



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

5/24/99

GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:

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

Gentlemen:

I have examined the application for the:

Cross Timbers Operating Co SEMGSAU # 908-A
Operator Lease & Well No. Unit S-T-R 32-175-33e

and my recommendations are as follows:

OK.

Protection of fresh water OK P3K

Yours very truly,

Chris Williams

Chris Williams
Supervisor, District 1

/ed

APPLICATION FOR AUTHORIZATION TO INJECT

- I. Purpose: ☒ Secondary Recovery ☐ Pressure Maintenance ☐ Disposal ☐ Storage
Application qualifies for administrative approval? ☐ yes ☐ no
- II. Operator: Cross Timbers Operating Company
Address: 3000 N. Garfield, Suite 175, Midland, TX 79705
Contact party: Ray Martin Phone: 915/682-8873
- III. Well data: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? ☒ yes ☐ no
If yes, give the Division order number authorizing the project R-3134.
- 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 geological data on the injection zone including appropriate lithologic detail, geological 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 source 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 source 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: Ray Martin Title Operations Engineer
Signature: Ray Martin Date: May 19, 1999
- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be duplicated and resubmitted. Please show the date and circumstance of the earlier submittal.

AFFIDAVIT OF PUBLICATION

State of New Mexico,
County of Lea.

I,

Publisher

of the Hobbs Daily News-Sun, a
daily 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

May 8 1999

and ending with the issue dated

May 8 1999

[Signature]

Publisher

Sworn and subscribed to before

me this 7th day of

May 1999

[Signature]

Notary Public.

My Commission expires
October 18, 2000

(Seal)

NOTARY

1999

10216

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

May 8, 1999

This is to advise all parties concerned, Cross Timbers Operating Company intends to convert
the following well to water injection:

SEMGS AU #908

Sec. 32, T-17-S, R-33-E

Lea Co., NM

The formation to be injected into is the Grayburg/San Andres at a depth of 4261-4399'. The
maximum expected injection rate is 500 BWPD per well at a maximum injection pressure of 852
psig. Questions can be addressed to:

Ray Martin
Cross Timbers Operating Company
3000 N. Garfield, Suite 175
Midland, TX 79705
Phone: (915) 682-8873

Interested parties must file objections for hearing within 15 days of this notice to the:

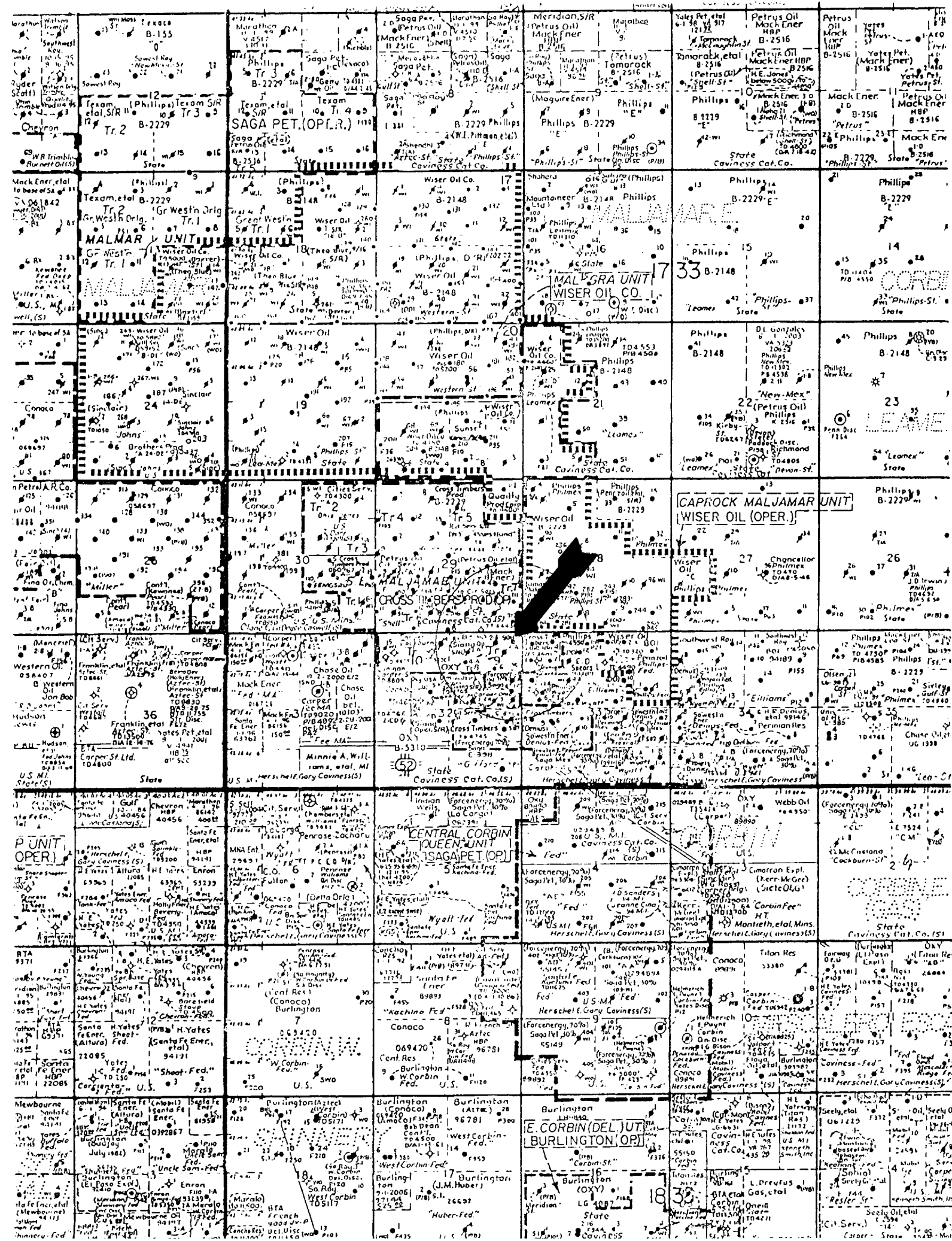
Oil Conservation Division
P.O. Box 2088
Sante Fe, NM 87501

