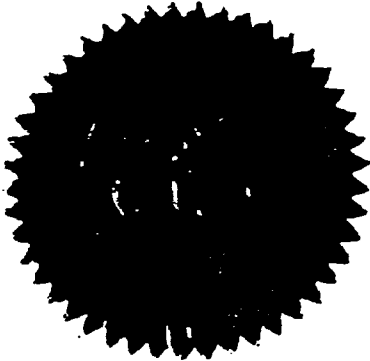
DONE at Santa Fe, New Mexico, on the day and year
hereinabove designated.

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

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	N
130	A	32	20	37	
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	

CASE NO. 8398
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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

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EXHIBIT "B"

- (1) Amoco Production Co. State "C" Tr. 11 Well No. 4 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.

CASE NO. 8398
Order No. R-7766
EXHIBIT "C"

TABLE 1
WELLS IN AREA OF REVIEW

API	Lease	Well #	Operator Name	Location	Footage	Field Name	Current Status	IP Prod Form	Driller TD	Spud Date	Comp Date
30025207020001	A J ADKINS COM	10	EXXON CORPORATION	10 21S 36E	990	FSL 990 FWL	GAS	YATES	6010	05/04/1992	06/07/1992
30025207020001	A J ADKINS COM	10	EXXON CORPORATION	10 21S 36E	990	FSL 990 FWL	GAS	YATES	6010	05/04/1992	06/07/1992
30025324420000	ADKINS EARNEST C	12	ARCO OIL & GAS CORP	9 21S 36E NW SE	2160	FSL 1650 FEL	GAS	YATES	3700	04/02/1994	05/11/1994
30025291830000	BELL R R(NCT-C) COM	5	CHEVRON U S A INC	15 21S 36E	1440	FNL 1320 FWL	GAS	YATES	3625	06/24/1985	07/14/1985
30025350820000	BERRYMAN M S	2	HARTMAN DOYLE	11 21S 36E SW SW SE	405	FSL 2295 FEL	GAS	YATES	3850	09/17/2000	10/06/2000
30025321310000	COLLINS HENRY C	6	CHEVRON U S A INC	14 21S 36E NE NW	890	FNL 1810 FWL	GAS	YATES	3750	09/23/1993	10/30/1993
30025045860000	ERNEST C ADKINS	9	ARCO OIL & GAS CORP	9 21S 36E	730	FSL 1910 FEL	GAS	YATES	3705	12/04/1953	01/03/1954
30025309220000	GRAHAM ORCUTT GAS COM	1	CHEVRON U S A INC	9 21S 36E SW SE	1175	FSL 1375 FEL	GAS	YATES	3700	02/28/1991	04/19/1991
30025045950001	JD KNOX	1	EXXON CORPORATION	10 21S 36E	1980	FSL 1980 FEL	GAS	YATES	3865	11/12/1954	11/17/1954
30025207060002	KNOX JOHN D	12	EXXON CORPORATION	10 21S 36E	990	FSL 1652 FEL	GAS	YATES	6020	10/25/1995	11/28/1995
30025304210000	LOCKHART 'B'	10	CONOCO INCORPORATED	14 21S 36E SW NW	2280	FNL 660 FWL	GAS	YATES	3680	08/01/1988	12/14/1988
30025332100000	LOCKHART 'B'	12	CONOCO INCORPORATED	14 21S 36E	860	FNL 660 FWL	GAS	YATES	3700	04/04/1996	04/30/1996
30025326860001	SKELLY 'B' STATE COM	3	TEXACO EXPL&PROD INC	16 21S 36E NE NE	660	FNL 990 FEL	GAS	YATES	3700	12/29/1997	01/28/1998
30025260180000	STATE 'D'	14	CONOCO INCORPORATED	15 21S 36E	915	FNL 990 FEL	GAS	YATES	3800	07/31/1978	09/12/1978
30025293750000	STATE 'D'	16	CONOCO INCORPORATED	11 21S 36E	2080	FSL 660 FWL	GAS	YATES	3750	01/29/1986	02/24/1986
30025327180000	STATE 'D'	18	CONOCO INCORPORATED	15 21S 36E SW NE	1780	FNL 1895 FEL	GAS	YATES	3700	11/01/1994	01/17/1995
30025330670000	STATE 'D'	20	CONOCO INCORPORATED	15 21S 36E	2180	FSL 910 FEL	GAS	YATES	3720	09/05/1995	09/28/1995
30025329970000	STATE 'D' COM	19	CONOCO INCORPORATED	11 21S 36E	990	FSL 760 FWL	GAS	YATES	3685	07/05/1995	07/26/1995
30025046050002	STATE D	1	CONOCO INCORPORATED	11 21S 36E	1980	FSL 660 FWL	GAS	YATES	4091	1801/01/01	1801/01/01
30025046080000	EMSU	313	CHEVRON U S A INC	11 21S 36E	1980	FSL 1980 FWL	EUNICE MONUMENT	GRAYBURG	3890	01/29/1937	03/05/1937
30025046050000	EMSU	314	CHEVRON U S A INC	11 21S 36E	1980	FSL 660 FWL	EUNICE MONUMENT	GRAYBURG	4091	09/20/1936	09/20/1936
30025046000000	EMSU	315	CHEVRON U S A INC	10 21S 36E	1980	FSL 660 FEL	EUNICE MONUMENT	GRAYBURG	3890	04/01/1981	04/01/1981
30025298820000	EMSU	316	CHEVRON U S A INC	10 21S 36E NW SE	1847	FSL 1885 FEL	EUNICE MONUMENT	GRAYBURG	4030	04/24/1987	05/22/1987
30025045900000	EMSU	317	CHEVRON U S A INC	10 21S 36E	1980	FSL 1980 FWL	EUNICE MONUMENT	GRAYBURG	3880	04/04/1936	05/01/1936
30025299010000	EMSU	318	CHEVRON U S A INC	10 21S 36E NW SW	1860	FSL 830 FWL	EUNICE MONUMENT	GRAYBURG	4000	05/01/1987	05/31/1987
30025045840000	EMSU	319	CHEVRON U S A INC	9 21S 36E	1650	FSL 990 FEL	EUNICE MONUMENT	GRAYBURG	3890	02/19/1957	02/22/1957
30025045830000	EMSU	342	CHEVRON U S A INC	9 21S 36E	330	FSL 330 FEL	EUNICE MONUMENT	GRAYBURG	3895	12/23/1935	02/08/1936
30025045890000	EMSU	343	CHEVRON U S A INC	10 21S 36E	660	FSL 660 FWL	EUNICE MONUMENT	GRAYBURG	3910	12/08/1935	02/11/1936
30025045920000	EMSU	344	CHEVRON U S A INC	10 21S 36E	660	FSL 1980 FWL	EUNICE MONUMENT	GRAYBURG	3960	02/22/1987	03/04/1987
30025298230000	EMSU	345	CHEVRON U S A INC	10 21S 36E SW SE	760	FSL 1880 FEL	EUNICE MONUMENT	GRAYBURG	4054	03/22/1987	10/21/1987
30025298810000	EMSU	346	CHEVRON U S A INC	10 21S 36E SE SE	659	FSL 560 FEL	EUNICE MONUMENT	GRAYBURG	4050	04/18/1987	09/01/1987
30025046060000	EMSU	347	CHEVRON U S A INC	11 21S 36E	660	FSL 660 FWL	EUNICE MONUMENT	GRAYBURG	3900	09/10/1936	10/18/1936
30025046070000	EMSU	348	CHEVRON U S A INC	11 21S 36E	660	FSL 1980 FWL	EUNICE MONUMENT	GRAYBURG	3905	09/07/1936	10/11/1936
30025298380000	EMSU	349	CHEVRON U S A INC	11 21S 36E SW SE	760	FSL 2230 FEL	EUNICE MONUMENT	GRAYBURG	4000	01/23/1987	08/10/1987
30025046360000	EMSU	355	CHEVRON U S A INC	14 21S 36E	660	FNL 1980 FWL	EUNICE MONUMENT	GRAYBURG	3883	05/06/1985	09/09/1985
30025046290000	EMSU	356	CHEVRON U S A INC	14 21S 36E	660	FNL 660 FWL	EUNICE MONUMENT	GRAYBURG	3895	06/12/1936	08/28/1936
30025046430000	EMSU	357	CHEVRON U S A INC	15 21S 36E	660	FNL 660 FEL	EUNICE MONUMENT	GRAYBURG	3875	09/27/1982	10/13/1982
30025046420000	EMSU	358	CHEVRON U S A INC	15 21S 36E	660	FNL 1980 FEL	EUNICE MONUMENT	GRAYBURG	3865	07/18/1936	08/30/1936
30025046510000	EMSU	359	CHEVRON U S A INC	15 21S 36E	660	FNL 1980 FWL	EUNICE MONUMENT	GRAYBURG	3881	08/12/1936	09/20/1936
30025046490000	EMSU	360	CHEVRON U S A INC	15 21S 36E	660	FNL 660 FWL	EUNICE MONUMENT	GRAYBURG	3885	01/24/1936	03/16/1936
30025046550000	EMSU	361	CHEVRON U S A INC	16 21S 36E	660	FNL 660 FEL	EUNICE MONUMENT	GRAYBURG	3885	11/20/1935	01/01/1936
30025046500000	EMSU	385	CHEVRON U S A INC	15 21S 36E	1980	FNL 660 FWL	EUNICE MONUMENT	GRAYBURG	3869	03/19/1936	04/20/1936
30025046520000	EMSU	386	CHEVRON U S A INC	15 21S 36E	1980	FNL 1980 FWL	EUNICE MONUMENT	GRAYBURG	3875	02/09/1937	02/09/1937
30025046450000	EMSU	387	CHEVRON U S A INC	15 21S 36E	1980	FNL 1980 FEL	EUNICE MONUMENT	GRAYBURG	3880	11/01/1936	12/06/1936

TABLE 1
WELLS IN AREA OF REVIEW

30025046410000	EMSU	388	CHEVRON U S A INC	15 21S 36E	1980	FNL 660	FEL	EUNICE MONUMENT	W-INJ	GRAYBURG	4000	03/06/1987	03/06/1987
30025046310000	EMSU	389	CHEVRON U S A INC	14 21S 36E	1980	FNL 660	FWL	EUNICE MONUMENT	TA	GRAYBURG	3950	06/30/1987	10/13/1988
30025046460000	EMSU	397	CHEVRON U S A INC	15 21S 36E	1980	FSL 660	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3865	11/03/1936	12/03/1936
30025296210000	EMSU	461	CHEVRON U S A INC	9 21S 36E NE SE	1540	FSL 1305	FEL	EUNICE MONUMENT	P&A	GRAYBURG	5000	05/24/1986	10/16/1986
30025351620000	EMSU	695	CHEVRON U S A INC	9 21S 36E NE NE SE	2440	FSL 200	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3930	10/12/2000	11/20/2000
30025341370000	EMSU	696	CHEVRON U S A INC	10 21S 36E	2523	FNL 1456	FWL	EUNICE MONUMENT	TA	GRAYBURG	3910	12/02/1997	09/03/1998
30025351630000	EMSU	697	CHEVRON U S A INC	10 21S 36E NW NW SE	2517	FSL 2550	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3942	10/20/2000	11/23/2000
30025348470000	EMSU	698	CHEVRON U S A INC	10 21S 36E NE NW SE	2285	FSL 1280	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3925	04/01/2000	07/10/2000
30025342150000	EMSU	699	CHEVRON U S A INC	10 21S 36E SE NE	2562	FNL 100	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3893	02/23/1998	05/25/1998
30025351640000	EMSU	707	CHEVRON U S A INC	10 21S 36E NE SE SE	1310	FSL 20	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3920	10/27/2000	12/10/2000
30025348480000	EMSU	708	CHEVRON U S A INC	10 21S 36E SW NE SE	1330	FSL 1220	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3920	02/19/2000	04/14/2000
30025348490000	EMSU	709	CHEVRON U S A INC	10 21S 36E SE NE SW	1330	FSL 2421	FWL	EUNICE MONUMENT	OIL	GRAYBURG	3930	03/08/2000	06/29/2000
30025348250000	EMSU	710	CHEVRON U S A INC	10 21S 36E NW SE SW	1170	FSL 1425	FWL	EUNICE MONUMENT	TA	GRAYBURG	3931	01/25/2000	04/20/2000
30025348500000	EMSU	711	CHEVRON U S A INC	9 21S 36E NE SE SE	1320	FSL 200	FWL	EUNICE MONUMENT	OIL	GRAYBURG	3940	04/11/2000	07/05/2000
30025348510000	EMSU	734	CHEVRON U S A INC	15 21S 36E NW NW NW	225	FNL 300	FWL	EUNICE MONUMENT	OIL	GRAYBURG	3940	03/23/2000	05/28/2000
30025348260000	EMSU	735	CHEVRON U S A INC	15 21S 36E NE NW NW	275	FNL 1220	FWL	EUNICE MONUMENT	OIL	GRAYBURG	3925	02/04/2000	07/03/2000
30025348520000	EMSU	736	CHEVRON U S A INC	15 21S 36E NW NW NE	208	FNL 2490	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3925	03/15/2000	07/06/2000
30025348530000	EMSU	737	CHEVRON U S A INC	15 21S 36E NE NW NE	210	FNL 1420	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3914	02/29/2000	07/09/2000
30025351650000	EMSU	738	CHEVRON U S A INC	10 21S 36E SE SE SE	240	FSL 100	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3930	11/04/2000	02/28/2001
30025354580000	EMSU	739	CHEVRON U S A INC	11 21S 36E SW SE SW	235	FSL 1400	FWL	EUNICE MONUMENT	OIL	GRAYBURG	3910	05/15/2001	07/30/2001
30025351670000	EMSU	747	CHEVRON U S A INC	15 21S 36E SW NE NE	1200	FNL 1310	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3946	11/15/2000	02/24/2001
30025346410000	EMSU	748	CHEVRON U S A INC	15 21S 36E SW NE	1510	FNL 2543	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3950	07/02/1999	08/31/1999
30025354600000	EMSU	749	CHEVRON U S A INC	15 21S 36E NE NW	1205	FNL 1330	FWL	EUNICE MONUMENT	OIL	GRAYBURG	3951	06/23/1999	08/29/1999
30025351680000	EMSU	750	CHEVRON U S A INC	16 21S 36E NE SE NE	1420	FNL 200	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3950	11/30/2000	01/30/2001
30025351660000	EMSU	774	CHEVRON U S A INC	15 21S 36E SW SE NW	2630	FNL 1330	FWL	EUNICE MONUMENT	OIL	GRAYBURG	4008	10/03/2000	11/10/2000
30025354590000	EMSU	775	CHEVRON U S A INC	15 21S 36E NW NW SE	2630	FSL 2558	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3950	04/28/2001	07/10/2001
30025354600000	EMSU	776	CHEVRON U S A INC	15 21S 36E SW SE NE	2610	FNL 1310	FEL	EUNICE MONUMENT	OIL	GRAYBURG	3960	05/07/2001	06/30/2001
30025045960000	KNOX JOHN D	2	EXXON CORPORATION	10 21S 36E	660	FSL 1980	FEL	EUNICE MONUMENT	P&A	GRAYBURG	3852	06/07/1936	07/01/1936
30025045990000	KNOX JOHN D	5	EXXON CORPORATION	10 21S 36E	660	FSL 660	FEL	EUNICE MONUMENT	TA	GRAYBURG	3885	09/06/1936	09/27/1936
30025207000000	AJ ADKINS	8	EXXON CORPORATION	10 21S 36E	2310	FSL 2260	FWL	OIL CENTER	OIL	BLINEBRY	6050	06/27/1964	08/13/1964
30025203060000	KNOX JOHN D	11	EXXON CORPORATION	10 21S 36E	2310	FSL 330	FEL	OIL CENTER	OIL	BLINEBRY	6225	11/23/1963	02/10/1964
30025337780000	KNOX JOHN D	WI-14	EXXON CORPORATION	10 21S 36E	2337	FSL 1543	FEL	OIL CENTER	W-INJ	BLINEBRY	6220	01/01/1998	04/30/1999
30025206620000	STATE 'D'	13	CONOCO INCORPORATED	11 21S 36E	990	FSL 660	FWL	OIL CENTER	OIL	BLINEBRY	6000	08/28/1964	11/06/1964
30025270160000	STATE 'D'	15	CONOCO INCORPORATED	11 21S 36E	2310	FSL 2310	FWL	OIL CENTER	OIL	BLINEBRY	7120	04/30/1981	09/22/1981

TABLE 2
NEW COMPLETIONS IN AREA OF REVIEW

API	Lease Name	Well #	Operator Name	Location	Footage	FSL	1885	FEL	Field Name	Current Status	Driller TD	Comp Date
30025298820000	EUNICE MONUMENT SOUTH UNIT	316	CHEVRON U S A INC	10 21S 36E NW SE	1847	FSL	1885	FEL	EUNICE MONUMENT	W-INJ	4030	05/22/1987
30025299010000	EUNICE MONUMENT SOUTH UNIT	318	CHEVRON U S A INC	10 21S 36E NW SW	1860	FSL	830	FWL	EUNICE MONUMENT	W-INJ	4000	05/31/1987
30025298230000	EUNICE MONUMENT SOUTH UNIT	345	CHEVRON U S A INC	10 21S 36E SW SE	760	FSL	1880	FEL	EUNICE MONUMENT	OIL	4054	10/21/1987
30025298810000	EUNICE MONUMENT SOUTH UNIT	346	CHEVRON U S A INC	10 21S 36E SE SE	659	FSL	560	FEL	EUNICE MONUMENT	W-INJ	4050	09/01/1987
30025298380000	EUNICE MONUMENT SOUTH UNIT	349	CHEVRON U S A INC	11 21S 36E SW SE	760	FSL	2230	FEL	EUNICE MONUMENT	TA	4000	08/10/1987
30025296210000	EUNICE MONUMENT SOUTH UNIT	461	CHEVRON U S A INC	9 21S 36E NE SE	1540	FSL	1305	FEL	EUNICE MONUMENT	P&A	5000	10/16/1986
30025351620000	EUNICE MONUMENT SOUTH UNIT	695	CHEVRON U S A INC	9 21S 36E NE NE SE	2440	FSL	200	FEL	EUNICE MONUMENT	OIL	3930	11/20/2000
30025341370000	EUNICE MONUMENT SOUTH UNIT	696	CHEVRON U S A INC	10 21S 36E	2523	FNL	1456	FWL	EUNICE MONUMENT	TA	3910	09/03/1998
30025351630000	EUNICE MONUMENT SOUTH UNIT	697	CHEVRON U S A INC	10 21S 36E NW NW SE	2517	FSL	2550	FEL	EUNICE MONUMENT	OIL	3942	11/23/2000
30025348470000	EUNICE MONUMENT SOUTH UNIT	698	CHEVRON U S A INC	10 21S 36E NE NW SE	2285	FSL	1280	FEL	EUNICE MONUMENT	OIL	3925	07/10/2000
30025342150000	EUNICE MONUMENT SOUTH UNIT	699	CHEVRON U S A INC	10 21S 36E SE NE	2562	FNL	100	FEL	EUNICE MONUMENT	OIL	3893	05/25/1998
30025351640000	EUNICE MONUMENT SOUTH UNIT	707	CHEVRON U S A INC	10 21S 36E NE SE SE	1310	FSL	20	FEL	EUNICE MONUMENT	OIL	3920	12/10/2000
30025348480000	EUNICE MONUMENT SOUTH UNIT	708	CHEVRON U S A INC	10 21S 36E SW NE SE	1330	FSL	1220	FEL	EUNICE MONUMENT	OIL	3920	04/14/2000
30025348490000	EUNICE MONUMENT SOUTH UNIT	709	CHEVRON U S A INC	10 21S 36E SE NE SW	1330	FSL	2421	FWL	EUNICE MONUMENT	OIL	3930	06/29/2000
30025348250000	EUNICE MONUMENT SOUTH UNIT	710	CHEVRON U S A INC	10 21S 36E NW SE SW	1170	FSL	1425	FWL	EUNICE MONUMENT	OIL	3931	04/20/2000
30025348500000	EUNICE MONUMENT SOUTH UNIT	711	CHEVRON U S A INC	9 21S 36E NE SE SE	1320	FSL	200	FEL	EUNICE MONUMENT	OIL	3940	07/05/2000
30025348510000	EUNICE MONUMENT SOUTH UNIT	734	CHEVRON U S A INC	15 21S 36E NW NW NW	225	FNL	300	FWL	EUNICE MONUMENT	OIL	3940	05/28/2000
30025348260000	EUNICE MONUMENT SOUTH UNIT	735	CHEVRON U S A INC	15 21S 36E NE NW NW	275	FNL	1220	FWL	EUNICE MONUMENT	OIL	3925	07/03/2000
30025348520000	EUNICE MONUMENT SOUTH UNIT	736	CHEVRON U S A INC	15 21S 36E NW NW NE	208	FNL	2490	FEL	EUNICE MONUMENT	OIL	3925	07/06/2000
30025348530000	EUNICE MONUMENT SOUTH UNIT	737	CHEVRON U S A INC	15 21S 36E NE NW NE	210	FNL	1420	FEL	EUNICE MONUMENT	OIL	3914	07/09/2000
30025351650000	EUNICE MONUMENT SOUTH UNIT	738	CHEVRON U S A INC	10 21S 36E SE SE SE	240	FSL	100	FEL	EUNICE MONUMENT	OIL	3930	02/28/2001
30025354580000	EUNICE MONUMENT SOUTH UNIT	739	CHEVRON U S A INC	11 21S 36E SW SE SW	235	FSL	1400	FWL	EUNICE MONUMENT	OIL	3910	07/30/2001
30025351670000	EUNICE MONUMENT SOUTH UNIT	747	CHEVRON U S A INC	15 21S 36E SW NE NE	1200	FNL	1310	FEL	EUNICE MONUMENT	OIL	3946	02/24/2001
30025346320000	EUNICE MONUMENT SOUTH UNIT	748	CHEVRON U S A INC	15 21S 36E SW NE	1510	FNL	2543	FEL	EUNICE MONUMENT	OIL	3950	08/31/1999
30025346410000	EUNICE MONUMENT SOUTH UNIT	749	CHEVRON U S A INC	15 21S 36E NE NW	1205	FNL	1330	FWL	EUNICE MONUMENT	OIL	3951	08/29/1999
30025351680000	EUNICE MONUMENT SOUTH UNIT	750	CHEVRON U S A INC	16 21S 36E NE SE NE	1420	FNL	200	FWL	EUNICE MONUMENT	OIL	3950	01/30/2001
30025351660000	EUNICE MONUMENT SOUTH UNIT	774	CHEVRON U S A INC	15 21S 36E SW SE NW	2630	FNL	1330	FWL	EUNICE MONUMENT	OIL	4008	11/10/2000
30025354590000	EUNICE MONUMENT SOUTH UNIT	775	CHEVRON U S A INC	15 21S 36E NW NW SE	2630	FSL	2558	FEL	EUNICE MONUMENT	OIL	3950	07/10/2001
30025354600000	EUNICE MONUMENT SOUTH UNIT	776	CHEVRON U S A INC	15 21S 36E SW SE NE	2610	FNL	1310	FEL	EUNICE MONUMENT	OIL	3960	06/30/2001
30025337780000	KNOX JOHN D	WI-14	EXXON CORPORATION	10 21S 36E	2337	FSL	1543	FEL	OIL CENTER	W-INJ	6220	04/30/1999
30025207060002	KNOX JOHN D	12	EXXON CORPORATION	10 21S 36E	990	FSL	1652	FEL	EUMONT	GAS	6020	11/28/1995
30025207020001	A J ADKINS COM	10	EXXON CORPORATION	10 21S 36E	990	FSL	990	FWL	EUMONT	GAS	6010	06/07/1992

TABLE 2A
ABANDONED WELLS IN AREA OF REVIEW

API	Lease Name	Well #	Operator Name	Location	Footage	FSL	1305	FEL	Field Name	Current Status	Driller TD	Comp Date
30025296210000	EMSU	461	CHEVRON U S A INC	9 21S 36E NE SE	1540	FSL	1305	FEL	EUNICE MONUMENT	P&A	5000	10/16/1986
30025045960000	KNOX JOHN D	2	EXXON CORPORATION	10 21S 36E	660	FSL	1980	FEL	EUNICE MONUMENT	P&A	3852	07/01/1936
30025045990000	KNOX JOHN D	5	EXXON CORPORATION	10 21S 36E	660	FSL	660	FEL	EUNICE MONUMENT	TA	3885	09/27/1936

TABLE 3
EUMONT WELLS IN AREA

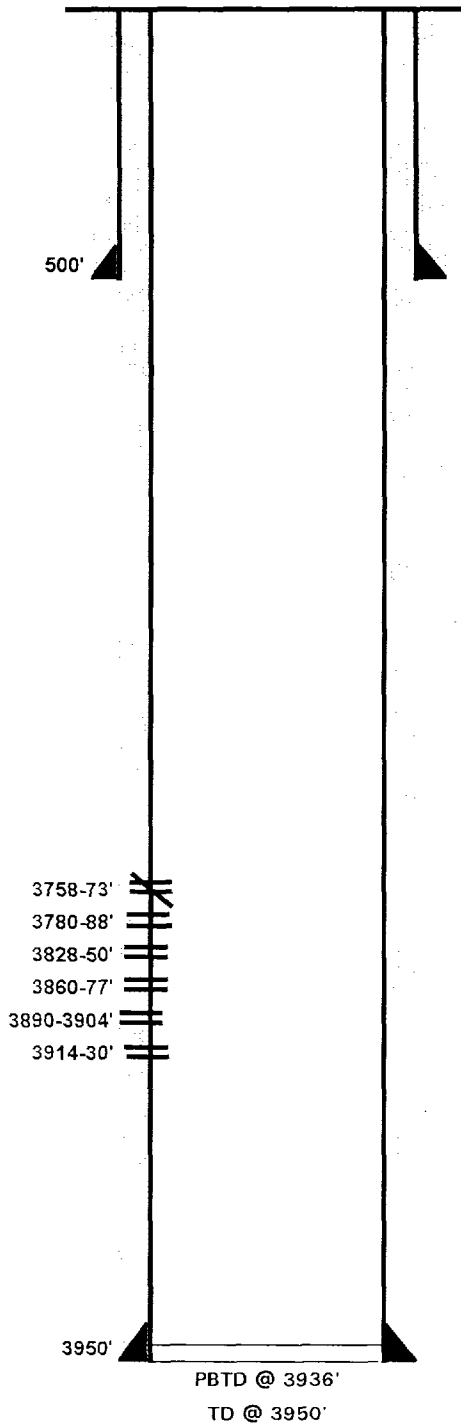
API	Lease Name	Well #	Operator Name	Location	Footage		Field Name	Current Status	Driller TD	Spud Date	Comp Date
30025045860000	ERNEST C ADKINS	9	ARCO OIL & GAS CORP	9 21S 36E	730	FSL	FEL	GAS	3705	12/04/1953	01/03/1954
30025045950001	JD KNOX	1	EXXON CORPORATION	10 21S 36E	1980	FSL	FEL	GAS	3865	11/12/1954	11/17/1954
30025046050002	STATE D	1	CONOCO INCORPORATED	11 21S 36E	1980	FSL	FWL	GAS	4091	1801/01/01	1801/01/01
30025207020001	A J ADKINS COM	10	EXXON CORPORATION	10 21S 36E	990	FSL	FWL	GAS	6010	05/04/1992	06/07/1992
30025260180000	STATE 'D'	14	CONOCO INCORPORATED	15 21S 36E	915	FNL	FEL	GAS	3800	07/31/1978	09/12/1978
30025291830000	BELL R R(NCT-C) COM	5	CHEVRON U S A INC	15 21S 36E	1440	FNL	FWL	GAS	3625	06/24/1985	07/14/1985
30025293750000	STATE 'D'	16	CONOCO INCORPORATED	11 21S 36E	2080	FSL	FWL	GAS	3750	01/29/1986	02/24/1986
30025304210000	LOCKHART 'B'	10	CONOCO INCORPORATED	14 21S 36E SW NW	2280	FNL	FWL	GAS	3680	08/01/1988	12/14/1988
30025309220000	GRAHAM ORCUTT GAS COM	1	CHEVRON U S A INC	9 21S 36E SW SE	1175	FSL	FEL	GAS	3700	02/28/1991	04/19/1991
30025321310000	COLLINS HENRY C	6	CHEVRON U S A INC	14 21S 36E NE NW	890	FNL	FWL	GAS	3750	09/23/1993	10/30/1993
30025324420000	ADKINS EARNEST C	12	ARCO OIL & GAS CORP	9 21S 36E NW SE	2160	FSL	FEL	GAS	3700	04/02/1994	05/11/1994
30025326860001	SKELLY 'B' STATE COM	3	TEXACO EXPL&PROD INC	16 21S 36E NE NE	660	FNL	FEL	GAS	3700	12/29/1997	01/28/1998
30025327180000	STATE 'D'	18	CONOCO INCORPORATED	15 21S 36E SW NE	1780	FNL	FEL	GAS	3700	11/01/1994	01/17/1995
30025329970000	STATE 'D' COM	19	CONOCO INCORPORATED	11 21S 36E	990	FSL	FWL	GAS	3685	07/05/1995	07/26/1995
30025330670000	STATE 'D'	20	CONOCO INCORPORATED	15 21S 36E	2180	FSL	FEL	GAS	3720	09/05/1995	09/28/1995
30025332100000	LOCKHART 'B'	12	CONOCO INCORPORATED	14 21S 36E	860	FNL	FWL	GAS	3700	04/04/1996	04/30/1996
30025350820000	BERRYMAN M S	2	HARTMAN DOYLE	11 21S 36E SW SW SE	405	FSL	FEL	GAS	3850	09/17/2000	10/06/2000

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 750	FIELD: Eunice-Monument	API: 30-025-35168
LOC: 1420 FNL & 200 FEL, Unit H	SEC: 16	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3567	CTY/ST: Lea Co., NM	SPUD: 11/30/2000
CURRENT STATUS: Producer	KB: 3573	DF:	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 500' w/
350 SX cement
Cmt Circ.? Yes
(12-1/4" hole)

7", 20#/ft K-55 Csg.
set @ 3950' w/ 1100 SX
Cmt Circ.? Yes
(8-3/4" hole)



Date Completed: 1-30-2001
Initial Prod: 27 BOPD/ 1547 BWPD/ 12 MCFGPD
Initial Formation: Grayburg From: 3758' To: 3930'
Completion Data:
Perf 3758-73, 3780-88, 3828-50, 3860-77, 3790-3904, 3914-30. Acidized 2750 gal w ball sealers then acidized with 4500 gals 50 qual CO2. Swab 5% oilcut. Place on pump.

2/2001 Sqz perms 3758-73. Acidized perms 3828-3930 w/ 3650 gals swab 25% oilcut. Place on pump. Test prior 15 BOPD 1769 BWPD Test after 104 BOPD 526 BWPD.

Additional Data:
T/Queen Formation @ 3418'
T/Grayburg Zone 1 @ 3711'

05/20/2002



WELL DATA SHEET

LEASE: EMSU WELL: 316WI
 LOC: 1847' F S L & 1885' F E L SEC: 10
 TOWNSHIP: 21S CNTY: Lea
 RANGE: 36E UNIT: J ST: N.M.

FORM: Grayburg / San Andres DATE: _____
 GL: 3583' STATUS: Injector
 KB: 3601' API NO: 30-025-29882
 DF: _____ CHEVNO: TH 17480-01

Date Completed: 05/17/1987
 Initial Injection: 720 BWIPD @ 0 psig
 Initial Formation: Grayburg
 FROM: 3752' to 3970'

Completion Data

GIH w/ bit. Tag @ 4002'. Perf 3752-64, 3776-86, 3806-30, 3834-40, 3846-60, 3896-3913 & 3939-70 (1 JHPF). Spot 250 gals acid across perfs. ACDZ w/ 6750 gals 15% NeFeA w/ 170 RCNBs. Swb 2 BO/ 34 BW SFL = 2200', EFL = 2600'. Swb Tr oil/35 BW SFL = 2600', EFL = 2800'. GIH w/ Baker TSN li pkr on 119 jts. 2-3/8" IPC tbq. Circ. w/ pkr fluid & set pkr @ 3698'. PWOL. Test: 720 BWIPD @ 0 psig.

Subsequent Workover or Reconditioning:

8/93 POH w/ pkr & tbq. GIH w/ Guiberson Uni VI on 2-3/8" IPC tbq. Circ. pkr fluid & set pkr. Pkr has 1.781" F SS profile nipple. Test csg to 320 psi - OK. RTI.
 5/95 MIRU CTU. Wash to 3937'. ACDZ perfs 3752-3970' w/ 5000 gals 15% acid.
 10/3/2000 POH w/ tbq & G-6 pkr. Perf w/ 3 spf @ 120 deg phs'g, 3792-98', 3868-76', & 3882-90'. RIH w/ pkr & RBP. Set RBP @ 3723'. Load hole w/ 55 BPW. Pickle tbq w/ 300 gals 15% HCl. Straddle acdz perfs w/ 15% NEFE HCl. Perfs 3896-3913' w/ 1000 gals HCl. Perfs 3882-90' w/ 1000 gals HCl. Perfs 3868-76' w/ 1000 gals HCl. Perfs 3846-60' w/ 1500 gals HCl. Perfs 3834-40' w/ 500 gals HCl. Perfs 3792-98' w/ 750 gals HCl. RIH w/ Guiberson G-6 pkr w/ 1.781" F" Nipple and XL O/O Tool. Set pkr @ 3701'.

Additional Data:

T/Queen Formation @ 3408'
 T/Penrose Formation @ 3536'
 T/Grayburg Zone 1 @ 3731'
 T/Grayburg Zone 2 @ 3766'
 T/Grayburg Zone 2A @ 3807'
 T/Grayburg Zone 3 @ 3829'
 T/Grayburg Zone 4 @ 3864'
 T/Grayburg Zone 5 @ 3920'
 T/Grayburg Zone 6 @ 3978'
 T/San Andres Formation @ 3980'
 KB @ 3601'

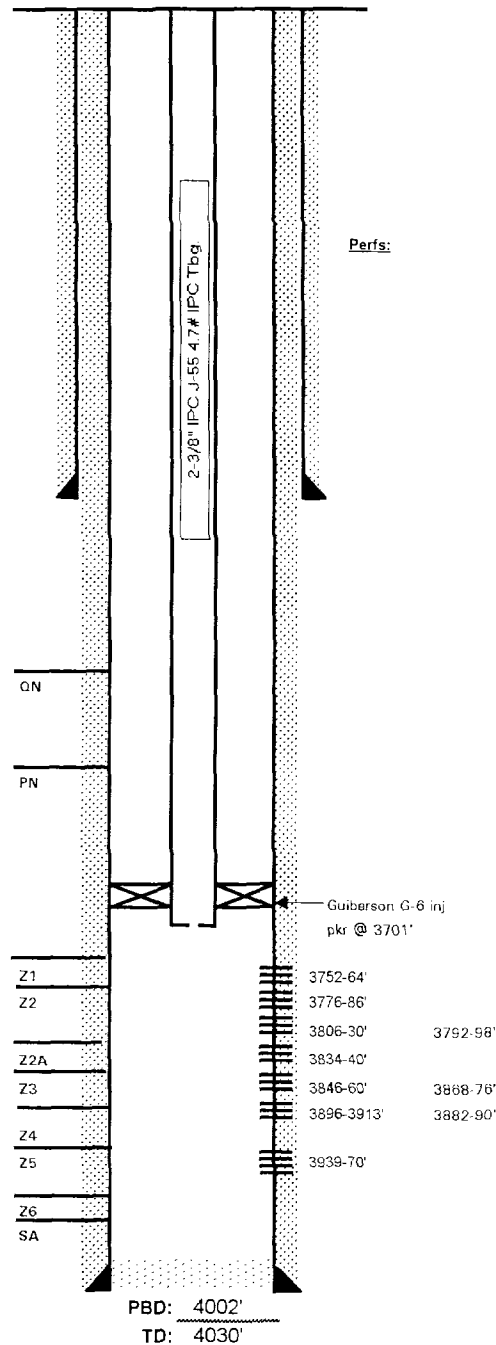
8-5/8" OD
 24# CSG
 Set @ 1350' W/ 900 SX
 Cmt circ.? yes
 TOC @ surf. by calc.

Tubing Detail: 5/16/87

Original KBTH: 18.00'
 1 Jt. 2-3/8" 4.7# J-55 EUE 8rd 31.38'
 118 Jts. 2-3/8" J-55 4.7# EUE 8rd IPC tbq;
 3649.39'
 2-3/8" x 5-1/2" XL O/O Tool
 Guiberson G-6 pkr w/ 1.781.1 F Nipple
 Wireline entry guide

Landed @: 3704.75'

5-1/2" OD
 15.5 & 17# CSG
 Set @ 4029' W/ 750 SX
 Cmt circ.? yes
 TOC @ surf. by calc.



FILE: EMSU316WB.XLS



WELL DATA SHEET

LEASE: EMSU WELL: 318WI

LOC: 1860' F S L & 830' F W L SEC: 10

TOWNSHIP: 21S CNTY: Lea

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

FORM: Grayburg / San Andres DATE:

GL: 3570' STATUS: Injector

KB: 3588' API NO: 30-025-29901

DF: CHEVNO: 1H 1753:01

Date Completed: 06/10/1987

Initial Production:

Initial Formation: Grayburg

FROM: 3718' to 3946'

Completion Data

Tag @ 3970'. Perf 3835-42, 3861-63, 3889-95, 3910-46' w/ 1 JHPF. Treated w/ 4000 gals 15% NeFeA & 80 RCNBs. Perf 3718-30, 3730-42, 3752-58, 3760-82, 3788-3805, 3812-22' w/ 1 JHPF. ACDZ w/ 4700 gals 15% NeFeA & 95 RCNBs. Ran 5-1/2" Baker TSN II inj packer on 2-3/8" IPC tbg. Set pkr @ 3673'. Put on injection.

Subsequent Workover or Reconditioning:

8/87 POH w/ inj. equip. Ran CBL/CET. GiH w/ inj. pkr. on 2-3/8" IPC tbg. Set pkr @ 3675'. RTI. Test 676 BWIPD @ 0 psig.

6/93 CO w/ CTU. Tag fill @ 3968'. Pretreat w/ 5 BBLs FW, 12 BBLs 15% NeFe, 20 BBL Biocide, 20 BBL X-LINKER, 21 BBLs FW. Pump 125 bbls 2#/bbl gel w/ 300 ppm X-Linker 1107-1463 psi. Pump 360 bbls 2.5# per bbl gel w/ 300 ppm X-Linker 1463-1730 psi. Pump 120 bbls 3#/bbl gel w/ 300 ppm X-Linker 1730-1896 psi. Inj. 1524 BWIPD @ 600 psig.

4/2001 Perf 3826-31, 3852-56, 3861-70, acid new perms 1500 gals, acid old perms 2500 gals

Additional Data:

T/Queen Formation @ 3392'

T/Penrose Formation @ 3520'

T/Grayburg Zone 1 @ 3706'

T/Grayburg Zone 2 @ 3743'

T/Grayburg Zone 2A @ 3780'

T/Grayburg Zone 3 @ 3806'

T/Grayburg Zone 4 @ 3847'

T/Grayburg Zone 5 @ 3900'

T/Grayburg Zone 6 @ 3949'

T/San Andres Formation @ 3951'

KB @ 3588'

8-5/8" OD

24# CSG K-55 8rd

Set @ 1349' W/ 900 SX

Cmt circ.? Yes

TOC @ surf. by calc.