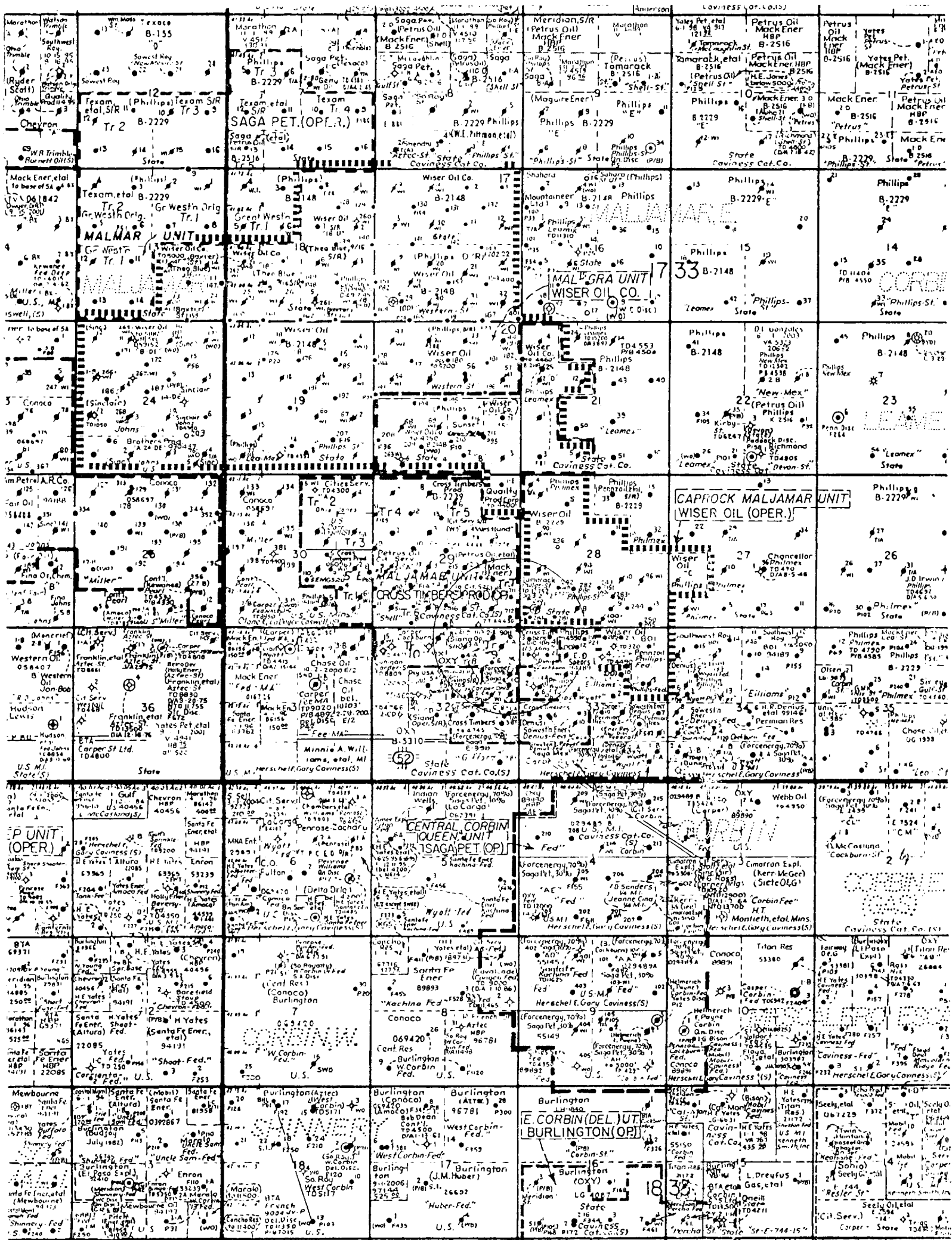
#16603

01102696000

02527026

Cross Timbers Operating Compan
3000 N. Garfield, Suite 175
MIDLAND, TX 79705





CROSS TIMBERS OPERATING COMPANY

SEMGS AU #908 - Convert to Injection

NMOCD Form C-108 Section III

III. Data on injection well.

A. Injection well information (see attached schematic)

1. Lease: SEMGS AU

Well: 908

Location: 330' FNL & 330' FEL, Unit A
Section 32, T-17-S, R-33-E
Lea County, NM

2. Casing: Surface - 8 5/8", 23# @ 415', cmt'd w/275
sxs., circ 48 sxs to surface.

Production - 5 1/2", 15.5# @ 4417', cmt'd
w/900 sxs., circ 25 sxs to
surface.