Tubing Detail: 5/29/87

Original KBTH: 17.00'

117 Jts. 2-3/8" J-55 8rd IPC Tbg: 3619.82'

1 Jt. 2-3/8" J-55 4.7# IPC EUE 8rd: 31.70'

5-1/2" Baker TSN-2 Injection Pkr: 5.40'

Landed @: 3673.92'

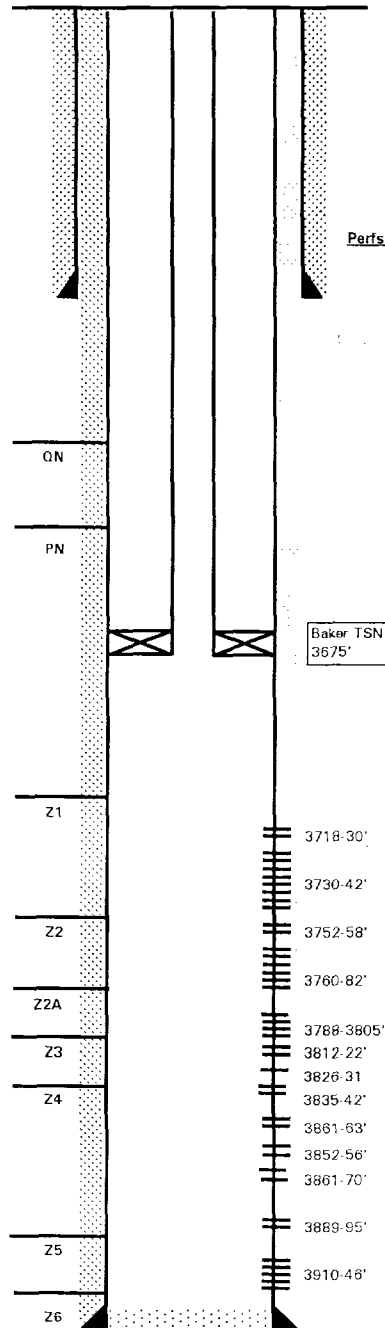
5-1/2" OD

15.5# CSG

Set @ 4000' W/ 775 SX

Cmt circ.? Yes

TOC @ surf. by calc.



PBD: 3970'

TD: 4000'

FILE: EMSU318WB.XLS



WELL DATA SHEET

LEASE: EMSU WELL: 345

LOC: 760' F S L & 1880' F E L SEC: 10

TOWNSHIP: 21S CNTY: Lea

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

FORM: Grayburg / San Andres DATE:

GL: 3567.4' STATUS: Producer

KB: 3585' API NO: 30-025-29823

DF: CHEVNO: IH 4143:01

Date Completed: 09/22/1987

Initial Production: 5 BOPD / 38 BWPD

Initial Formation: Grayburg

FROM: 3768' to 3922' / GOR 4800

11-3/4" OD
42 # CSG
Set @ 370' W/ 350 SX
Cmt circ.? yes
TOC @ surf. by calc.
(14-3/4" hole)

8-5/8" OD K-55 ST&C
24 & 32 # CSG
Set @ 2655' W/ 700 SX
Cmt circ.? yes
TOC @ 111' by calc.
(11" hole)

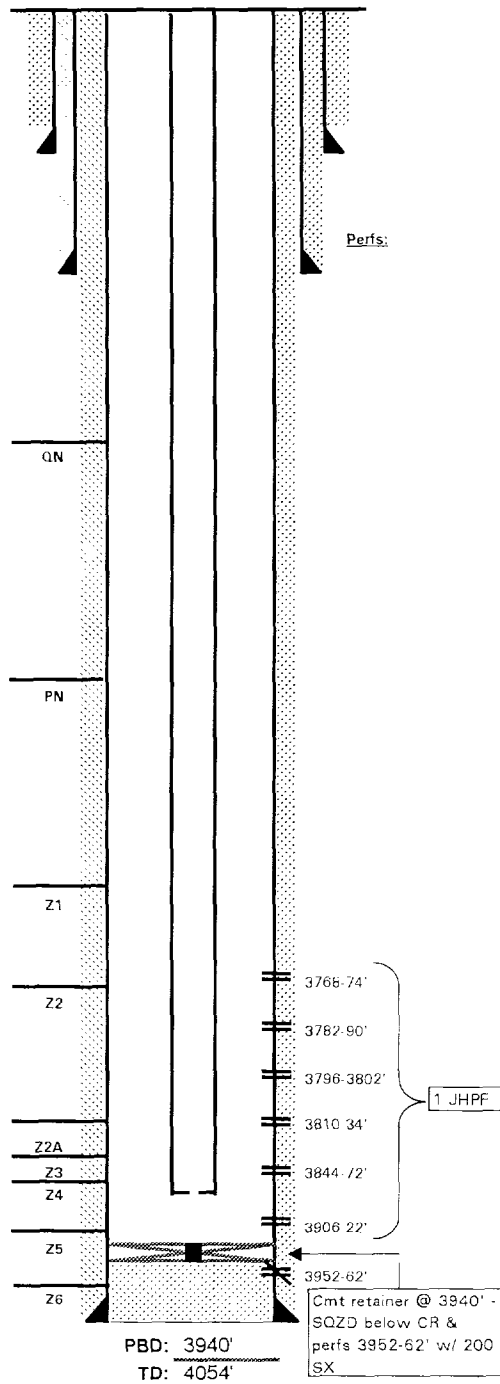
Tubing Detail: 5/12/97

KBTH: 0.00'
123 Jts. 2-7/8" 6.5# J-55 8rd tbg:
3831.84'
KUDU pump 44.28'
Landed @ 3876.12'

Rod Detail: 5/12/97

1 1-1/2" X 30' Polished Rod
3 6' & 1-4' 1" Subs
151 1" N-97 Rods
15' Rotor

5-1/2" OD K-55 ST&C
15.5 & 17 # CSG
Set @ 4054' W/ 615 SX
Cmt circ.? yes
TOC @ surf. by calc.



Completion Data

Perf Zone 5 fr 3952-62'. ACDZ w/ 1100 gals 15% NeFe HCl. SQZD w/ 200 SX. Perf 3768-74, 3782-90, 3796-3802, 3810-34, 3844-72 & 3906-22 (1 JHPF - 88 holes). ACDZ w/ 6500 gals 15% NeFe HCl.

Subsequent Workover or Reconditioning:

9/19/87 From 3952-62' interval: swabbed 70 BW / 0 oil in 2.5 hrs (5 BLW).

9/20/87 From 3952-62' interval: swabbed 21 BW / 0 oil (FER 21 BPH).

4/95 Upsize pumping equipment.

5/7/97 ACDZ perfs 3768-3922' w/ 6000 gals Resisol II+. Swb, IFL = 2200', EFL = 2400'. Rec'd 68 BW w/ trace oil. RIH KUDU pump, TOTP.

Additional Data:

T/Queen Formation @ 3413'

T/Penrose Formation @ 3543'

T/Grayburg Zone 1 @ 3737'

T/Grayburg Zone 2 @ 3775'

T/Grayburg Zone 2A @ 3810'

T/Grayburg Zone 3 @ 3838'

T/Grayburg Zone 4 @ 3875'

T/Grayburg Zone 5 @ 3927'

T/Grayburg Zone 6 @ 3971'

T/San Andres Formation @ 3973'

KB @ 3585'

FILE: EMSU345WB.XLS



WELL DATA SHEET

LEASE: EMSU WELL: 346 WI

LOC: 659' F S L & 569' F E L SEC: 10

TOWNSHIP: 21S CNTY: Lea

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

FORM: Grayburg / San Andres DATE:

GL: 3582' STATUS: Injector

KB: 3600' API NO: 30-025-29881

DF: CHEVNO: IH 4144:01

Date Completed: 08/27/1987

Initial Injection: 720 BWIPD @ 0 psig

Initial Formation: Grayburg

FROM: 3768' to 3954'

8-5/8" OD

24 # CSG

Set @ 1358' W/ 900 SX

Cmt circ.? yes

TOC @ surf. by calc.

Tubing Detail: 8/25/2000

KBTH: 17.60'

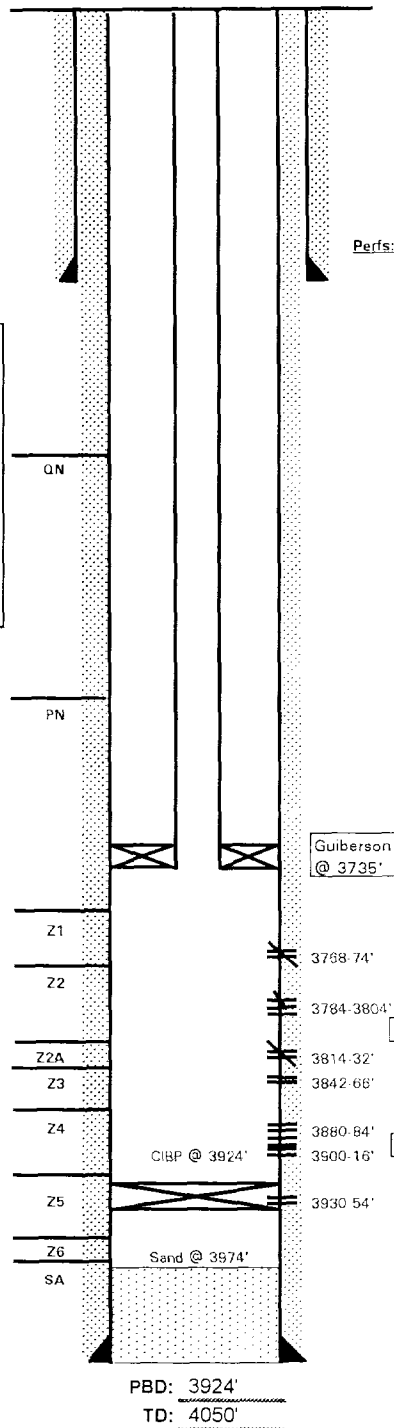
120 Jts. 2-3/8" 4.7# J-55 IPC tbg Top, L-EPC & IPC: 3729.22'

2-3/8" XL O/O tool w/ 1.78" F" nipple: 3731.02'

5-1/2" Guiberson G-6 pkr: 3734.72'

2-3/8" wireline entry guide: 3735.25'

Landed @ 3735.25'



Completion Data

CO to 3970'. Perf 3880-84, 3906-16 & 3930-54 (1 JHPF). Trtd w/ 2900 gals 15% NeFeA. Perf 3768-74, 3784-3804, 3814-32 & 3842-66 (1 JHPF). ACDZ w/ 5200 gals 15% NeFeA. GIH w/ Baker TSN pkr on 2-3/8" 4.7# J-55 IPC tbg. Set pkr @ 3734'. Put on injection.

Subsequent Workover or Reconditioning:

4/93 Present inj.: 2075 BWIPD @ 181 psig.

8/93 Retreat w/ 15 bbls FW, 12 bbls 15% NeFe, 20 bbls FW w/ 10G biocide, 20 bbls FW w/ 5 gals X-Linker, 20 bbls FW. Pump 10 bbls FW spacer. Pump 112 bbls of 2 PPB mix @ 48 GPM 1131-1271 psi. Pump 368 bbls of 2.5 PPB mix w/ 500 ppm X-Linker @ 48 GPM 1271-1339 psi. Pump 100 bbls polymer flush w/ non X-linked gel & FW. Test: 1656 BWIPD @ 111 psig.

12/10/98 Monitor backside for communication - perfs 3842 in comm. w/ perfs 3832' (perform supplemental procedure). ACDZ perfs 3842-3954' w/ 2000 gals 15% Anti-sludge HCl, pmppg 70Q 1% KCl wtr for diversion. Swb (15 runs), IFL=1200' and EFL=1200'. Dump 3450# 20/40 sand, tag @ 3672'. Wash sd to 3922', dump 1100# sand down tbg & tag @ 3844'. Set CIBP @ 3840'. RIH w/ CIBP, set @ 3702'. M&P 105 SX CI "C" & sqzd 22 SX in form. Perfs 3768-3832' squeezed off. D/O CIBP & CIBP. Run MIT. RTI.

8/18/2000 Rise G-6 pkr, POH w/ 2-3/8" IPC tbg. RIH w/ 4-3/4" bit. Wash FeS scale to 4011', quit making hole. Perf w/ 3SPF @ 120 deg phs g, 3794-3806' & 3890-3900'. Dump 1250# 100 mesh sd to pb to 3820'. RIH w/ notch collar & MCL. Tag sd @ 3959'. POH LD MCL. RIH set RBP @ 3750'. Pickle tbg w/ 500 gals 15% HCl. Straddle acdz perfs 3906-3916 w/ 500 gals 15% NEFE; Perfs 3890-3900' w/ 750 gals 15% NEFE HCl; Perfs 3880-84' w/ 500 gals 15% NEFE HCl; Perfs 3842-66' w/ 1500 gals 15% NEFE HCl; and Perfs 3794-3806' w/ 750 gals. Sqzd perfs 3768-3804' brk dn during acid job. Dump 400# 20/40 sd & cap w/ 200# 100 mesh sd. RIH OE'd, tag sd @ 3974'. Previous sd top @ 3959'. RIH w/ 5-1/2" CIBP, tag solid @ 3774'. POH w/ CIBP. RIH OE'd, tag sd @ 3974'. Wash to 3940'. RIH w/ set CIBP @ 3924'. RIH w/ 5-1/2" G-6 pkr w/ XL O/O tool w/ 1.78" F" nipple. Set pkr @ 3735'.

Additional Data:

T/Queen Formation @ 3434'

T/Penrose Formation @ 3545'

T/Grayburg Zone 1 @ 3742'

T/Grayburg Zone 2 @ 3776'

T/Grayburg Zone 2A @ 3812'

T/Grayburg Zone 3 @ 3837'

T/Grayburg Zone 4 @ 3871'

T/Grayburg Zone 5 @ 3919'

T/Grayburg Zone 6 @ 3962'

T/San Andres Formation @ 3964'

KB @ 3600'

5-1/2" OD

15.5 & 17 # CSG

Set @ 4050' W/ 750 SX

Cmt circ.? yes

TOC @ surf. by calc.

FILE: EMSU346WB.XLS

Chevron



WELL DATA SHEET

LEASE: EMSU (ARCO: M.S. Berryman #2) WELL: 349

LOC: 760' F S L & 2230' F E L SEC: 11

TOWNSHIP: 21S CNTY: Lea

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

FORM: Grayburg / San Andres DATE: _____

GL: 3581.9' STATUS: SI Producer

KB: 3594.7' API NO: 30-025-29838

DF: _____ CHEVNO: 1G19010:01

Date Completed: 7/5/87

Initial Production: 0 BOPD / 63 BWPD / 118 MCFPD

Initial Formation: Grayburg Zones 1-5

FROM: 3717' - 3920'

Completion Data

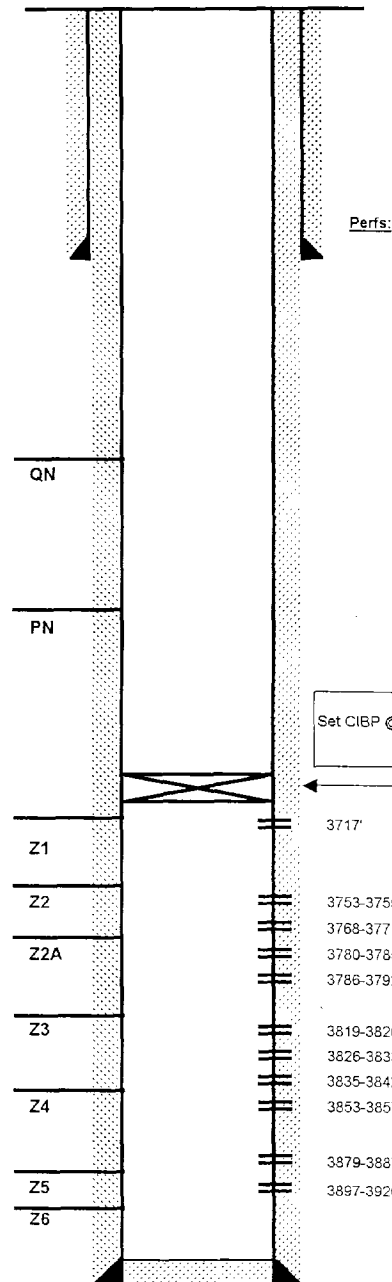
DO cmt & FC f/ 3924-3990'.

Log w/ GR, CNL, CCL, CBL, CET. Perf: 3897-3920 & 3878-3887. Perf: 3853-3857, 3717, 3786-3792, 3780-3785, 3768-3771, 3753-3755, 3835-3842, 3826-3833, 3819-3826. ACDZ perms 3920-3878' w/ 2500 gals. Acdz perf 3754-3858' w/ 3500 gal 15% NeFe.

Subsequent Workover or Reconditioning:

11/2001 Set CIBP at 3656' Test failed MIT.

8-5/8" OD
24# CSG
Set @ 368' W/ 250 SX
Cmt circ.? Yes
TOC @ surf. by calc
(12-1/4" hole)



4-1/2" OD
9.5# CSG J-55 LT&C
Set @ 4000' W/ 1200 SX
Cmt circ.? Yes
TOC @ surf. by calc
(7-5/8" hole)

Formation Tops:

T/Queen @ 3410'
T/Penrose @ 3533'
T/Grayburg Zone 1 @ 3716'
T/Grayburg Zone 2 @ 3745'
T/Grayburg Zone 2A @ 3784'
T/Grayburg Zone 3 @ 3810'
T/Grayburg Zone 4 @ 3844'
T/Grayburg Zone 5 @ 3888'
T/Grayburg Zone 6 @ 3924'
T/San Andres @ 3925'
KB @ 3595'

FILE: EMSU349WB.XLS

PBD: 3990'
TD: 4000'

WELL DATA SHEET

FIELD: Eunice Monument South Unit

WELL NAME: EMSU 695

FORMATION: Grayburg

LOC: 2440' FSL & 200' FEL
TOWNSHIP: 21S
RANGE: 36E

SEC: 9
COUNTY: Lea
STATE: NM

UNIT: N

GL: 3572'
KB: 3578'
DF: 3577'

CURRENT STATUS: Producer
API NO: 30-025-35162
CHEVNO: HA3291

9-5/8", 36#, K-55, Surf. Pipe
set @ 500' w/ 350 SX cmt.
TOC @ Surf' by circ.
(12-1/4" hole)

Tubing Detail:

KB to tbg head flange	2.0
117 jts 2-7/8" tbg	3677.77'
2-7/8" sub w/ 2-7/8" x 2-3/8" XO	3682.37'
ESP TD 1300 129 stg sub pmp	3688.67'
ESP TD 1300 129 stg sub pmp	3694.97'
TR4 Seal	3702.97'
TR4 Seal	3708.87'
456 CT 120 hp mtr	3729.67'
PSI	3731.27'

3734-38'
3743-46'
3752-60'
3776-84'
3794-3800'
3806-10'
3832-36'
3842-46'
3860-70'
3886-90'

FC @ 3881'

PBTD @ 3910'
TD @ 3930'

Date Completed: 11/20/2000

Initial Prod: 18 BOPD/ 512 BWPD/ 9 MCF

Initial Formation: Grayburg From: 3734 To: 3890

OH Logs: GR/DSN, SDL, GR/DLL/MSFL/CSL.

Completion Data:

RIH. Tag @3868'. DO 10' cmt to FC @ 3878'. DO FC & hard cmt to 3910'. Run CBL/GR/CCL, indicates good bond. Run Cast-V-CBL-CCL, indicates very good bond & improved w/ press. RIH w/ HSCG w/ 3 SPF @120 phs'g. Perf: 3734-38', 3743-46', 3752-60', 3776-84', 3794-3800', 3806-10', 3832-36', 3842-46', 3860-70', & 3886-90'. Set pkr @ 3654'. Spot 1650 gals 15% CCA NEFE HCl, dropping 250 1.1 7/8 RCNBS. Rise pkr. Circ balls out. Reset pkr @ 3654', Acldz w/3750 gals 15% CSA NEFE HCl foamed to 50Q w/CO2 and drop 125 7/8" 1.1.RCNBS. Swb tst f/ comm. Perfs comm'd : 3806-10' & 3832-36'; 3776-84' & 3794-3800'. RIH w/ ESP Rental TD 1300 129 stg sub pmp w/ 120 hp mtr, w/ 117 jts 2-7/8" tbg, intake @ 3695'.

Workover History:

Additional Data:

T/Rustler @ 1330'
T/Salado @ 1424'
T/Tansil @2560'
T/Yates @ 2759'
T/Seven Rivers@ 2956'
T/Queen Formation @ 3380'
T/Penrose Formation @ 3540'
T/Grayburg Zone 1 @ 3688'
T/Grayburg Zone 2 @ 3725'
T/Grayburg Zone 3 @ 3786'
T/Grayburg Zone 4 @ 3826'
KB @ 3578'

7", 20#, K-55 csg set @ 3930'
w/ 980 SX Premium + cmt
1st stage 930 sx Premium + Zoneseal cmt
2nd stage 50 sx Premium +
Cmt Circ.? Yes, est. 200 sx
TOC @ surf
(8-3/4" hole)

CURRENT WELLBORE DIAGRAM

LEASE:	EMSU	WELL:	696	FIELD:	Eunice-Monument	API:	30-025-34137
LOC:	2523 FNL & 1456 FWL, Unit F	SEC:	10	BLK:	T21S, R36E	REF NO:	
SVY:	N.M.P.M.	GL:	3584	CTY/ST	Lea / NM	SPUD:	12/02/1997
CURRENT STATUS:	Prod	KB:	3590	DF:	3589	TD DATE:	12/16/1997

HOLE SIZE: 12 1/4
 SURFACE CSG: 9.625 36#
 SET @: 525
 SXS CMT: 300
 CIRC: YES
 TOC AT: 0
 TOC BY: CIRC
 525'

COMMENTS:

Date Completed: 2-19-98
 Initial Prod: 1 BOPD/338 BWPD/4 MCFPD
 Initial Formation: From: 3745 To: 3910
 Completion Data:
 12-2-97 Drill to 525'. CMT surf csg w/ 300 SX - circ. 93 SX CMT; drill to 3745'. CMT 1st STAGE w/ 110 SX, drop bomb, open DVT. Cir. CMT 2nd STAGE w/ 400 SX (lead). Tail w/ 175 SX CMT & close tool. Cut three cores.
 2-23-98 ACDZ zn 3-4 w/ 3000 gals 15% RSII & 1500 gal 70Q 15% NEFE HCL. Swb. Set pkr @ 3721'. ACDZ zn 2-3 w/ 4000 gal 15% RSII and 3000 70Q 15% NEFE HCL. Swb. RIH w/ prod tbg & TOTP.

Workover History:

3-98 Run ESP.

8-18-98 Restim new drill; ACDZ zn 3-5 w/ 3600 gals 15% Antisludge, 1750 gals VES Diverter, 3500 4% KCl & 1000 gal preflush w/ solvent. Swb. ACDZ zn 2 w/ 1650 gals 15% Antisludge, 825 VES & 4% KCl flush. Swb. RIH w/ sub pump, fluid to surface in 10 min (amps-46, 46, 47) & TOTP.

Additional Data:

T/Queen @ 3388'
 T/Penrose @ 3520'
 T/Grayburg Zone 1 @ 3699'
 T/Grayburg Zone 2 @ 3712'
 T/Grayburg Zone 3 @ 3794'
 T/Grayburg Zone 4 @ 3832'
 T/Grayburg Zone 5 @ 3884'

20# K-55

DV Tool @ 3258'

HOLE SIZE: 8 3/4
 PROD CSG: 7" 29 #
 SET @: 3745
 SXS CMT: 685
 CIRC: No
 TOC AT: 5390
 TOC BY: EST 75% 3745'

Z1

Z2

Z3

Z4

Z5

TD @ 3910'

04/22/2002

WELL DATA SHEET

FIELD: EMSU

WELL NAME: EMSU 697

FORMATION: Grayburg

LOC: 2517' FSL & 2550' FEL
TOWNSHIP: 21S
RANGE: 36E Unit J

SEC: 10
COUNTY: Lea
STATE: NM

GL: 3593'
KB: 3599'
DF: 3598'

CURRENT STATUS: Producer
API NO: 30-025-35163
CHEVNO: HA4582

9-5/8", 36#, K-55 Surf. Pipe
set @ 505' w/ 350 SX cmt.
Cmt Circ.? Yes, est. 150 sx
TOC @ Surf' by circ.

Tubing Detail: 11/4/2000

KBTH: 6.00'
120 Jts. 2-7/8" 6.5# J-55 8rd EUE: 3755.06'
7" TAC 3757.41'
4 2-7/8" 6.5# J-55 8rd EUE Bare tbg 3879.71'
2.5" x 2.25" x 24' Wrkg bbl 3909.01'
2-7/8" 6.5# J-55 8rd Slotted MAJT 3925.01'

Rod Detail: 11/4/2000

1-1/2" x 26' Polish Rod 26.00
8'-6"-4'-2" x 7/8" Norris 97 rod subs 46.00'
142 jts 7/8" Norris 97 rds 3596.00'
12 jts 1-1/2" WT Bars 3896.00'
2.25" x 4' Plunger 3900.00'

FC @ 3887'

3782-92'
3821-26'
3832-51'
3859-62'
3889-3900'
3911-14'
3920-32'
3942'

PBTD @ 3933'
TD @ 3942'

QN

PNR

Z1

Z2

Z3

Z4

Z5

Date Completed: 11/23/2000

Initial Prod: 8 BOPD/ 610 BWPD/ 4 MCF

Initial Formation: Grayburg From: 3782' To: 3932'

Completion Data:

11/2/2000 RIH and tag @ 445', rotate thru tight spot, tag solid @ 525'.
DO cmt stringers f/ 525 - 600', fell free. Tag cmt @ 3658'. DO cmt f/ 3658' - 88'. Wash to 3826'. DO soft cmt f/ 3826' - 3887', Tag FC @ 3887'.
DO FC & solid cmt to 3933'. Run GAL-GR-CCL f/ 3928' - 2928'. Fair bond thru pay zone. Perf w/ 4" csg gun @: 3782'-92', 3821'-26', 3832'-51', 3859-62', 3889-3900', 3911-14', & 3920-32' w/ 3 JHPF 120 dgr phs'g. Set pkr @ 3694'. Acdz w/ 2000 gals 15% NEFE HCl, drop 250 - 1.1 RCNBS. Flush perms w/ 1% KCl. Rev out ball sealers. Pmp 1000 gal 50Q foamed KCl wtr, Acdz perms w/ 3200 gals 15% NEFE HCl foamed to 50Q w/ CO2, drop 150 - 1.1 RCNBS evenly thru last 5900 gals foamed acid, over displace 10 bbls 50Q foamed KCl wtr. Upper perms 3782'-92' communicated to 3821'-26'. RIH w/ slotted MAJT, 2.5" x 2.25" x 24' working bbl, 4 jts, TAC, 120 jts 2-7/8" 6.5# J-55 8rd EUE tbg, TAC @ 3755', pmp @ 3879', EOT @ 3925'.

Workover History:

Additional Data:

T/Rustler @ 1322'
T/Salado @ 1413'
T/Tansil @ 2574'
T/Yates @ 2776'
T/Seven Rivers @ 2964'
T/Queen @ 3399'
T/Penrose Formation @ 3518'
T/Grayburg Zone 1 @ 3719'
T/Grayburg Zone 2 @ 3753'
T/Grayburg Zone 3 @ 3815'
T/Grayburg Zone 4 @ 3852'
T/Grayburg Zone 5 @ 3904'
KB @ 3599'

7", 20#, K-55 csg set @ 3942'
w/ 910 SX cmt.
1st stg, 860 sx Prem + Zoneseal
2nd stg, 50 sx Premium +
Cmt Circ.? Yes, est. 238 sx
TOC @ surf.

FILE: EMSU697WB.XLS
DLMO: 12/14/2000

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WEL 698 FIELD: Eunice-Monument	API: 30-025-34847
LOC: 2585' FSL & 1330' FEL, Unit I	SEC: 10 BLK: T21S, R36E	REF NO: BY5766
SVY: N.M.P.M.	GL: 3591' CTY/ST Lea / NM	SPUD: 04/01/2000
CURRENT STATUS: Oil Producer	KB: 3597' DF:	TD DATE: 04/07/2000

9-5/8", 36# K-55 STC Csg.
set @ 512' 300 sxs
w/35:36 POZ "C" +Add.
Tail w/150 sx "C" +Add
Cmt Circ? Yes (107 sx)
TOC @ surf. by circ.

12-1/4" Hole

512'

Tubing Detail
Orig KB 6'
116 Jts 2-7/8" 6.5# J-55
8RD EUE Tbg. 3649.89
1 2-7/8" x4 sub 4.10
ESP TD 1750 183 STG
sub pmp 68.60
EOT 3728.59

8-3/4" Hole

Perfs:
3768'-74'
3804'-12'
3819'-22'
3828'-36'
3844'-47'
3854'-57'-
3870'-78'

QN

PN

Z1

Z2

Z3

Z4

Z5

7", 20# K-55 STC Csg.
set @ 3924' w/600 sxs "C"
Nitrified +Add., Tail w/125 sx "C"
+Add, Cap w/50 sxs "C" +Add
Cmt Circ? Yes (144 sx)
TOC @ surf. by circ.

PBTD @ 3898'
TD @ 3925'

Date Completed: 7/10/2000
Initial Prod: P 52 BOPD/ 1704' BWPDP/ 22 MCFPD
Initial Formation: Grayburg From: 3709' To: 3935'

Completion Data: 5/26/00 thur 8/16/00
Pickle tbg & csg w/1000 gals 15% HCL. Spot 500 gals 15% NEFE HCL from 3881'-3586'. Run SBT/CBL/GR/CCL F/3899'-3000'. Good bond to 3500'.
Perf w/4" HSCG w/3 SPF @ 120 deg., 3768'-74, 3804'-12', 3819'-22', 3828'-36', 3844'-47', 3854'-57', 3870'-78'. 117 holes, all fired. Acidz w/2000 gals 15% NEFE HCL, & 3000 Gals 15% NEFE HCL, foamed to 50 Q w/CO2 & 100 7/8 1.1 ball sealers.

Workover History:

Additional Data:

T/Rustler @ 1323'
T/Salado @ 1415'
T/Tansil @ 2570'
T/Yates @ 2765'
T/Seven Rivers @ 2954'
T/Queen @ 3390'
T/Penrose @ 3520'
T/Grayburg Zone 1 @ 3709'
T/Grayburg Zone 2 @ 3747'
T/Grayburg Zone 3 @ 3814'
T/Grayburg Zone 4 @ 3837'
T/Grayburg Zone 5 @ 3884'

FILE: EMSU698WB.xls
CJH: 3-8-2001

04/15/2002

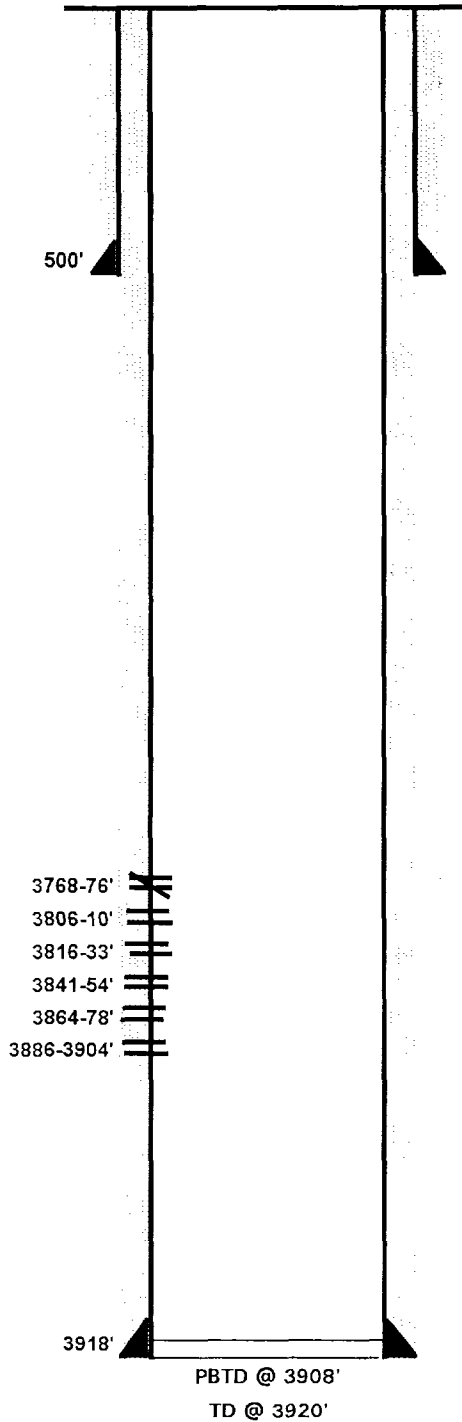
CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 707	FIELD: Eunice-Monument	API: 30-025-35164
LOC: 1310 FSL & 20 FEL, Unit P	SEC: 10	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3588	CTY/ST: Lea Co., NM	SPUD: 10/27/2000
CURRENT STATUS: Producer	KB:	DF:	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 500' w/
350 SX cement
Cmt Circ.? Yes
(12-1/4" hole)

7", 20#/ft K-55 Csg.
set @ 3918' w/ 915 SX
Cmt Circ.? Yes

(8-3/4" hole)



Date Completed: 01-25-2001
Initial Prod: 8 BOPD/ 255 BWPD/ 10 MCFGPD
Initial Formation: Grayburg From: 3806 To: 3904
Completion Data:
 Perf 3768-76, 3806-10, 3816-33, 3841-54, 3864-78, 3886-3904. Acidized w/ 2000 gals. with ball sealers. Swab 0% oilcut. Acidized w 3500 gals 50Q CO2. Swab 100% water. Placed on pump with y-tool. Sqz perms 3868-76'. Swab 15% oilcut. Place well on pump.

Additional Data:
 T/Queen Formation @ 3394'
 T/Grayburg Zone 1 @ 3708'

04/22/2002

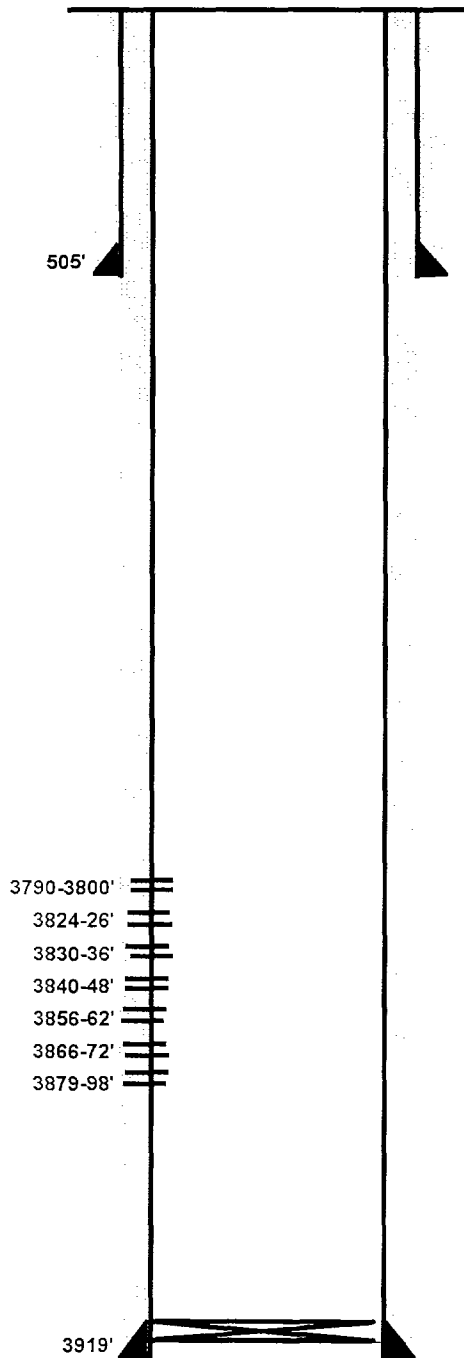
CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 708	FIELD: Eunice-Monument	API: 30-025-34848
LOC: 1330 FSL & 1220 FEL, Unit I	SEC: 10	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3578	CTY/ST: Lea Co., NM	SPUD: 02/19/2000
CURRENT STATUS: Producer	KB:	DF:	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 505' w/
350 SX cement
Cmt Circ.? Yes
(12-1/4" hole)

7", 20#/ft K-55 Csg.
set @ 3919' w/ 800 SX
Cmt Circ.? Yes

(8-3/4" hole)



Date Completed: 04-14-2000
Initial Prod: 21 BOPD/ 121 BWPD/ 20 MCFGPD
Initial Formation: Grayburg From: 3790 To: 3898
Completion Data:
Set CIBP @ 3899'. Perf 3790-3800, 3824-26, 3830-36, 3840-48, 3856-62, 3866-72, 3879-5-3897 5. Acidized w/ 2800 gals. with PIP. Swab 15% oilcut. Placed on pump.

Additional Data:
T/Queen Formation @ 3409'
T/Grayburg Zone 1 @ 3726'

04/19/2002

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WEL 709	FIELD: Eunice-Monument	API: 30-025-34849
LOC: 1330' FSL & 2421' FWL, Unit	SEC: 10	BLK: T21S, R36E	REF NO: BY4280
SVY: N.M.P.M.	GL: 3574'	CTY/ST: Lea / NM	SPUD: 03/08/2000
CURRENT STATUS: Oil Producer	KB: 3580'	DF: 3579	TD DATE: 03/13/2000

9-5/8", 36# K-55 STC Csg.
set @ 502' w/200 sxs
w/35:36 POZ "C" +Add.
Tail w/150 sx "C" +Add
Cmt Circ? Yes (45 sx)
TOC @ surf. by circ.

12-1/4" Hole

502'

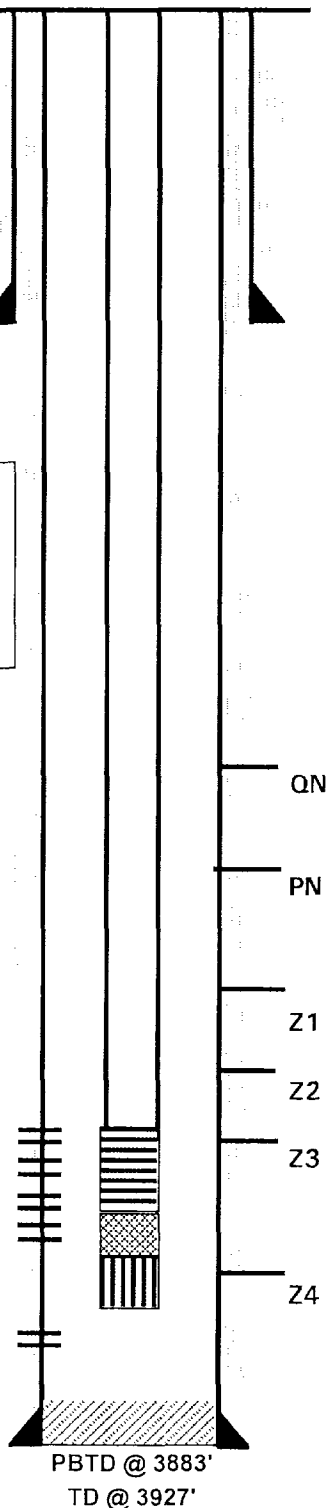
Tubing Detail
Orig KB 6'
121 Jts 2-7/8" 6.5# J-55
8RD EUE Tbg.

8-3/4" Hole

Perfs:
3836'-38'
3846'-58'
3864'-76'

Isolated
w/CIBP
3918'-23'
3911'-16'

7", 20# K-55 STC Csg.
set @ 3929' w/650 sxs "C"
Nitrified +Add., Tail w/125 sx "C"
+Add, Cap w/50 sxs "C"
Cmt Circ? Yes (99 sx)
TOC @ surf. by circ.