3. Tubing: 2 3/8", 4.7#, J-55, internally plastic
coated set @ 4388'.

4. Packer: Baker Lok-Set type or Baker Model AD-1 type
set @ ± 4210'

B. Other well information

1. Injection formation: Grayburg
Field: Maljamar Grayburg San Andres

2. Existing cased hole perforated from 4261' - 4399'.

3. Originally drilled for oil and gas production.

4. There are no other perforated or tested zones.

5. There are no upper productive zones. The San
Andres formation is productive at about 4400' and
is included in this pool. The Abo formation is
productive at about 8600'.

CROSS TIMBERS OPERATING COMPANY

NMOCD form C-108 Sections VII - XII

VII.

1. Proposed average daily injection is 250 BWPD.
Maximum daily injection is 500 BWPD.
2. This will be a closed system.
3. Proposed average injection pressure is 500 psig.
Proposed maximum injection pressure is 852 psig*.
*Note: Maximum injection pressure abides by the 0.2
psi/ft maximum injection pressure imposed by the NMOCD.
Future increases in surface pressure will be obtained
administratively from the NMOCD using field obtained
"Step Rate Tests".
4. Injection fluid will be produced water from the existing
waterflood. Makeup water will be supplied by Conoco. Water
analyses are attached.

VIII. The proposed injection interval is the Grayburg at a depth of
4200 feet. The Grayburg formation primarily consists of
quartz sand with dolomitic cementation. The surface
formation is Cretaceous and has no known sources of drinking
water.

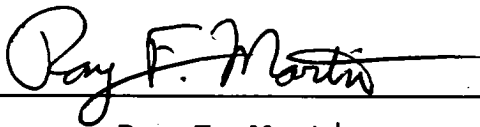
- IX. Any stimulation work will consist of acidizing the existing zone to clean up perforations and near wellbore formation.
- X. Logs were filed at your office when the well was drilled.
- XI. There are no fresh water wells within one mile of these wells.
- XII. Not applicable
- XIII. Copies of this C-108 Application have been mailed to the surface owner and to each leasehold operator within one-half mile of the proposed injection wells. A notice was published in the Hobbs Daily News-Sun and the Affidavit of Publication is attached. See attached mailing list and certified mail certificates for Proof of Notice.

AFFIDAVIT OF MAILING

STATE OF TEXAS

COUNTY OF MIDLAND

I, Ray F. Martin, do solemnly swear that a copy of this Application has been mailed by Certified Mail to each of the interested parties listed on the Mailing List, which is attached, as required in XIV of Form C-108.

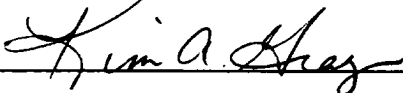


Ray F. Martin

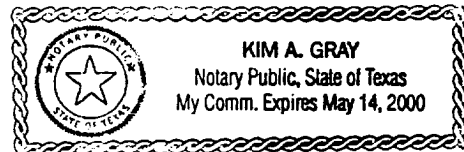
Operations Engineer

SWORN AND SUBSCRIBED TO before me this 20th day of May, 1999.

My Commission Expires: 5/14/00



Notary Public



MAILING LIST

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

Bureau of Land Management
P. O. Box 1778
Carlsbad, NM 88220

Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

Oil Conservation Division
1625 North French Drive
Hobbs, NM 88240

SURFACE OWNERS

Caviness Cattle Company
Star Route
Causey, NM 88113

Janice Caviness
East Star Route
Maljamar, NM 88264

Mr. Eric Dixon
P. O. Box 575
Portales, NM 88130

Mr. Mike Newell
Heidel, Samberson, Newell & Cox
P. O. Drawer 1599
Lovington, NM 88260

OFFSET OPERATORS

Chevron USA Production Company
P. O. Box 1150
Midland, TX 79702

OXY USA Inc.
P.O. Box 50250
Midland, TX 79710

The Wiser Oil Company
8115 Preston Road, Suite 400
Dallas, TX 75225

Pennzoil E&P Company
P. O. Box 50090
Midland, TX 79710-0090

Phillips Petroleum Company
4001 Penbrook
Odessa, TX 79762

Z 206 789 670

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to		Chevron USA Production	
Street & Number	P. O. Box 1150	Post Office, State & ZIP Code	Midland, TX 79702
Postage	\$	Certified Fee	
Special Delivery Fee		Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered		Return Receipt Showing to Whom, Date & Addressed Address	
TOTAL Postage & Fees	\$	Postmark or Date	5/20/99

Fold at line over top of envelope to the right of the return address

CERTIFIED

Z 206 789 670



Z 206 789 666

US Postal Service
Receipt for Certified Mail
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Sent to		OXY USA INC	
Street & Number	P. O. Box 50250	Post Office, State & ZIP Code	Midland, TX 79701
Postage	\$	Certified Fee	
Special Delivery Fee		Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered		Return Receipt Showing to Whom, Date & Addressed Address	
TOTAL Postage & Fees	\$	Postmark or Date	5/20/99