Date Completed: 6/29/2000
Initial Prod: P 20 BOPD/ 286' BWPB/ 80 MCFPD
Initial Formation: Grayburg From: 3737' To: 3879'

Completion Data:
4/19/00 thur 5/03/00

Pickle tbg & csg w/1000 gals 15% HCL.
Tag PBTB @ +/- 3926', attempt to log bottom, tool started logging @ 3852'. Logged to 3560', w/questional bond. MIRU BKR Atlas, run SBT/CBL/CCL, correlated to HLS GR/DSN/SDL, dated 3-14-00 f/3924' (WLTD)-2900'. RIH w/4" HSCG w/3 spf @ 120 deg., perf 3918'-23', 3911'-16'. RIH O/E to 3905'. Pickle tbg w/250 gals 15% HCL. Spot 300 gals 15% NEFE HCL f/3924'-3745'. Acidz perfs 3918'-23' & 3911'-16' w/total 1000 gals 15% NEFE HCL, set pkr @ 3847' & Swab. Rise pkr, POH & L/D tool. Set CIBP @ 3900', Perf w/4" HSCG w/3 SPF @ 120 deg., 3836'-38', 3846'-58', 3864'-76'. All shots fired. Acidz w/ total 1300 gals Acid. Set RBP @ 3842' & PKR @ 3793'. RIH w/117 jts 2-7/8" tbg, EOT @ 3747', Intake @ 3708'.

5-24-00 Run sub pump w/Top of Pump @ 3825', intake @ 3859' & Bottom of Pump @ 3896'.

Workover History:

Additional Data:
T/Rustler @ 1320'
T/Salado @ 1420'
T/Tansil @ 2560'
T/Yates @ 2782'
T/Seven Rivers @ 2976'
T/Queen @ 3412'
T/Penrose @ 3536'
T/Grayburg Zone 1 @ 3737'
T/Grayburg Zone 2 @ 3774'
T/Grayburg Zone 3 @ 3837'
T/Grayburg Zone 4 @ 3879'

FILE: EMSU709WB.xls
CJH: 3-8-2001

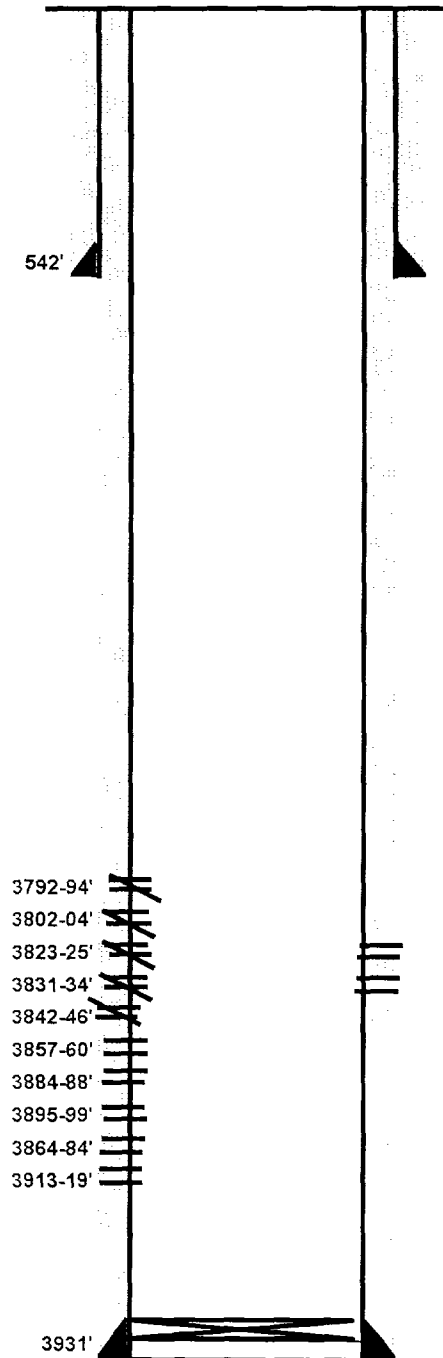
04/15/2002

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 710	FIELD: Eunice-Monument	API: 30-025-34825
LOC: 1170 FSL & 1425 FWL, Unit N	SEC: 10	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3573	CTY/ST: Lea Co., NM	SPUD: 01/25/2000
CURRENT STATUS: Producer	KB: 3579	DF: 3578	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 542' w/
350 SX cement
Cmt Circ.? Yes
(12-1/4" hole)

7", 20#/ft K-55 Csg.
set @ 3931' w/ 670 SX
Cmt Circ.? Yes
(8-3/4" hole)



CIBP @3925'

PBTD @ 3925'
TD @ 3931'

Date Completed: 04-20-2000
Initial Prod: 27 BOPD/ 1396 BWPD/ 81 MCFGPD
Initial Formation: Grayburg From: 3826 To: 3919
Completion Data:
Perf 3884-88, 3895-99, 3913-19. Set CIBP @ 3921'. Acidized 3913-19 w/ 300 gals. Acidized 3895-99 w 200 gals, 3884-88 with 200 gals. Perf 3792-94, 3802-04, 3823-25, 3831-34, 3842-46, 3857-60. acidized 800 gals using PIP. Swab 100% water. Sqz all perfs 150 sx. Drill out cmt to 3925'. Perf 3826-36, 3844-48, 3857-60, 3884-88, 3895-99, 3913-19. Acidize with PPI 3200 gals Swab 2% oilcut. Placed on pump.

Additional Data:
T/Queen Formation @ 3393'
T/Grayburg Zone 1 @ 3715'

3826-36'
3844-48'

04/19/2002

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WEL 711 FIELD: Eunice-Monument	API: 30-025-34850
LOC: 1310' FSL & 200' FEL, Unit P	SEC: 9 BLK: T21S, R36E	REF NO: BY6852
SVY: N.M.P.M.	GL: 3581' CTY/ST Lea / NM	SPUD: 04/11/2000
CURRENT STATUS: Oil Producer	KB: 3587' DF: 3586'	TD DATE: 04/16/2000

9-5/8", 36# K-55 STC Csg.
set @ 518' 300 sxs
w/65:35 POZ "C"
Tail w/150 sx "C" +Add
Cmt Circ? Yes (165 sx)
TOC @ surf. by circ.

12-1/4" Hole

518'

Tubing Detail 6-7-00	
Orig KB	6.00
119 Jts 2-7/8"	3725.21
7" TAC	2.35
3 Jts 2-7/8" TBG	93.94
1 Jt 3-1/2" IPC Tbg	31.63
2-3/4" Bottleneck Pump	29.62
2-7/8" Slotted MAJT	15.95
EOT	3904.60

Rod Detail: 6-7-00	
1-1/2" x26' Polish Rod	26
6'-8" x 7/8" Rod Subs	14
133-7/8" N-97 Rod	3325
20-1-1/2" wt Bars	500
	3865

Perfs:
3778'-91'
3812'-15'
3834'-36'
3848'-54'
3867'-70'
3891'-96'

7", 20# K-55 STC Csg.
set @ 3940' w/550 sxs "C"
N2 +Add., Tail w/125 sx "C"
+Add, Cap w/100 sxs "C" +Add
Cmt Circ? Yes (42 sx)
TOC @ surf. by circ.

PBTD @ 3916'
TD @ 3940'

Date Completed: 6/9/2000
Initial Prod: P 19 BOPD/ 370' BWPD/ 10 MCFPD
Initial Formation: Grayburg From: 3720' To: 3940'

Completion Data: 5/31/00 thur 6/7/00
Pickle tbg & csg w/1000 gals 15% HCL. Run SBT-CBL-CCL from 3916'-2900'. Tied into HLS GR-DSN-SDL. Good bond from 3370'-to TD. Perf w/3 JHPF w/4" csg guns, 120 deg @ 3778'-91', 3812'-15', 3834'-36', 3848'-54', 3867'-70', & 3891'-96'. WL TD @ 3916'. Set & tst Pkr. Acdz Perfs w/2400 gals 15% NEFE HCL. Run 2-7/8" tbg.

Workover History:

Additional Data:	
T/Rustler @	1362'
T/Salado @	1453'
T/Tansil @	2583'
T/Yates @	2785'
T/Seven Rivers @	2975'
T/Queen @	3396'
T/Penrose @	3526'
T/Grayburg Zone 1 @	3720'
T/Grayburg Zone 2 @	3758'
T/Grayburg Zone 2a @	3792'
T/Grayburg Zone 3 @	3818'
T/Grayburg Zone 4 @	3858'
T/Grayburg Zone 5 @	3911'

QN

PN

Z1

Z2

Z2a

Z3

Z4

Z5

TAC @ 3731'

FILE: EMSU711WB.xls
CJH: 3-20-2001

04/15/2002

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WEL 734 FIELD: Eunice-Monument	API: 30-025-34851
LOC: 225' FNL & 300' FWL, Unit D	SEC: 15 BLK: T21S, R36E	REF NO: BY5273
SVY: N.M.P.M.	GL: 3583' CTY/ST Lea / NM	SPUD: 03/23/2000
CURRENT STATUS: Oil Producer	KB: 3589' DF: 3588'	TD DATE: 03/29/2000

9-5/8", 36# K-55 STC Csg.
set @ 517' 200 sxs
w/35:65 POZ, Tail w/150
sx "C" + Additives
Cmt Circ? Yes (60 sx)
TOC @ surf. by circ.

12-1/4" Hole

517'

Tubing Detail 6-27-00
Orig KB 6.00
118 Jts 2-7/8", TAC, 4 Jts 2-7/8", 1 jt 2-7/8" IPC, 2-3/4" bottle neck pump.
EOT @ 3905'

Perfs:
3774'-79'
3818'-28'
3838'-46'
3855'-59'
3866'-69'
3880'-84'
3890'-95'

QN
PN
Z1
Z2
Z3
Z4
Z5

7", 20# K-55 STC Csg.
set @ 3940' w/650 sxs "C"
Tail w/125 sx Class "C",
Cap w/50 sxs Class "C"
Cmt Circ? Yes (117 sx)
TOC @ surf. by circ.

PBTD @ 3915'
TD @ 3940'

Date Completed: 5/23/00
Initial Prod: P 45 BOPD/ 850' BWPD/ 64 MCFPD
Initial Formation: Grayburg From: 3711' To: 3940'

Completion Data: 5/17/00 thru 5/23/00
GIH w/2-7/8" Tbg, Tag FC @ 3889'. PU pwr swivel & stripper head, Break Circ, DO FC, solid cmt to 3915'. Pickle tbg & csg w/1000 gals 15% NEHCL.
Run SBT-CBL-CCL from 3915'-3000' Tied into Halibuton, GR-DSN-SDL, 3-30-00. Good bond thru Pay. Perf w/4" csg guns, w/3 JHPF, 120 deg, @ 3774'-79', 3818'-28', 3838'-46', 3855'-59', 3866'-69', 3880'-84' & 3890'-95'. Loggers TD 3913'. Selectively Acdz Perfs w/2925 gals 15% NEFE HCL. Swab. Run 2-7/8" tbg. & Sub pmp. 6/27/00
POH L/D Sub Pump, RIH w/ tbg. EOT @ 3905'.

Workover History:

Additional Data:
T/Rustler @ 1372'
T/Salado @ 1463'
T/Tansil @ 2592'
T/Yates @ 2791'
T/Seven Rivers @ 2984'
T/Queen @ 3409'
T/Penrose @ 3533'
T/Grayburg Zone 1 @ 3711'
T/Grayburg Zone 2 @ 3743'
T/Grayburg Zone 3 @ 3808'
T/Grayburg Zone 4 @ 3849'
T/Grayburg Zone 5 @ 3898'

FILE: EMSU734WB.xls
CJH: 3-22-2001

WELL DATA SHEET

FIELD: Eunice Monument South Unit

WELL NAME: EMSU 735

FORMATION: Grayburg

LOC: 275' FNL & 1220' FWL
TOWNSHIP: 21S
RANGE: 36E

SEC: 15
COUNTY: Lea
STATE: NM

UNIT: D

GL: 3578'
KB: 3584'
DF to GL:

CURRENT STATUS: Producer
API NO: 30-025-34826
CHEVNO:

9-5/8", 36#, K-55, Surf. Pipe
set @ 514' w/ 300 SX cmt.
TOC @ Surf' by cap.
(12-1/4" hole)

Tubing Detail:

7", 20# & 23# , csg set @
3925' w/ 850 SX "C" w/
233 SCF N2/BBL & 125 SX "C"
Cap w/ 50 SX "C"
Cmt Circ.? Yes
TOC @ surf
(8-3/4" hole)

Rod Detail:

3784 - 94

3800 - 06

3826 - 28

3842 - 44

3851 - 71

FC @ 3875'

3916 - 22

PBTD @ 3921'
TD @ 3925'

Date Completed: 5-00

Initial Prod: 48 BOPD/ 1362 BWPD/ 89 MCF

Initial Formation: Grayburg From: 3784 To: 3922

OH Logs: HLS - GR-CSL-DLL-MSFL, GR-DSN-SDL, GR-MRIL

Cored from 3750 to 3925.

Completion Data:

2/00 - Run GR-SBT-CBL. Good Bond.
5/00 - DO FC to 3921. Pickle tbg & csg w/ 500 gal 15% HCl. Spot 500 gal 15% NEFE HCl. Perf w/ 3JSPF 3784 - 3794, 3800 - 3806, 3826 - 3828, 3842 - 3844, 3851 - 3871, 3916 - 3922. Acdz w/ 2200 gal 15% NEFE HCl dropping 175 RCNBS's. Swab 20% OC. Acdz w/ 2500 gal 15% NEFE HCl foamed to 50 Q w/ CO2 dropping 100 RCNBS's. Swab 15% OC. Run sub pump.

Workover History:

Additional Data:

T/Rustler @ 1334'
T/Salt @ 1426'
B/Salt @ 2573'
T/Yates @ 2775'
T/Seven Rivers @ 2968'
T/Queen Formation @ 3393'
T/Penrose Formation @ 3521'
T/Grayburg Zone 1 @ 3736'
T/Grayburg Zone 2 @ 3771'
T/Grayburg Zone 2A @ 3802'
T/Grayburg Zone 3 @ 3831'
T/Grayburg Zone 4 @ 3874'
T/Grayburg Zone 5 @ 3904'
T/Grayburg Zone 6 @ ~3953'
T/San Andres Formation @ ~3956'
KB @ 3584'

QN

PNR

Z1

Z2

Z2A

Z3

Z4

Z5

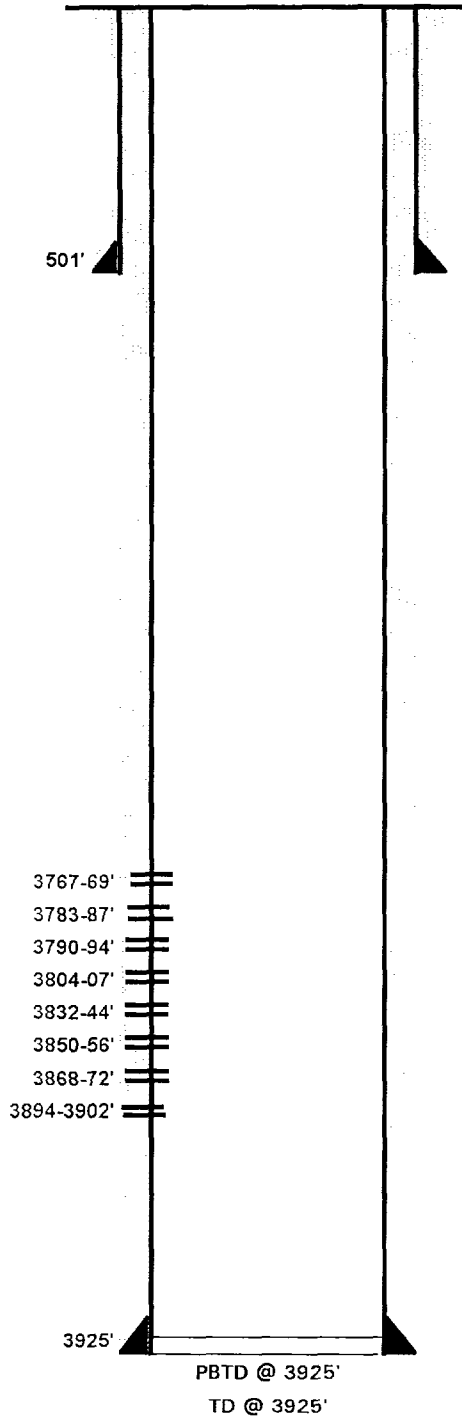
Z6

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 736	FIELD: Eunice-Monument	API: 30-025-34852
LOC: 2490 FEL & 208 FNL, Unit B	SEC: 15	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3564	CTY/ST: Lea Co., NM	SPUD: 03/15/2000
CURRENT STATUS: Producer	KB: 3570	DF:	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 501' w/
350 SX cement
Cmt Circ.? Yes
(12-1/4" hole)

7", 20#/ft K-55 Csg.
set @ 3924' w/ 750 SX
Cmt Circ.? Yes
(8-3/4" hole)



Date Completed: 6-13-2000
Initial Prod: 13 BOPD/ 446 BWPD/ 11 MCFGPD
Initial Formation: Grayburg From: 3767' To: 3902'
Completion Data:
Perf 3832-44, 3850-56, 3868-72, 3878-82, 3894-3902 Acidized 2500 gal 50% foam w
CO2. Swab 30% oilcut. Perf 3767-69, 3783-87, 3790-94, 3804-07. Stimulated with
straddle packer and 975 gals HCl. Swab 5% il cut. Placed well on pump.

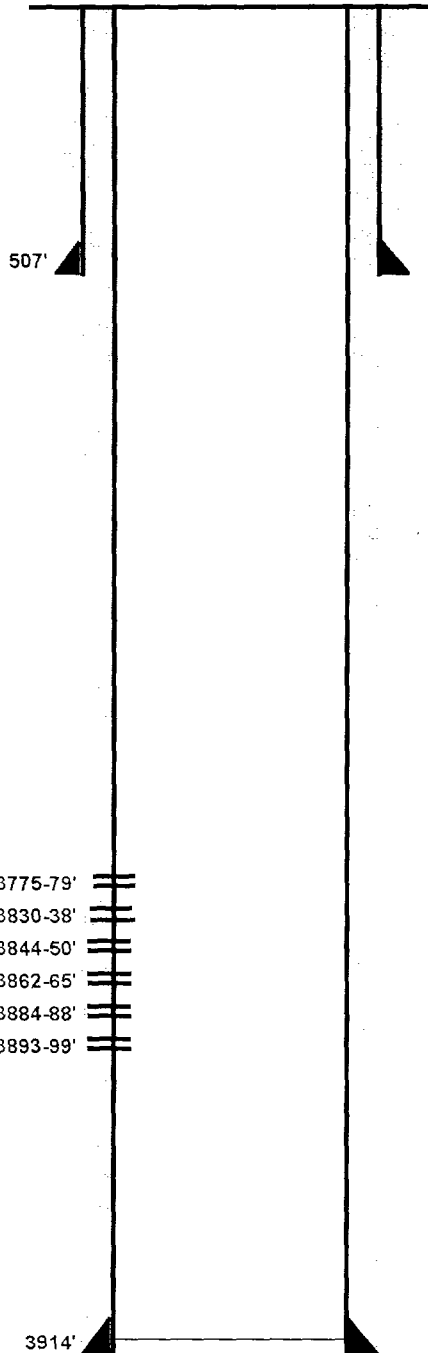
Additional Data:
T/Queen Formation @ 3410'
T/Grayburg Zone 1 @ 3733'

04/16/2002

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 737	FIELD: Eunice-Monument	API: 30-025-34853
LOC: 1420 FEL & 210 FNL, Unit B	SEC: 15	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3560	CTY/ST: Lea Co., NM	SPUD: 02/29/2000
CURRENT STATUS: Producer	KB: 3566	DF:	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 507' w/
350 SX cement
Cmt Circ.? Yes
(12-1/4" hole)



Date Completed: 7-9-2000
Initial Prod: 12 BOPD/ 740 BWPD/ 13 MCFGPD
Initial Formation: Grayburg From: 3775' To: 3899'
Completion Data:
Perf 3775-79, 3830-38, 3844-50, 3862-65, 3884-3888, 3893-99 Acidized 2000 gal w
ball sealers. Swab 10% oilcut. Place on pump.

Additional Data:
T/Queen Formation @ 3420'
T/Grayburg Zone 1 @ 3721'

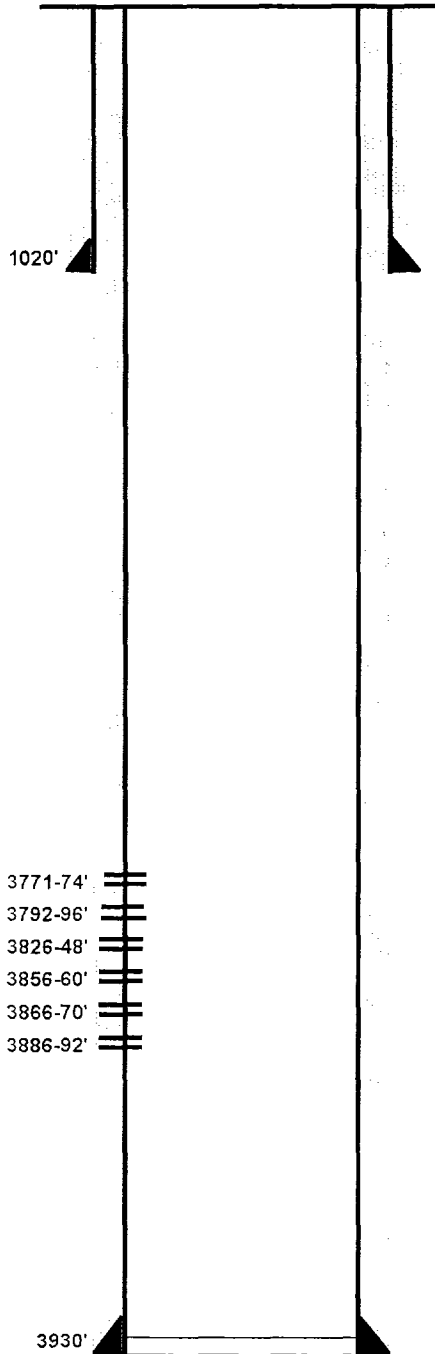
7", 20#/ft K-55 Csg.
set @ 3914' w/ 850 SX
Cmt Circ.? Yes
(8-3/4" hole)

04/16/2002

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 738	FIELD: Eunice-Monument	API: 30-025-35165
LOC: 100 FEL & 240 FSL, Unit P	SEC: 10	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3560	CTY/ST: Lea Co., NM	SPUD: 11/04/2000
CURRENT STATUS: Producer	KB: 3566	DF:	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 1020' w/
625 SX cement
Cmt Circ.? Yes
(12-1/4" hole)



Date Completed: 2-28-2001
Initial Prod: 28 BOPD/ 421 BWPD/ 6 MCFGPD
Initial Formation: Grayburg From: 3771' To: 3892'
Completion Data:
Perf 3771-74, 3792-96, 3826-48, 3856-60, 3866-70, 3886-3892 Acidized 4000 gal w 50
qual CO2. Swab 3% oilcut. Place on pump.

Additional Data:
T/Queen Formation @ 3418'
T/Grayburg Zone 1 @ 3718'

7", 20#/ft K-55 Csg.
set @ 3930' w/ 825 SX
Cmt Circ.? Yes
(8-3/4" hole)

PBTD @ 3914'
TD @ 3930'

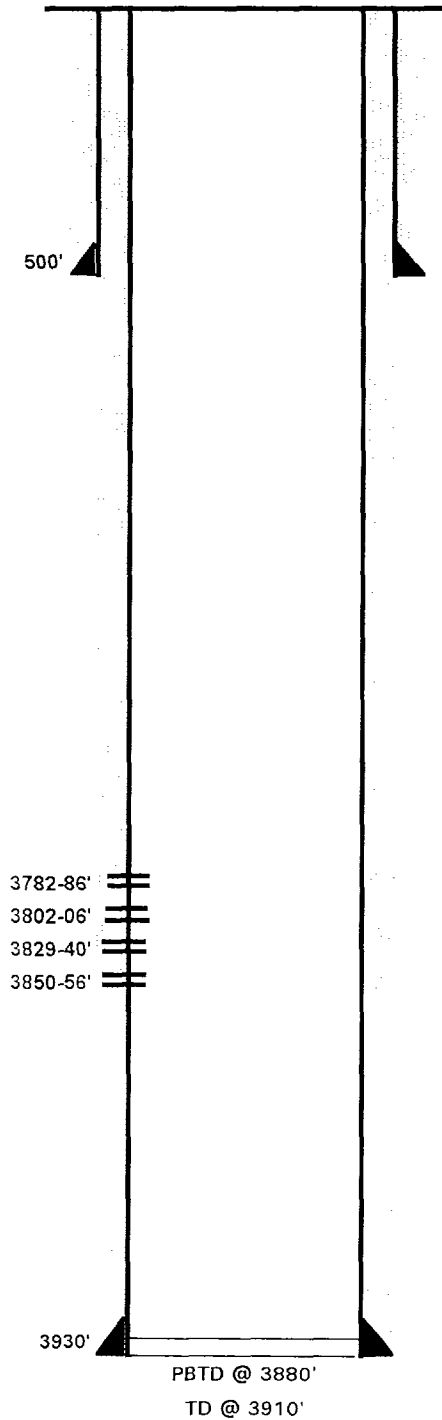
04/16/2002

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 739	FIELD: Eunice-Monument	API: 30-025-35458
LOC: 1400 FWL & 235 FSL, Unit N	SEC: 11	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3584	CTY/ST: Lea Co., NM	SPUD: 05/15/2001
CURRENT STATUS: Producer	KB: 3590	DF:	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 500' w/
350 SX cement
Cmt Circ.? Yes
(12-1/4" hole)

7", 20#/ft K-55 Csg.
set @ 3910' w/ 930 SX
Cmt Circ.? Yes
(8-3/4" hole)



Date Completed: 7-30-2001
Initial Prod: 4 BOPD/ 103 BWPD/ 2 MCFGPD
Initial Formation: Grayburg From: 3782' To: 3856'
Completion Data:
Perf 3782-86, 3802-06, 3829-40, 3850-56, Acidized 950 gal w ball sealers then acidized with 2200 gals 50 qual CO2. Swab 4% oilcut. Place on pump.

Additional Data:
T/Queen Formation @ 3420'
T/Grayburg Zone 1 @ 3715'

04/16/2002

CURRENT WELLBORE DIAGRAM

LEASE:	EMSU	WELL:	699	FIELD:	Eunice-Monument	API:	30-025-34215
LOC:	1262 FNL & 150 FEL, Unit H	SEC:	10	BLK:	T21S, R36E	REF NO:	BP7316
SVY:	N.M.P.M.	GL:	3580	CTY/ST	LEA, N.M.	SPUD:	02/23/1998
CURRENT STATUS:	Prod	KB:	3586	DF:		TD DATE:	7/31/98

9-5/8", 36#/ft, Surf.
Pipe set @ 533' w/ 300
SX cmt. TOC @ Surf' by
circ. 12-1/4" hole.

533'

Tubing Detail: 07/31/98

KBTH:	10.00'
111 Jts. 2-7/8" 6.5#:	3459.04'
2-7/8" X 7 TAC:	2.34'
2-7/8" Tbg 6.5# J-55 8RD Tbg	
	31.02'
3-1/2" J-55 8 RD Tbg	315.02'
2.25" Tbg Pmp w/ Stablzr	33.23'
2-7/8" Perf Sub	4.10'
3-1/2" BP MA JT	31.30'
Landed @	3886.10'

7", 23#/ft, csg set @
3731' w/ 835 sxs cmt.
TOC @ Surf' by circ.
8-3/4" hole.

3731'

OPEN HOLE

TD @ 3893'

PNRS

Z1

Z2

Z3

Z4

Date Completed: 3-1-98

Initial Prod: 14 BOPD/349 BWPD/6 MCFPD

Initial Formation: Pnrs/Grayburg From: 3506' To: 3686'

Completion Data:

Drill to 3790', circ & clean hole. Run 7" csg to 3731'.

Workover History:

7-27-98 Dump 4000# 20/40 sd down tbg. Acdz OH
fr 3770-3860 w/ 5,060 gal S-3000 Acid + additives, pump
70Q foamed 1% KCl down ann. Swb. C/O sand to 3899'.
Tag @ 3890'. Set TAC @ 3469'. EOT @ 3886'. RIH w/ prod
tbg and TOTP.

Additional Data:

T/Queen @ 3382'

T/Penrose @ 3506'

T/AGU @ N/A

T/Grayburg Zone 1 @ 3689'

T/Grayburg Zone 2 @ 3724'

T/Grayburg Zone 3 @ 3780'

T/Grayburg Zone 4 @ 3814'

Rod Detail: 07-31-98

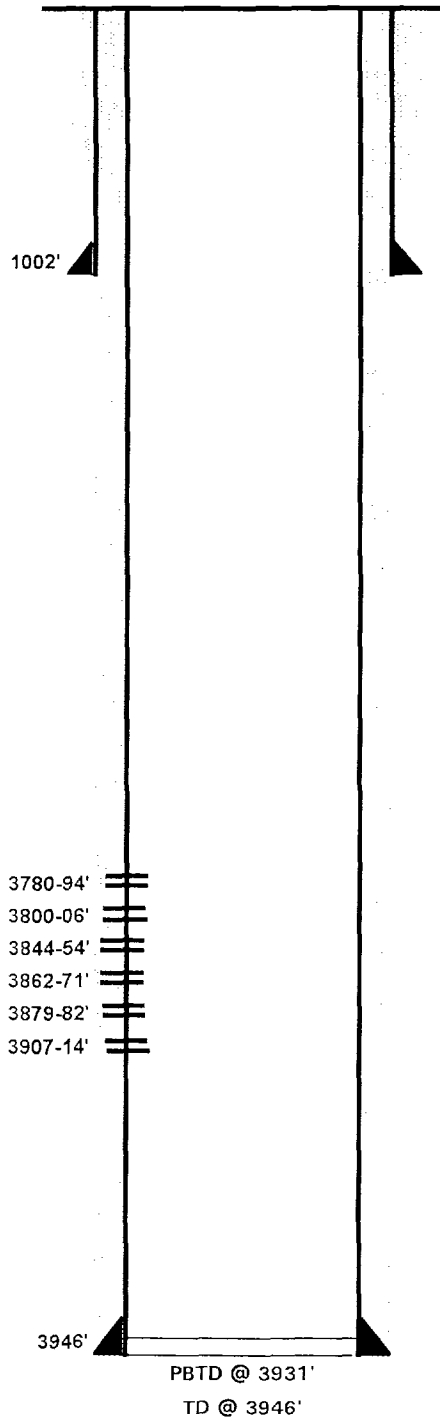
1 1-1/2" x 26' Polish Rod
2 7/8" N97 Pony (1-4' 1-2')
1 COROD (3555')
10 1-1/2" K-Bars (250')
2.250" Plunger (3')

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 747	FIELD: Eunice-Monument	API: 30-025-35167
LOC: 1310 FWL & 1200 FNL, Unit A	SEC: 15	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3572	CTY/ST: Lea Co., NM	SPUD: 11/15/2000
CURRENT STATUS: Producer	KB: 3578	DF:	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 1002' w/
550 SX cement
Cmt Circ.? Yes
(12-1/4" hole)

7", 20#/ft K-55 Csg.
set @ 3946' w/ 900 SX
Cmt Circ.? Yes
(8-3/4" hole)



Date Completed: 2-24-2001
Initial Prod: 30 BOPD/ 470 BWPD/ 4 MCFGPD
Initial Formation: Grayburg From: 3780' To: 3914'
Completion Data:
Perf 3780-94, 3800-06, 3844-54, 3862-71, 3879-82, 3907-14'. Acidized 1750 gal w ball sealers then acidized with 2500 gals 50 qual CO₂. Swab 10% oilcut. Place on pump.

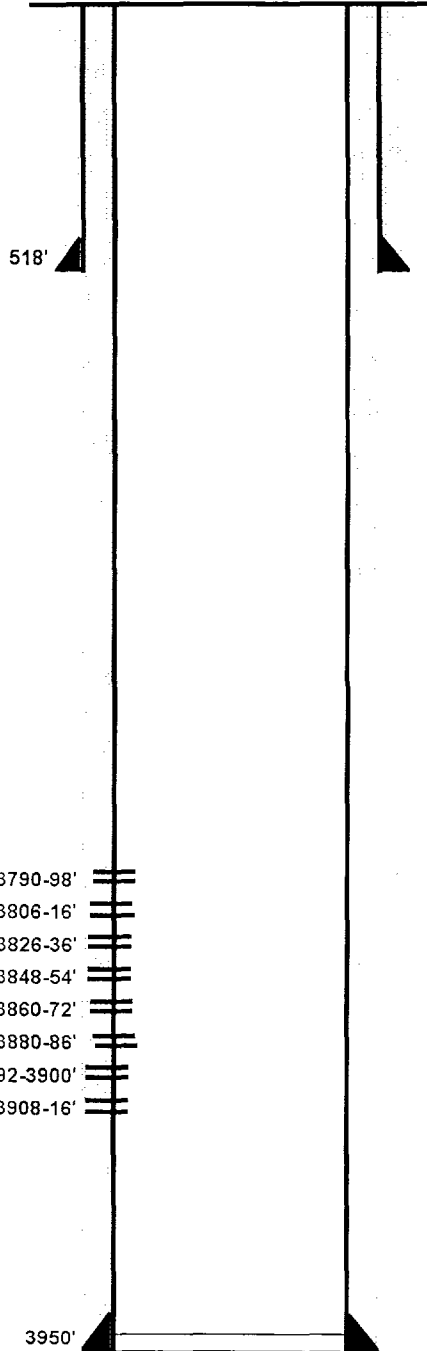
Additional Data:
T/Queen Formation @ 3420'
T/Grayburg Zone 1 @ 3732'

04/17/2002

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 748	FIELD: Eunice-Monument	API: 30-025-34632
LOC: 1510 FNL & 2543 FEL, Unit G	SEC: 15	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3572	CTY/ST: Lea Co., NM	SPUD: 07/02/1999
CURRENT STATUS: Producer	KB: 3578	DF:	TD DATE:

8-5/8", 24#/ft
Surf. Pipe set @ 518' w/
350 SX cement
Cmt Circ.? Yes
(11" hole)



Date Completed: 8-31-1999
Initial Prod: 90 BOPD/ 963 BWPD/ 42 MCFGPD
Initial Formation: Grayburg From: 3790' To: 3916'
Completion Data:
Perf 3790-98, 3806-16, 3826-36, 3848-54, 3860-72, 3880-86, 3892-3900, 3908-16'.
Acidized 2500 gal w ball sealers then acidized with 6000 gals 50 qual CO2. Swab 20% oilcut. Place on pump.

Additional Data:
T/Queen Formation @ ~~3420~~ 3426'
T/Grayburg Zone 1 @ ~~3702~~ 3742'

5.5", 15.5#/ft K-55 Csg.
set @ 3950' w/ 725 SX
Cmt Circ.? Yes
(7-7/8" hole)

3790-98'
3806-16'
3826-36'
3848-54'
3860-72'
3880-86'
3892-3900'
3908-16'

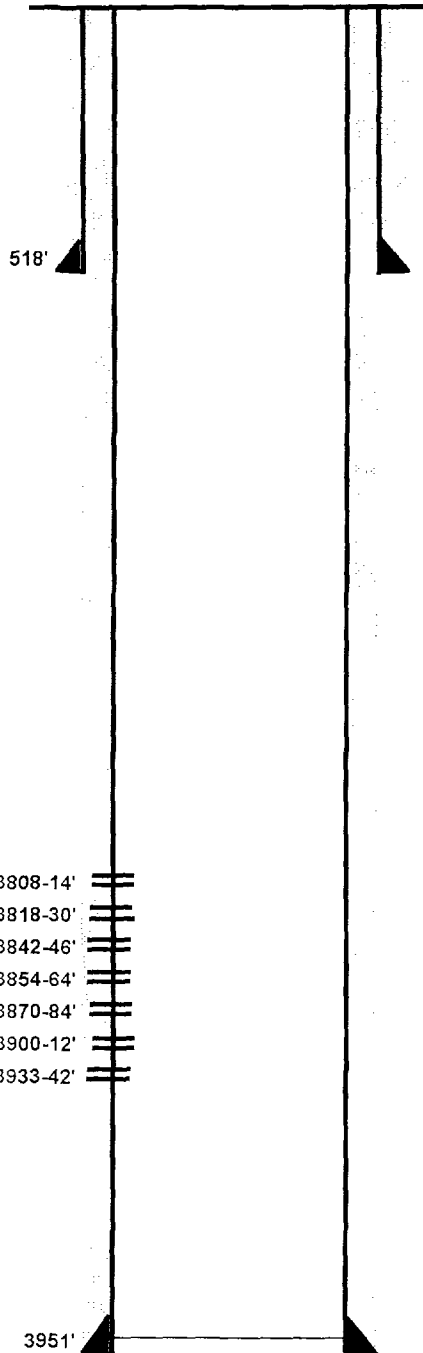
3950'
PBTD @ 3950'
TD @ 3950'

04/17/2002

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 749	FIELD: Eunice-Monument	API: 30-025-34641
LOC: 1205 FNL & 1330 FWL, Unit C	SEC: 15	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3580	CTY/ST: Lea Co., NM	SPUD: 06/23/1999
CURRENT STATUS: Producer	KB: 3591	DF:	TD DATE:

8-5/8", 24#/ft
Surf. Pipe set @ 528' w/
350 SX cement
Cmt Circ.? Yes
(11" hole)



5.5", 15.5#/ft K-55 Csg.
set @ 3951' w/ 850 SX
Cmt Circ.? Yes
(7-7/8" hole)

PBTD @ 3951'
TD @ 3951'

Date Completed: 8-29-1999
Initial Prod: 71 BOPD/ 597 BWPD/ 24 MCFGPD
Initial Formation: Grayburg From: 3908' To: 3942'
Completion Data:
Perf 3808-14, 3818-30, 3842-46, 3854-64, 3870-84, 3900-12, 3933-42'. Acidized 2500 gal w ball sealers then acidized with 6000 gals 50 qual CO2. Swab 10% oilcut. Place on pump.

Additional Data:
T/Queen Formation @ 3423'
T/Grayburg Zone 1 @ 3752'

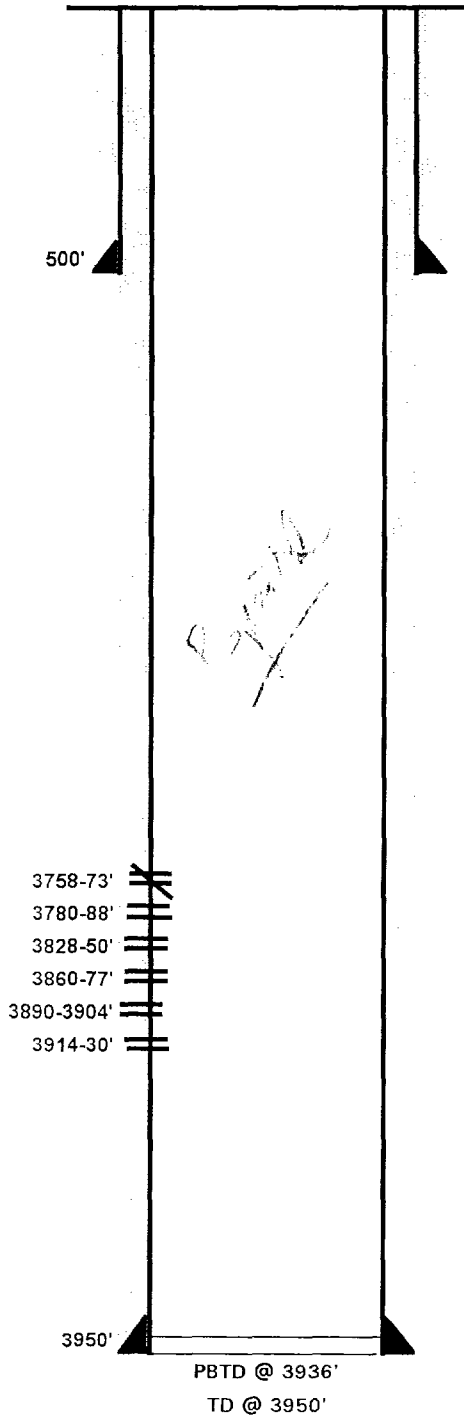
04/17/2002

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 750	FIELD: Eunice-Monument	API: 30-025-35168
LOC: 1420 FNL & 200 FEL, Unit H	SEC: 16	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3567	CTY/ST: Lea Co., NM	SPUD: 11/30/2000
CURRENT STATUS: Producer	KB: 3573	DF:	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 500' w/
350 SX cement
Cmt Circ.? Yes
(12-1/4" hole)

7", 20#/ft K-55 Csg.
set @ 3950' w/ 1100 SX
Cmt Circ.? Yes
(8-3/4" hole)



Date Completed: 1-30-2001
Initial Prod: 27 BOPD/ 1547 BWPD/ 12 MCFGPD
Initial Formation: Grayburg From: 3758' To: 3930'
Completion Data:
Perf 3758-73, 3780-88, 3828-50, 3860-77, 3790-3904, 3914-30. Acidized 2750 gal w ball sealers then acidized with 4500 gals 50 qual CO2. Swab 5% oilcut. Place on pump.