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Sent to		Phillips Pet Co.	
Street & Number	5001 Penbrook	Post Office, State & ZIP Code	Odessa, TX 79762
Postage	\$	Certified Fee	
Special Delivery Fee		Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered		Return Receipt Showing to Whom, Date & Addressed Address	
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Sent to		The Kiser Oil Co.	
Street & Number	8115 Preston Rd, Suite 400	Post Office, State & ZIP Code	Dallas, TX 75225
Postage	\$	Certified Fee	
Special Delivery Fee		Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered		Return Receipt Showing to Whom, Date & Addressed Address	
TOTAL Postage & Fees	\$	Postmark or Date	5/20/99

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Sent to		Pennzoil Exp Co.	
Street & Number	P. O. Box 50090	Post Office, State & ZIP Code	Midland, TX 79710-0090
Postage	\$	Certified Fee	
Special Delivery Fee		Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered		Return Receipt Showing to Whom, Date & Addressed Address	
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Z 206 789 664

US Postal Service
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Sent to		Mr. Mike Newell	
Street & Number	P. O. Drawer 1599		
Post Office, State, & ZIP Code	Lovington, NY 88260		
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date, & Addressee's Address			
TOTAL Postage & Fees	\$		
Postmark or Date	5/20/99		

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Z 206 789 663

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Sent to		Eric Dixon	
Street & Number	P. O. Box 575		
Post Office, State, & ZIP Code	Portales, NM 88130		
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date, & Addressee's Address			
TOTAL Postage & Fees	\$		
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Z 557 885 187

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Sent to		Janice Caviness	
Street & Number	East Star Route		
Post Office, State, & ZIP Code	Maljamar, NY 88246		
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date, & Addressee's Address			
TOTAL Postage & Fees	\$		
Postmark or Date	5/20/99		

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Z 557 885 187



Z 557 885 186

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Sent to		Caviness Cattle Co.	
Street & Number	Star Route		
Post Office, State, & ZIP Code	Causey, NM 88113		
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date, & Addressee's Address			
TOTAL Postage & Fees	\$		
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Z 557 885 250

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Sent to		ENNRD/OCB	
Street & Number		1625 N. French Dr.	
Post Office, State & ZIP Code		Hobbs, NM 88240	
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date & Addressee's Address			
TOTAL Postage & Fees	\$		
Postmark or Date		5/20/99	

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MAIL

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US Postal Service
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Sent to		ENNRD/OCB	
Street & Number		2040 S. Pacheco	
Post Office, State & ZIP Code		Santa Fe, NM 87505	
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date & Addressee's Address			
TOTAL Postage & Fees	\$		
Postmark or Date		5/20/99	

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MAIL

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Sent to		State Land Office	
Street & Number		P. O. Box 1148	
Post Office, State & ZIP Code		Santa Fe, NM 87504	
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date & Addressee's Address			
TOTAL Postage & Fees	\$		
Postmark or Date		5/20/99	

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MAIL

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US Postal Service
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Do not use for International Mail (See reverse)

Sent to		BLM	
Street & Number		Box 1778	
Post Office, State & ZIP Code		Carlsbad, NM 88220	
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date & Addressee's Address			
TOTAL Postage & Fees	\$		
Postmark or Date		5/20/99	

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MAIL

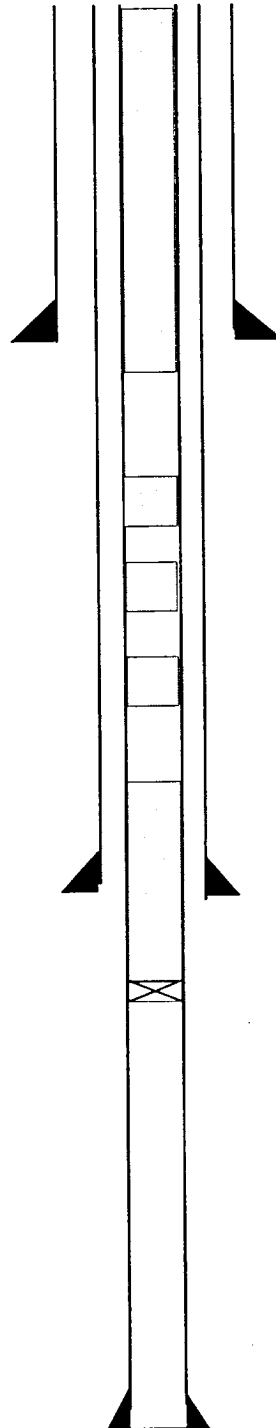
NAME	OPERATOR	LOCATION	COMPL DATE	TYPE	TD	CSG SIZE	DEPTH SET	SX CMT	PERFS	COMMENTS
CMU #98	The Wiser Oil Co.	660' FSL, 660' FWL, Unit M, Sec. 28, T17S, R33E	11/29/77	Oil	4439'	8 5/8" 5 1/2"	367 4439	250 200	4128-4337	Converted to WIW 5/94
CMU #284	The Wiser Oil Co.	330' FSL & 330' FWL, Unit M, Sec. 28, T17S, R33E	1/7/98	Oil	4550	8 5/8" 4 1/2"	396 4550	300 1350	4291-4333	Active Prod.
Phillips State #8	Pennzoil	660' FSL & 1980' FWL, Unit N, Sec. 28, T17S, R33E	12/4/57	Inj	4450	8 5/8" 5 1/2"	357 4449	125 100	4281-4356	Active WIW
CMU #242	The Wiser Oil Co.	1330' FSL, 1330' FWL, Unit K, Sec. 28, T17S, R33E	4/21/96	Oil	4803	8 5/8" 5 1/2"	496 4803	300 1350	4523-4576	Active Prod.
CMU #93	The Wiser Oil Co.	1980' FSL, 660' FWL, Unit L, Sec. 28, T17S, R33E	12/26/57	Oil	4460	8 5/8" 5 1/2"	345 4460	150 200	4200-4352	Active WIW
Philimex #14	Phillips Petr.	569' FSL, 507' FWL, Unit M, Sec. 28, T17S, R33E	10/18/81	SWD	12752	11 3/4" 8 5/8" 5 1/2"	376 4747 6609	480 750 1650	4830-5220	P&A 4/95
CMU #281	The Wiser Oil Co.	330' FSL, 1210' FWL, Unit M, Sec. 28, T17S, R33E	1/31/97	Oil	4775	8 5/8" 5 1/2"	391 4775	325 900	4273-4454 4492-4521	Active Prod.
CMU #280	The Wiser Oil Co.	932' FSL, 330' FWL, Unit M, Sec. 28, T17S, R33E	4/5/97	Oil	4827	8 5/8" 5 1/2"	444 4827	325 850	4200-4383 4511-4649	Active Prod.
SEMGSAU #710	Cross Timbers Oper.	1165' FSL, 2010' FEL, Unit A, Sec. 29, T17S, R33E	6/4/96	Oil	4400	8 5/8" 5 1/2"	404 4394	250 850	4272-4324	Active Prod.
SEMGSAU #714	Cross Timbers Oper.	1200' FSL & 900' FEL, Unit P, Sec. 29, T17S, R33E	5/6/97	Oil	4450'	8 5/8" 5 1/2"	383 4450	250 900	4282-4332	Active WIW
SEMGSAU #709	Cross Timbers Oper.	2250' FSL, 1225' FEL, Unit I, Sec. 29, T17S, R33E	10/31/81	Oil	4450	8 5/8" 5 1/2" 4"	1314 3950 3678-4449	660 1000 250	4218-4414	TA 12/91
SEMGSAU #704	Cross Timbers Oper.	1650' FSL, 990' FEL, Unit I, Sec. 29, T17S, R33E	11/1/54	Oil INJ	4360	8 5/8" 5 1/2"	297 4246	300 800	4246-4360	Conv to inj TA 5/85
SEMGSAU #713	Cross Timbers Oper.	1700' FSL, 1400' FEL, Unit J, Sec. 29, T17S, R33E	4/22/97	Oil	4390	8 5/8" 5 1/2"	383 4389	250 650	4264-4311	Active Prod.
SEMGSAU #711	Cross Timbers Oper.	1040' FSL, 330' FEL, Unit P, Sec. 29, T17S, R33E	11/22/96	Oil	4405	8 5/8" 5 1/2"	407 4404	275 800	4299-4355	Active Prod.
SEMGSAU #706	Cross Timbers Oper.	1155' FSL, 1385' FEL, Unit O, Sec. 29, T17S, R33E	8/22/72	Oil	4355	8 5/8" 5 1/2"	353 4350	220 435	4244-4322	Active Prod.
SEMGSAU #701	Cross Timbers Oper.	660' FSL, 1980' FEL, Unit O, Sec. 29, T17S, R33E	3/12/44	Oil INJ	4439	10 3/4" 7" 5"	1254 4034 3736-4439	550 300 100	4222-4343	Conv to inj 11/81 Active WIW
SEMGSAU #703	Cross Timbers Oper.	660' FSL, 990' FEL, Unit P, Sec. 29, T17S, R33E	1/16/53	Oil INJ	4340	8 5/8" 5 1/2"	1260 4290	550 300	4290-4340	Conv to inj 10/67 Active WIW