2/2001 Sqz perms 3758-73. Acidized perms 3828-3930 w/ 3650 gals swab 25% oilcut. Place on pump. Test prior 15 BOPD 1769 BWPD Test after 104 BOPD 526 BWPD.

Additional Data:
T/Queen Formation @ 3418'
T/Grayburg Zone 1 @ 3711'

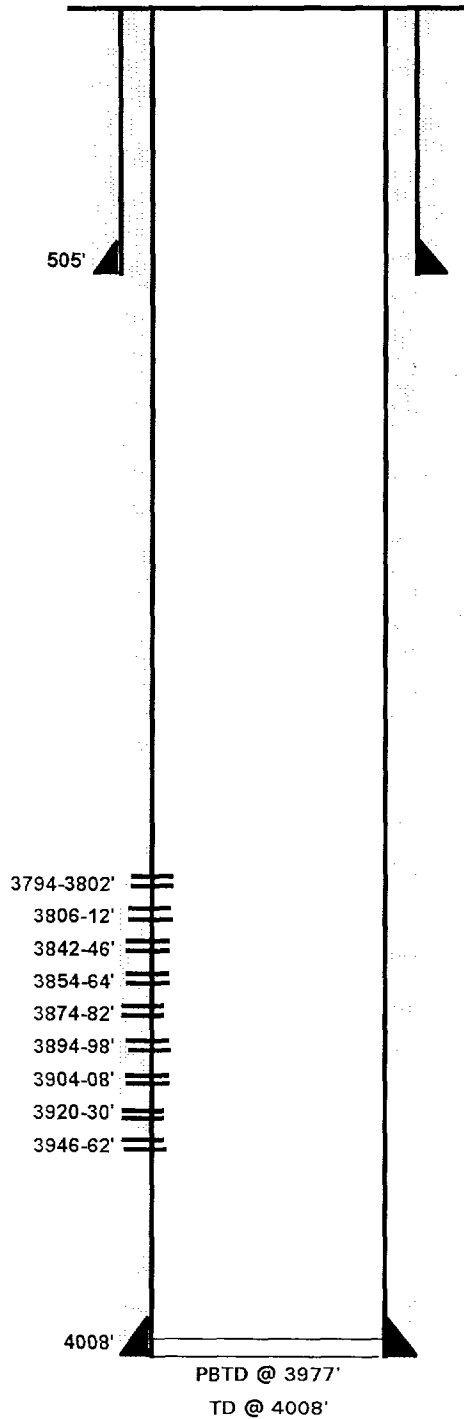
04/17/2002

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 774	FIELD: Eunice-Monument	API: 30-025-35166
LOC: 2630 FNL & 1330 FWL, Unit F	SEC: 15	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3580	CTY/ST: Lea Co., NM	SPUD: 10/03/2000
CURRENT STATUS: Producer	KB: 3586	DF: 3585	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 505' w/
350 SX cement
Cmt Circ.? Yes
(12-1/4" hole)

7", 20#/ft K-55 Csg.
set @ 4008' w/ 1075 SX
Cmt Circ.? Yes
(8-3/4" hole)



Date Completed: 11-10-2000
Initial Prod: 52 BOPD/ 1600 BWPD/ 16 MCFGPD
Initial Formation: Grayburg From: 3794' To: 3962'
Completion Data:
Perf 3946-62 acid 1000 gal. Swab 8% oil cut. Perf 3794-3802, 3806-12, 3842-46, 3854-64, 3874-82, 3894-98, 3904-08 and 3920-30. Acidized 2500 gal w ball sealers then acidized with 3500 gals 50 qual CO2. Swab 5% oilcut. Place on pump.

Additional Data:
T/Queen Formation @ 3430'
T/Grayburg Zone 1 @ 3750'

04/18/2002

Well: **EMSU 775****EUNICE**

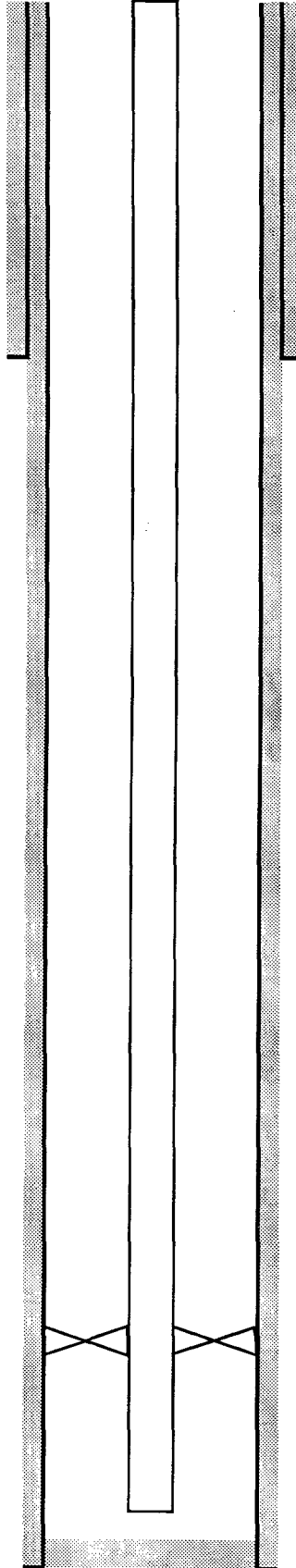
Reservoir:

Location: 2630' FSL
 2558' FEL
 Section: 15
 Block: 21S
 Survey: 36E
 County: LEA, NM

Elevations:

GL: 3570'
 DF: 3575'
 KB: 3576'

Current
Wellbore Diagram

**Well ID Info:**

Refno:
 API No: 30-025-
 L5/L6:
 Spud Date:
 Compl. Date: 07/03/2001

Surf. Csg: 9 5/8"
 36#
 k-55
Set: @ 1003'
With: 525 sxs
Hole Size: 12 1/4"
Circ: YES
TOC @ SURF

Perfs:	Status
3810'-18'	ACTIVE
3830-34'	"
3847'-58'	"
3858-74	"
3886-90	"
3896-3900	"
3912-18	"

Tbg Detail:

KB	6.00
123 JTS 2 7/8"	3765.46
TAC	2.75
3 JTS 2 7/8"	93.17
1 JT 2 7/8" IPC	31.10
SN	1.10
SLOTTED MAJT	15.80
EOT	3915.38

ROD DETAIL:

1 1/2" POLISH ROD	26
7/8" ROD SUB	6
146 - 7/8" KD RODS	3650
8 - 1 1/2" WT BARS	200
2 1/2"X2"X24' PROD PUMP	24
	3906

Prod. Csg: 7
 20
 K-55
Set @ 3,950 '
With: 935 SXS
Hole Size: 8 3/4"
Circ:
TOC @ SURF

COTD:
PBTD: 3,935 '
TD: 3,950 '

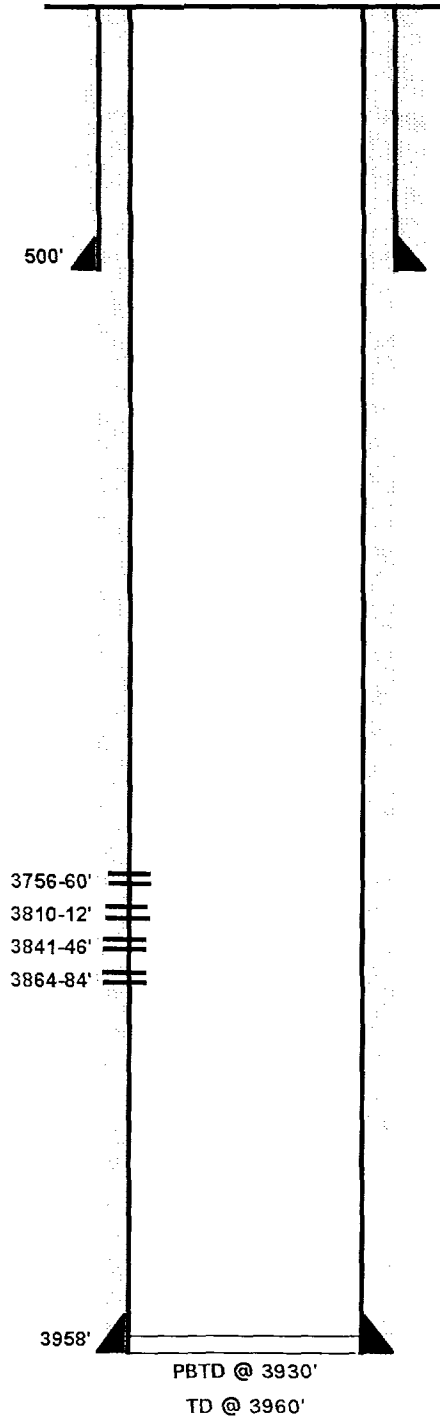
Updated: 21-Jun-01
By: DL LOVELL

CURRENT WELLBORE DIAGRAM

LEASE: EMSU	WELL: 776	FIELD: Eunice-Monument	API: 30-025-35460
LOC: 2610 FNL & 1310 FEL, Unit H	SEC: 15	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3570	CTY/ST: Lea Co., NM	SPUD: 05/07/2001
CURRENT STATUS: Producer	KB: 3576	DF: 3575	TD DATE:

9-5/8", 36#/ft
Surf. Pipe set @ 500' w/
350 SX cement
Cmt Circ.? Yes
(12-1/4" hole)

7", 20#/ft K-55 Csg.
set @ 3958' w/ 1050 SX
Cmt Circ.? Yes
(8-3/4" hole)



Date Completed: 06-30-2001
Initial Prod: 30 BOPD/ 1193 BWPD/ 7 MCFGPD
Initial Formation: Grayburg From: 3756 To: 3884
Completion Data:
Perf 3756-60, 3810-12, 3841-46, 3864-84 . Acidized w/ 1250 gals w ball sealers.
Acidized again with 2200 gals foamed 50Q CO2. Swab 2 % oilcut. Place on pump.

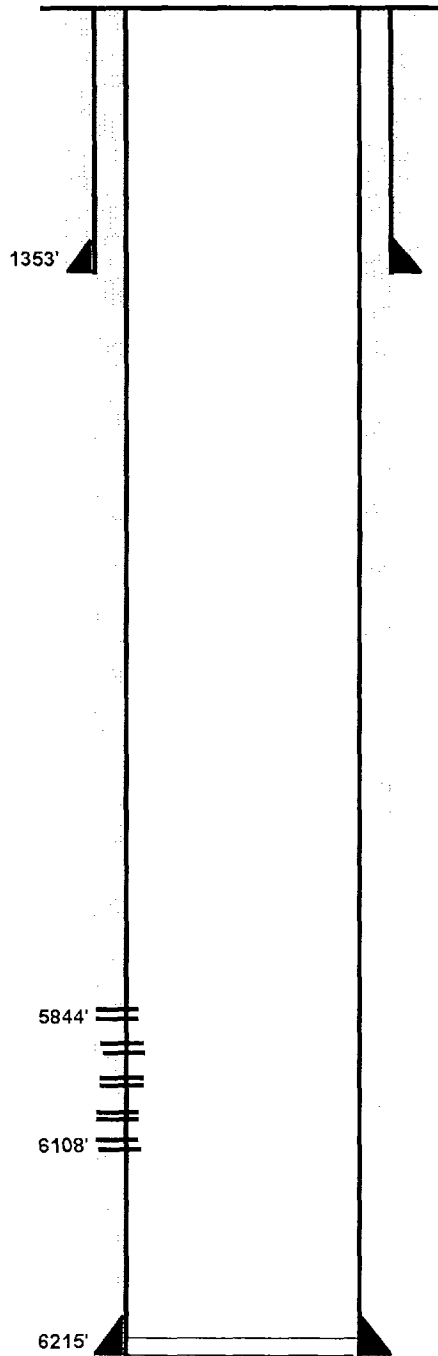
Additional Data:
T/Queen Formation @ 3449'
T/Grayburg Zone 1 @ 3754'

04/18/2002

CURRENT WELLBORE DIAGRAM

LEASE: JD KNOX	WELL: 14	FIELD: OIL CENTER	API: 30-025-33778
LOC: 2337 FSL & 1543 FEL	SEC: 10	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3591	CTY/ST: Lea Co., NM	SPUD: 01/01/1998
CURRENT STATUS: Producer	KB: 3606	DF:	TD DATE:

8-5/8",
Surf. Pipe set @ 1350' w/
800 SX cement
TOC 0' (est.)
12.25" hole



5.5" Csg.
set @ 6215' w/ 1200 SX
TOC 0' (est.)
7.785" hole

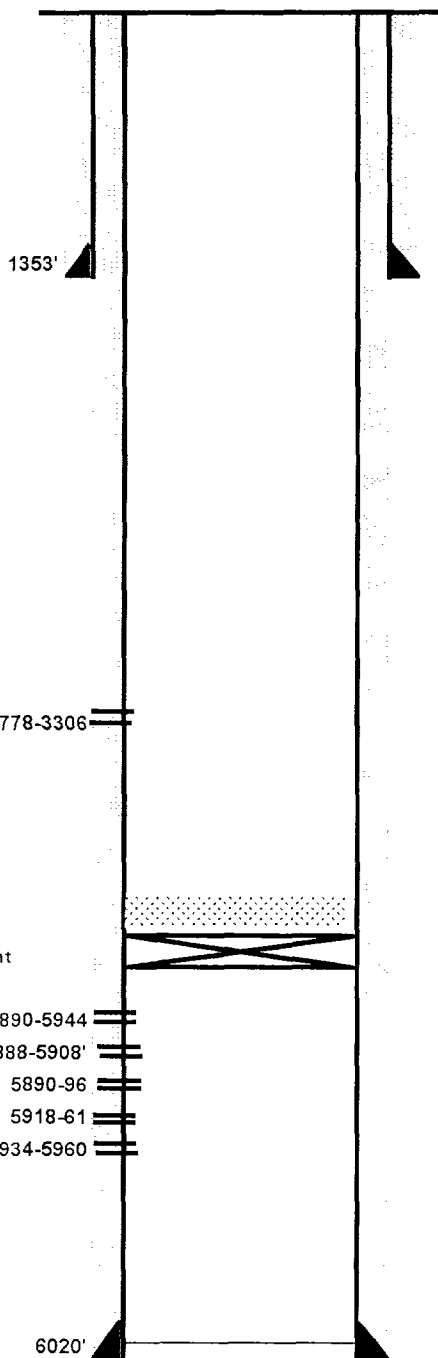
Date Completed: 04-30-1999
Initial Prod: Water injection well
Initial Formation: Blinbery From: 5884' To: 6108'

04/30/2002

CURRENT WELLBORE DIAGRAM

LEASE: JD KNOX	WELL: 12	FIELD: EUMONT	API: 30-025-20706
LOC: 990 FSL & 1652 FEL	SEC: 10	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL:	CTY/ST: Lea Co., NM	SPUD: 03/27/1964
CURRENT STATUS: Producer	KB: 3583	DF:	TD DATE:

7-5/8",
Surf. Pipe set @ 1353' w/
450 SX cement
TOC @ 0' (EST)
9.875" HOLE



4.5" Csg.
set @ 6020' w/ 525 SX
TOC @ 2650' (EST)
6.75" HOLE

CIBP @ 5838' w / 3.5 sx cmt

5890-5944
5888-5908
5890-96
5918-61
5934-5960

6020'

PBTD @ 5803'
TD @ 6020'

Date Completed: 06-24-1964

Initial Prod: 122 BOPD/ 43 BWPD 103 MCFGPD
Initial Formation: Blinbery From: 5890' To: 5896'
Workover Data:

11/11/1983
Perf 5890-5944 acid 3600 gals

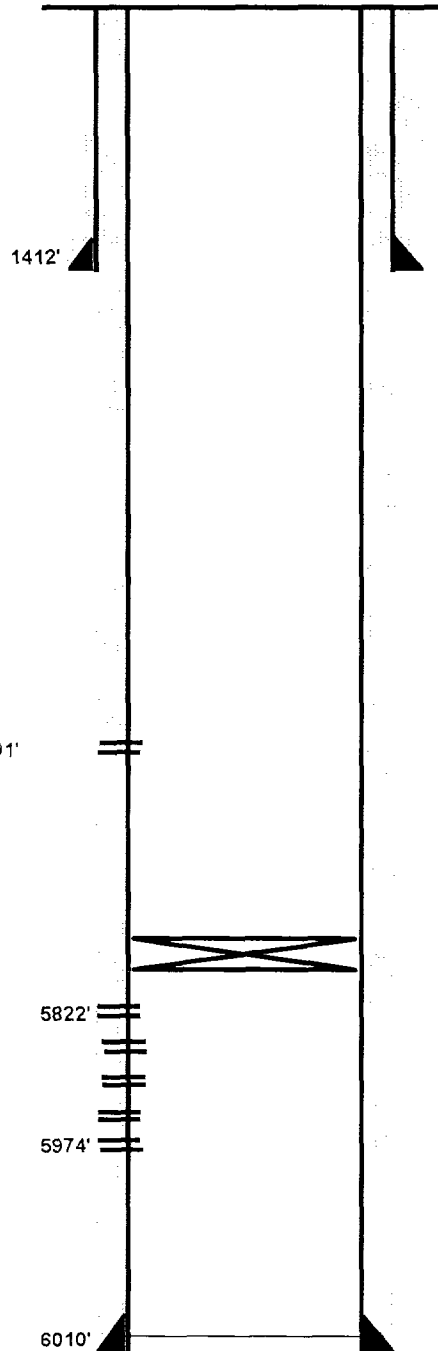
11/28/1995
Perf 2778-3306 flowed 754 MCFD from Yates

04/30/2002

CURRENT WELLBORE DIAGRAM

LEASE: AJ ADKINS	WELL: 10	FIELD: EUMONT	API: 30-025-20702
LOC: 990 FSL & 990 FWL	SEC: 10	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL:	CTY/ST: Lea Co., NM	SPUD: 10/16/1964
CURRENT STATUS: Producer	KB: 3585	DF:	TD DATE:

7-5/8",
Surf. Pipe set @ 1412' w/
475 SX cement
TOC 0' EST
9.875' HOLE



4.5" Csg.
set @ 6010' w/ 600 SX
TOC 2750' (EST)
6.75" HOLE

3319'-3591'

CIBP @ 5800'

5822'

5974'

6010'

PBTD @ 5800'

TD @ 6010'

Date Completed: 12-23-1964

Initial Prod: 42 BOPD 42 BWPD 25 MCFD

Initial Formation: GLORIETA

Workover

6/7/1992 Perf Queen 3397-3591 F 511 MCFG

04/30/2002



WELL DATA SHEET

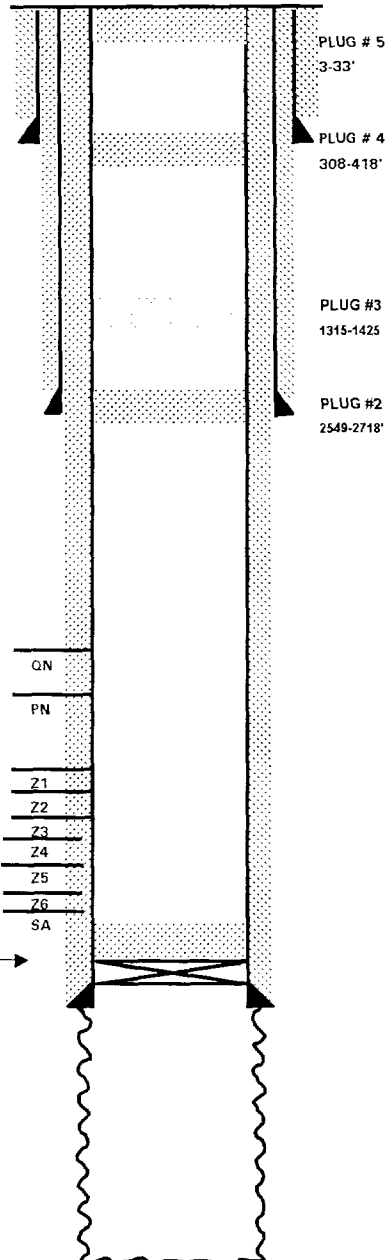
LEASE: EMSU
LOC: 1540' F S L & 1305' F E L
TOWNSHIP: 21S
RANGE: 36E UNIT:
WELL: 461-WSW
SEC: 9
CNTY: Lea
ST: N.M.