NAME	OPERATOR	LOCATION	COMPL DATE	TYPE	TD	CSG SIZE	DEPTH SET	SX CMT	PERFS	COMMENTS
SEMGSAU #712	Cross Timbers Oper.	330' FSL, 330' FEL, Unit P, Sec 29, T17S, R33E	12/20/96	OIL	4500	8 5/8" 5 1/2"	405 4499	275 850	4301-4371	Active Prod.
SEMGSAU #707	Cross Timbers Oper.	100' FSL, 1430' FEL, Unit O, Sec 29, T17S, R33E	11/26/72	DH	4430	8 5/8" 5 1/2"	810 4429	350 435	4272-4284	P&A 7/73
SEMGSAU #708	Cross Timbers Oper.	100' FSL, 2590' FEL, Unit O, Sec 29, T17S, R33E	4/10/73	OIL	4316	8 5/8" 5 1/2"	819 4429	500 435	4278-4292	TA 12/91
SEMGSAU #616	Cross Timbers Oper.	2590' FWL, 775' FSL, Unit N, Sec 29, T17S, R33E	5/8/97	OIL	4359	8 5/8" 5 1/2"	394 4359	250 950	4254-4300	Active Prod.
State CB #2	Cities Service Oil	2310' FNL & 1700' FEL, Unit G, Sec. 32, T17S, R33E	10/18/65	OIL	8780	13 3/8" 8 5/8" 4 1/2"	333 2882 8779	250 500 850	8750-8758	P&A 11/83
State CB #5	Cities Service Oil	1650' FNL, 1650' FEL, Unit G, Sec. 32, T17S, R33E	12/31/49	OIL	4500	12 1/2" 10" 7"	210 980 3917		4495-4500	P&A 2/80
SEMGSAU #905	Cross Timbers Oper.	1650' FNL & 330' FEL, Unit H, Sec. 32, T17S, R33E	10/24/64	OIL	4475	8 5/8" 7" 4-1/2"	1346 3523 4484	50 50 50	4298-4407	Active Prod.
SEMGSAU #907	Cross Timbers Oper.	990' FEL & 2310' FNL, Unit H, Sec. 32, T17S, R33E	12/31/91	OIL	4600	8 5/8" 5 1/2"	338 4600	200 1450	4316-4457	Active Prod.
SEMGSAU #902	Cross Timbers Oper.	330' FNL, 990' FEL, Unit A, Sec 32, T17S, R33E	5/10/51	OIL INJ	4500	8 5/8" 5 1/2"	1257 4050	50 100	4050-4500	Conv to inj 11/91 SI 11/96
SEMGSAU #904 (Tract 9 #4)	Cross Timbers Oper.	660' FNL, 660' FEL, Unit A, Sec 32, T17S, R33E	8/24/46	OIL	4312	8 5/8" 7"	1300 3943	50 100	3943-4312	P&A 7/73
SEMGSAU #906	Cross Timbers Oper.	1200' FNL, 950' FEL, Unit A, Sec 32, T17S, R33E	12/13/91	OIL	4545	8 5/8" 5 1/2"	306 4546	250 1300	4270-4374	Active Prod. 4448-4460
SEMGSAU #908	Cross Timbers Oper.	330' FNL, 330' FEL, Unit A, Sec 32, T17S, R33E	11/22/96	OIL	4450	8 5/8" 5 1/2"	415 4417	275 900	4261-4399	Active Prod.
SEMGSAU #803 (Tract 8 #3)	Cross Timbers Oper.	660' FNL, 1980' FEL, Unit B, Sec 32, T17S, R33E	5/11/44	OIL INJ	4325	8" 7"	1280 4045	50 102	4045-4300	Conv to inj 9/67 P&A 7/84
SEMGSAU #10-04	Cross Timbers Oper.	330' FNL, 2310' FWL, Unit C, Sec 32, T17S, R33E	11/12/51	OIL INJ	4298	7" 5 1/2"	1223 4096	50 120	4095-4298	Conv to inj 2/74 P&A 10/83
Ohio-State C #1	Chevron	1980' FNL & 330' FEL, Sec. 32, T17S, R33E	11/24/60	OIL	8825	13 3/8" 8 5/8" 4 1/2"	311 3168 8825	340 800 1600	8615-8650	Active Prod.
Ohio-State "A" #6	Chevron	2310' FNL & 330' FEL, Sec. 32, T17S, R33E	11/10/53	OIL	3769	8-5/8" 7"	1368 3735	50 100	3735-3769	SI
Cockburn "A" State #4	OXY USA	990' FNL, 1980' FEL, Unit B, Sec 32, T17S, R33E	3/28/66	OIL	8820	13 3/8" 8 5/8" 4 1/2"	334 2899 8819	320 500 700	8632-8695	SI

NAME	OPERATOR	LOCATION	COMPL DATE	TYPE	TD	CSG SIZE	DEPTH SET	SX CMT	PERFS	COMMENTS
SEMGSAU #2	Cross Timbers Oper.	990' FNL, 990' FWL, Unit D, Sec. 33, T17S, R33E	7/22/53	OIL	4302	8 5/8"	1306	50	4104-4302	Active Prod
						7	4104	100		
Wyatt A Fed #13	Phillips Pet Co.	1980' FNL, 660' FWL, Unit E, Sec. 33, T17S, R33E	8/26/47	OIL	4582	10"	26	25	3995-4582	Active Prod
						7"	3995	150		
SEMGSAU #1	Cross Timbers Oper.	990' FNL, 330' FWL, Unit D, Sec. 33, T17S, R33E	9/5/53	OIL	4448	7"	1427	25	4278-4448	Active Prod.
						5 1/2"	4278	100		
SEMGSAU #3	Cross Timbers Oper.	380' FNL, 350' FWL, Unit D, Sec. 33, T17S, R33E	5/31/96	OIL	4480	8 5/8"	394	250	4300-4399	Active Prod.
						5 1/2"	4470	950		
SEMGSAU #4	Cross Timbers Oper.	330' FNL, 990' FWL, Unit D, Sec. 33, T17S, R33E	6/18/97	OIL	4505	8 5/8"	428	250	4308-4381	Active Prod.
						5 1/2"	4505	850		
Wyatt A Fed #21	Barney Cockburn	1980' FNL, 460' FWL, Unit E, Sec. 33, T17S, R33E	11/15/51	Dry	3765	8-5/8"	1430	50	None	Dry
						7"	3649	310		
Wyatt A Fed #3	Phillips Pet Co.	1650' FNL, 330' FWL, Unit E, Sec. 33, T17S, R33E	10/7/51	OIL	4300	7"	1330	50	3719-4300	P&A 12/92
						5 1/2"	3719	50		
Wyatt A Fed #4	Phillips Pet Co.	1659' FNL, 1650' FWL, Unit F, Sec. 33, T17S, R33E	9/4/52	OIL	3710	8"	1350	50	3675-3710	Active WIW
						7"	3675	110		
Wyatt-Phillips #5	H. R. Dentius et al	990' FNL, 1650' FWL, Unit C, Sec. 33, T17S, R33E	1/28/55	Inj	4305	8	1200	100	4258-4305	P&A 11/59
						7	1220	50		
						4	4305	100		
Wyatt A Fed #12	Phillips Pet Co.	660' FNL, 1980' FWL, Unit C, Sec. 33, T17S, R33E	1/27/56	OIL	4310	8 5/8"	224	50	4200-4310	Active Prod.
						5 1/2"	4200	600		
Wyatt A Fed #1	Phillips Pet Co.	330' FNL, 2310' FWL, Unit C, Sec. 33, T17S, R33E	5/7/64	OIL	4506	10-3/4"	315	250	4393-4420	Active Prod
						4-1/2"	4499	1200		
Williams-Fed #6	Phillips Pet Co.	2310' FNL, 659' FWL, Unit E, Sec. 33, T17S, R33E	7/3/61	OIL	8788	13 3/8"	320	350	8562-8734	Active Prod
						8 5/8"	4589	700		
						5 1/2"	8788	620		
Cockburn #1	Phillips Pet Co.	990' FNL, 380' FWL, Unit D, Sec. 33, T17S, R33E	4/5/61	DH	8940	13 3/8"	309	340		P&A 2/85
						8-5/8"	4557	1900		

Philmex #14

569' FSL & 507' FWL, Unit M, Sec 28, T17S, R33E



Surface Csg

11-3/4" @ 376' Cmt'd w/480 sx

Plugs Set as follows:

1. CIBP @ 4,800' w/25 sx
cmt cap fr/4,800'-4,560'
2. 3,981'-3,741' - 25 sx
3. 2,663'-2,423' - 25 sx
4. 1,507'-1,267' - 25 sx
5. 412' - 0' - 50 sx

Intermediate Csg

8-5/8" @ 4,747'
Cmt'd w/750 sx

Production Csg

5-1/2" @ 6,609'
Cmt'd w/1650 sx

07)

CIBP

8 5/8" @ 810', CMT W/350 SX

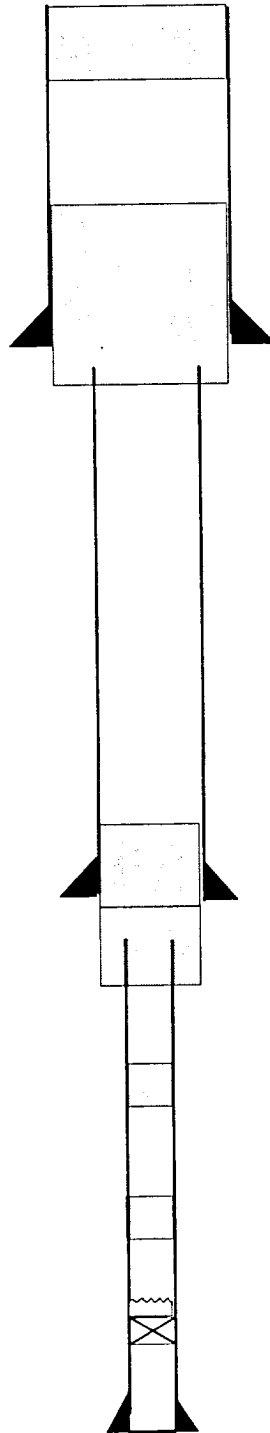
1. CIBP @ 4207 W/5 SXS (4167-4207)
2. PULLED 1738 OF 5 1/2".
3. 1688 - 1788 W/25 SXS
4. 1280 - 1380 W/40 SXS
5. 740 - 840 W/ 30 SXS
6. 0 - 30 W/10 SXS

5 1/2" @ 4429', CMT W/435 SX

TD:4430

State CB #2

2310' FNL & 1700' FEL, Unit G, Sec 32, T17S, R33E



Surface Csg

13-3/8" @ 333' Cmt'd w/250 sx

8-5/8" csg cut @ 386'

Plugs Set as follows:

1. CIBP @ 8,630' w/5 sx cmt cap.
2. 6,234'-5,985' - 25 sx
3. 3,993'-3,743' - 25 sx
4. 3,219'-3,019' - 50 sx
5. 3,019'-2,719' - 75 sx
6. 443' - 143' - 120 sx
7. 56' - 0' - 40 sx