FORM: Grayburg / San Andres
GL: 3584'
KB: 3602'
DF: 3601'
DATE: 06/08/1986
STATUS: SI Water Supply
API NO: 30-025-29621
CHEVNO: FW 6272

Date Completed: 06/08/1986
Initial Production: flwd 750 BW in 1-3/4 hrs.
Initial Formation: Grayburg
FROM: 4200 to 5000'

16" OD
65# CSG H-40
Set @ 368' W/ 500 SX
Cmt circ.? Yes
TOC @ surf. by

11-3/4" OD
47# CSG K-55
Set @ 2668' W/ 1000 SX
Cmt circ.? Yes
TOC @ surf. by TS



8-5/8" OD
32# CSG K-55
Set @ 4200' W/ 700 SX
Cmt circ.? Yes
TOC @ surf. by

PBD:
TD: 5000'

FILE: EMSU461WB.XLS

Completion Data

5/24/1986 Drill to 3745'. Core 3745'-3926' w/ 6 core barrels. Drill 3926'-4200'. Log Schl. LDT-CNL-EPT, DLL-MSFL, & RFT (logger TD @ 4202'. Run 8-5/8" csg. DO cmt. Drill 4200'-5000'. Lost 800 bbls wtr 4610'-4643'. Well flowed approx 100 BW & died. RTBP set @ 4001' & circ 240 BW w/ corr inhib on top of plug.
10/13/1986 Rec RBP & set fullbore pkr @ 4035'. Swb Rec 95 BW in 12 runs in 3 hrs. SFL @ 1100', FER 31.6 BPH. Swb SION Rec 60 BW in 8 runs in 2.5 hrs; SFL & EFL @ 1200', FER 24 BPH. Rel pkr & RIH w/ submersible pmp. Well tubed to 2553', pmp intake @ 2511'. Test well Rec 750 BW in 1-3/4 hrs (12,000 BWPD). FL @ 1470' /10 min shut dn; @ 1344' / 20 min shut dn. Turn over to Prod.

Subsequent Workover or Reconditioning:

2/13/1987 Pmp would not start. Run Gearhart logs FDC-CNL-GR 4000'-5011' (logr TD). Repair & RIH w/ pmp. SFL @ 1050', 10 min FL @ 1150' FS, 25 min FL @ 1200' FS, 45 min FL @ 1200' FS. Well flwg @ approx 16,000 bbl/ day.
7/12/1988 Bad seal, motor and bad spots on cable approx 800- 1000' f/ pmp. TIH w/ new PE. Centralift 2200 v, 79 amp, KME 300 hp mtr, equalizer, 34 stg pmp, & drain vlv. Fluid to surf in 30 sec. Initial rate 23,700 BPD w/ 80 psi tbg press. Ck dn to 14,000 BPD w/ 220 psi tp. Amps:62 in bal, volts: 2260. 7/16 Pmp rate 13,400 BPD w/220 psi tp.
10/3/1988 Repair sub pmp. Hole in last jt 4-1/2" csg. "Corrosion" under mtr flat. Pmp stuck. XO pmp & seal. Ran same mtr. Pmp 68 amps. Rate 14,800 BWPD.
6/15/1989 Splice to mtr flat blown. Pmp & mtr OK. GIH w/ mtrs, new seal, & pmp. XO 30 jts 4-1/2" csg because of corrosion pits. Starting amps 66 @ 14,200 BWPD..
10/6/1989 Mini-mandrel burned along w/ lower pigtail. Replaced. Ppg 12,600 BPD @ 71 amps.
6/2001 Set CIBP at 4160' /Test failed MIT
11/2001 P&A set Bentonite plugs

Additional Data:

T/Queen Formation @ 3427'
T/Penrose Formation @ 3558'
T/Grayburg Zone 1 @ 3749'
T/Grayburg Zone 2 @ 3783'
T/Grayburg Zone 3 @ 3844'
T/Grayburg Zone 4 @ 3882'
T/Grayburg Zone 5 @ 3936'
T/Grayburg Zone 6 @ 3992'
T/San Andres Formation @ 4002'
KB @ 3602'

CURRENT WELLBORE DIAGRAM

LEASE: JD KNOX	WELL: 2	FIELD: EUNICE MON	API: 30-025-04596
LOC: 660 FSL & 1980 FEL	SEC: 10	BLK: T21S, R36E	REF NO:
SVY: N.M.P.M.	GL: 3563	CTY/ST: Lea Co., NM	SPUD: 06/07/1936
CURRENT STATUS: P&A	KB: 3578	DF: 3577	TD DATE:

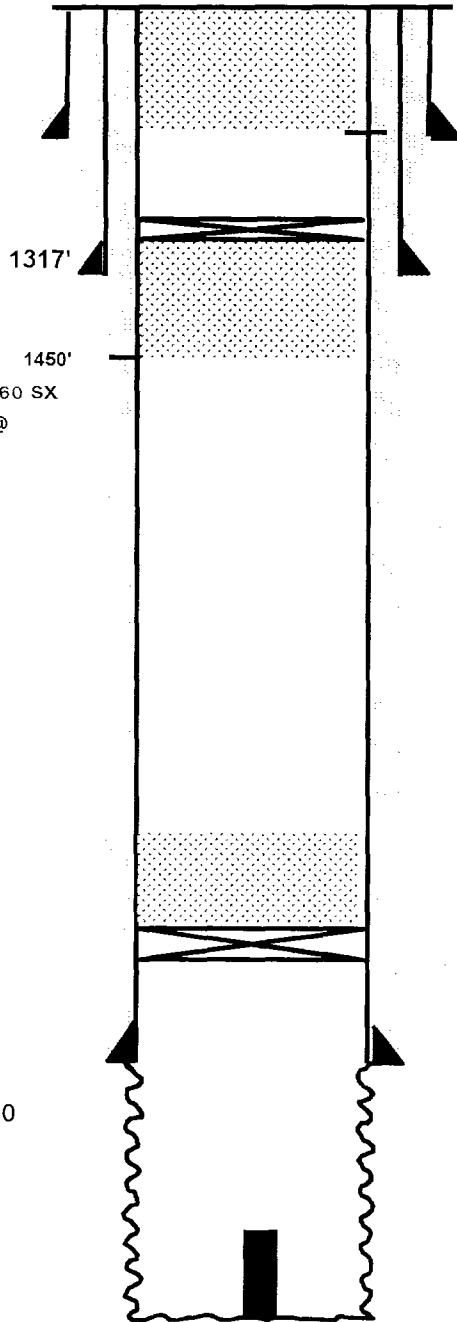
10-3/4", 33.75#
Surf. Pipe set @ 220' w/
110 SX cement
TOC @ 0' (EST)
15.75" HOLE

7-5/8", 26.4#
Int. Pipe set @
400 SX cement
TOC @ 0' (EST)
9-7/8" HOLE
1317'
1450'
PERF 1450' SQZ 60 SX
THRU CMT RET @
1195'

5.5" Csg.
set @ 3748' w/ 150 SX
TOC @ 2150' (EST)
6.75" HOLE

CIBP @ 3700'
w / 25 sx cmt on top

OPEN HOLE 3748-3860



Perf @ 100' circ cmt to surface

Initial completion
06/28/1936
Plugged and Abandoned
10/16/1987

Junk in hole - HOMCO center shear assembly
and 1 jt of tubing @3791'

TD @3860'

05/01/2002

CURRENT WELLBORE DIAGRAM

LEASE:	JD KNOX	WELL:	5	FIELD:	EUNICE MON	API:	30-025-04599
LOC:	660 FSL & 660 FEL	SEC:	10	BLK:	T21S, R36E	REF NO:	
SVY:	N.M.P.M.	GL:		CTY/ST	Lea Co., NM	SPUD:	09/06/1936
CURRENT STATUS:	TA	KB:	3595	DF:		TD DATE:	

10-3/4",
Surf. Pipe set @ 201' w/
100 SX cement
TOC @ 0'
15" HOLE

7-5/8", 26.4#
Int.Pipe set @
400 SX cement
TOC @ 0' (EST)
9-7/8" HOLE

Initial completion
09/27/1936
Temporarily Abandoned
07/10/1984

sqz holes in 5.5" casing 2670-2730 thru
cmt retainer at 2620'

5.5" Csg.
set @ 3762' w/ 100 SX
TOC @ 2813' (EST)
6.75" HOLE

CIBP @ 3750'
w /35' cmt on top

OPEN HOLE 3762-3885

TD @3885'

05/01/2002

Chevron U.S.A. Production Company
Kevin Hickey
New Mexico Waterflood
Petroleum Engineer
15 Smith Road
Midland, Texas 79705

ChevronTexaco

August 22, 2002

**REQUEST TO PUBLISH
LEGAL NOTICE**

Hobbs News-Sun
201 N. Thorp
Hobbs, NM 88240

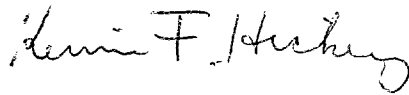
Attention: Classified Department

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 Kevin Hickey. 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 Kevin Hickey at (915) 687-7260.

Sincerely,



Kevin Hickey

KFH
Attachment

Legal Notice
(8/22/2002)

Chevron U.S.A. Production Co. has applied to Oil Conservation Division of the State of New Mexico for approval to convert the EMSU #343, #345, #347, #357 and #359 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: #343 – Section 10, Unit M, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #345 – Section 10, Unit O, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #347 – Section 11, Unit M, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #357 – Section 15, Unit A, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #359 – Section 15, Unit C, 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 Kevin F. Hickey, ChevronTexaco Inc., 15 Smith Road, Midland, TX 79705, phone (915) 687-7260.

Interested Parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, NM 87505, within 15 days of this notice.

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

August 28 2002

and ending with the issue dated

August 28 2002

Kathi Bearden

Publisher

Sworn and subscribed to before

me this 28th day of

August 2002

Jodi Benson

Notary Public.

My Commission expires
October 18, 2004
(Seal)

This newspaper is duly qualified
to publish legal notices or adver-
tisements within the meaning of
Section 3, Chapter 167, Laws of
1937, and payment of fees for
said publication has been made.

LEGAL NOTICE

August 28, 2002

Chevron U.S.A. Production Co. has applied to Oil Conser-
vation Division of the Sate of New Mexico for approval to
convert the EMSU #343, #345, #347, #357 and #359 to in-
jection in their Eunice Monument South Unit. These wells
are designed to improve recovery efficiency of the water-
flood patterns and enhance production of the EMSU sec-
ondary recovery project. The wells are located in the fol-
lowing locations: #343-Section 10, Unit M, Township 21
South, Range 36 East, NMPM, Lea County, New Mexico;
#345 Section 10, Unit O, Township 21 South, Range 36
East, NMPM, Lea County, New Mexico, #347- Section 11,
Unit M, Township 21 South, Range 36 East, NMPM, Lea
County, New Mexico; #357- Section 15, Unit A, Township
21 South, Range 36 East, NMPM, Lea County, New Mexi-
co; #359 - Section 15, Unit C, Township 21 South, Range
36 East, NMPM, Lea County New Mexico. Water will be in-
jected into the unitized interval of the Eunice Monument
Grayburg-San Andres Pool which has an upper limit of 100
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pected maximum pressure of 750 pounds per square inch.
Persons wanting to contact Chevron U.S.A. should direct
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Smith Road, Midland, TX 79705, phone (915)687-7260.
Interested Parties must file objections or requests for hear-
ing with the Oil Conservation Division, 1220 South St.
Francis Drive, Santa Fe, NM 87505, within 15 days of this
notice.

#19204

01102480000 67509205

Chevron Texaco
15 Smith Road
MIDLAND, TX 79705

Chevron U.S.A. Production Company
Kevin Hickey
New Mexico Waterflood
Petroleum Engineer
15 Smith Road
Midland, Texas 79705

ChevronTexaco

August 22, 2002

EMSU #343, #345, #347, #357 & #359
CONVERSIONS TO INJECTION
EUNICE MONUMENT SOUTH UNIT
EUNICE MONUMENT OIL POOL
LEA COUNTY, NEW MEXICO

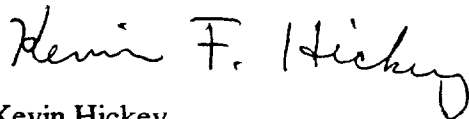
Attention: Offset Operator

Gentlemen:

Chevron U.S.A. Production Co., as operator of the Eunice Monument South Unit, has filed an application with the New Mexico Oil Conservation Division to convert the EMSU #343, #345, #347, #357 & #359 to injection. These conversions are designed to improve recovery efficiency of the waterflood patterns and enhance production of the EMSU secondary recovery project.

Attached is an OCD Form C-108 with information relative to the water injection conversion of the referenced wells. Also, a copy of the legal notice to be posted in the Hobbs News-Sun is included. If further information is required please contact me at (915) 687-7260.

Sincerely,



Kevin Hickey
Petroleum Engineer
New Mexico Area

KFH
Attachments

**EMSU #343, #345, #347, #357 & #359
Conversion to Injection
Eunice Monument South Unit
Lea County, NM**

Offset Operators

ChevronTexaco (operator)
15 Smith Rd.
Midland, TX 79705

David H. Arrington Oil & Gas Inc.
200 W. Texas
Midland, TX 79701

John H. Trescott, Jr.
A Ways Away
East Palatka, FL 32131

W. W. Gay
524 Stockton Street
Jacksonville, FL 32204

William E. & Connie Revels
9000 Cow Pen Branch Road
Hastings, FL 32145

Jake Petty
P. O. Box 286
Clyde, TX 79510

Alex Crabtree
P. O. Box 421953
Del Rio, TX 78842

JB Investments
James Boldrick
1801 W. Wall
Midland, TX 79701

Dr. Charles Tandy
450 Allison
Dallas, TX 75028

George R. Jones
P. O. Box 10253
Midland, TX 79702

Dr. Billy Kyser
222 Elaine
Camden, AR 71701

Bargo Petroleum Corp.
700 Louisiana, Suite 3700
Houston, TX 77002

The Herman R. Crile Revocable Trust
P. O. Box 880
Roswell, NM 88202

James D. Finley
1308 Lake Street
Fort Worth, TX 76102-4505

Two States Oil Company
4925 Greenville, Suite 718
Dallas, TX 75206

Doyle Hartman, ct ux. Margaret M.
P. O. Box 10426
Midland, TX 79702

John H. Hendrix Corp.
110 N. Marienfield
Midland, TX 79701

Michael L. Klein
909 Citation
Midland, TX 79705

Ronnie H & Karen D. Westbrook
2809 Hughes
Midland, TX 79705

Daniel L Viers
1209 W Cuthbert
Midland, TX 79701

Jetta-X2 LP
777 Taylor St., Suite PI-D
Fort Worth, TX 76102

Amoco Production
c/o BP Amoco
200 Westlake Park Blvd.
Houston, TX 77079

Doyle Hartman
500 N. Main
Midland, TX 79701

Exxon Mobil Corp.
P. O. Box 4697
Houston, TX 77210-4697

Brady W Production, Inc.
2401 Neill Ave
Midland, TX 79708

Conoco Inc.
10 Desta Drive
Midland, TX 79705

MWJR Petroleum
c/o Apache Corporation
2000 Post Oak Blvd, Suite 100
Houston, TX 77056-4400

Chevron U.S.A. Production Company
Kevin Hickey
New Mexico Waterflood
Petroleum Engineer
15 Smith Road
Midland, Texas 79705

ChevronTexaco

August 22, 2002

EMSU #343, #345, #347, #357, & #359
CONVERSIONS TO INJECTION
EUNICE MONUMENT SOUTH UNIT
EUNICE MONUMENT OIL POOL
LEA COUNTY, NEW MEXICO

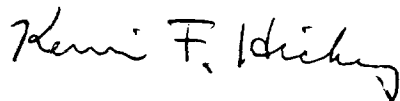
Attention: Land Owners

Gentlemen:

Chevron U.S.A. Production Co., as operator of the Eunice Monument South Unit, has filed an application with the New Mexico Oil Conservation Division to convert the EMSU #343, #345, #347, #357, and #359 to injection. These conversions are designed to improve recovery efficiency of the waterflood patterns and enhance production of the EMSU secondary recovery project.

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Sincerely,



Kevin F. Hickey
Petroleum Engineer
New Mexico Area

KFH
Attachments

**EMSU #343, #345, #347, #357, & #359
Conversion to Injection
Eunice Monument South Unit
Lea County, NM**

Surface Land Owners

State of New Mexico
c/o State Land Office
P.O. Box 1148
Santa Fe, NM 87504-1148

Millard Deck Estate and Larry Strain
c/o Ronald Rawdon
First Republic Bank
P.O. Box 1479
Ft. Worth, TX 76101-1479

Lea Partners Ltd.
Kirkwood & Darby
3000 E. Belknap, Suite 400
Ft. Worth, TX 76111

Tom Kennann
P. O. Box 186
Eunice NM 88231

Legal Notice

(8/22/2002)

Chevron U.S.A. Production Co. has applied to Oil Conservation Division of the State of New Mexico for approval to convert the EMSU #343, #345, #347, #357 and #359 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: #343 – Section 10, Unit M, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #345 – Section 10, Unit O, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #347 – Section 11, Unit M, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #357 – Section 15, Unit A, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico; #359 – Section 15, Unit C, 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 Kevin F. Hickey, ChevronTexaco Inc., 15 Smith Road, Midland, TX 79705, phone (915) 687-7260.

Interested Parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Drive, Santa Fe, NM 87505, within 15 days of this notice.



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Betty Rivera

Cabinet Secretary

Lori Wrotenbery

Director

Oil Conservation Division

9/9/02

Oil Conservation Division
1220 S. Francis Drive
Santa Fe, NM 87505

RE: Proposed:

MC _____
DHC _____
NSL _____
NSP _____
SWD _____
WFX X _____
PMX _____

Gentlemen:

I have examined the application for the:

Chevron USA Inc

Operator

Lease & Well No. Unit

S-T-R

- EMSU No. 343 located in Unit M, Sec. 10, T21S-R36E, Lea County, NM
- EMSU No. 345 located in Unit O, Sec. 10, T21S-R36E, Lea County, NM
- EMSU No. 347 located in Unit M, Sec. 11, T21S-R36E, Lea County, NM
- EMSU No. 357 located in Unit A, Sec. 15, T20S-R37E, Lea County, NM
- EMSU No. 359 located in Unit C, Sec. 15, T20S-R37E, Lea County, NM

and my recommendations are as follows:

OK

Yours very truly,

Chris Williams

Chris Williams

Supervisor, District 1