Intermediate Csg

8-5/8" @ 2,882'
Cmt'd w/850 sx

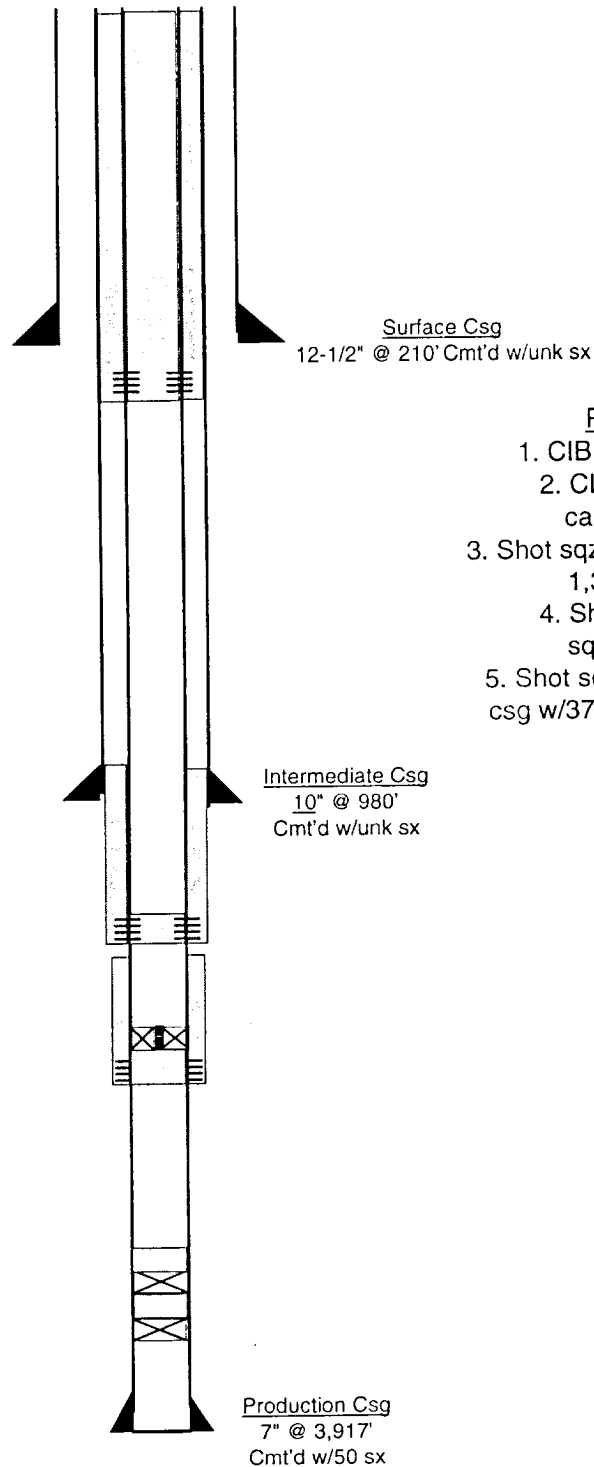
4-1/2" csg cut @ 3,068'

Production Csg

4-1/2" @ 8,779'
Cmt'd w/850 sx

State CB #5

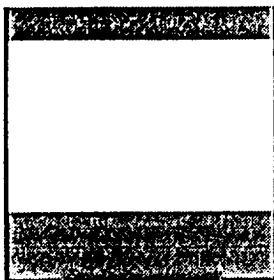
1650' FNL & 1650' FEL, Unit G, Sec 32, T17S, R33E



Plugs Set as follows:

1. CIBP @ 3,500' w/25' cmt cap.
2. CIBP @ 3,475' w/7 sx cmt cap fr/3,475-3,440' (35').
3. Shot sqz holes @ 1,340'. Set CICR @ 1,305' & sqz'd w/500 sx.
4. Shot sqz holes @ 1,150' & sqz'd dwn csg w/500 sx.
5. Shot sqz holes @ 250' & sqz'd dwn csg w/375 sx. Left csg full & circ cmt.

WELL: SEMGSAU #904 (Tract 9 #4)
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FNL, 660' FEL, UNIT A, SEC 32, T17S, R33E, LEA COUNTY, NM



SURFACE CASING:
9 5/8" @ 1350', CMT W/50 SX

PLUGS SET AS FOLLOWS:

1. SET CIBP @ 3891 W/7 SXS
3846 - 3891
2. PULLED 2215' OF 7"
3. 2165 - 2265 W/45 SXS
4. 1250 - 1350 W/45 SXS
5. 0 - 30 W/15 SXS

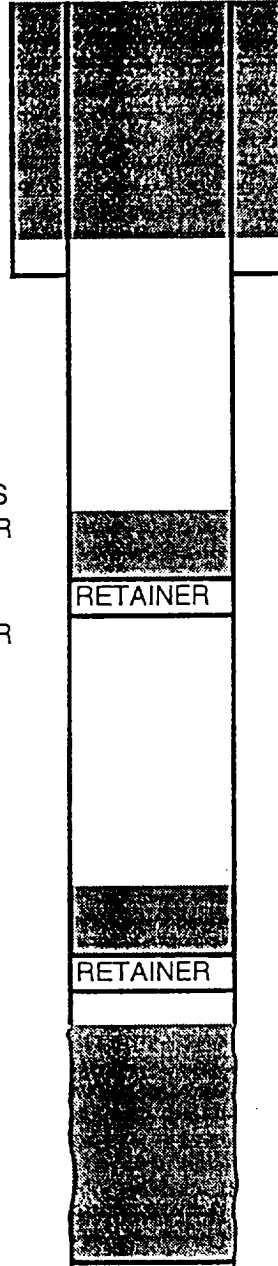
PRODUCTION CASING:
7" @ 3943', CMT W/100 SX

TD:4312

WELL: SEMGSAU #803 (Tract 8, Well #3)
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FNL, 1980' FEL, UNIT B, SEC 32, T17S, R33E, LEA COUNTY, NM

PLUGS SET AS FOLLOWS:

1. SQZ OH 4045 - 4300 W/150 SXS
2. DUMPED 37 SXS ON RETAINER @ 3947.
3. SQZ PERF @ 2800 W/500 SXS
4. DUMPED 37 SXS ON RETAINER @ 2697.
5. SQZ PERF @ 1200 W/250 SXS
6. 0 - 50 W/15 SXS



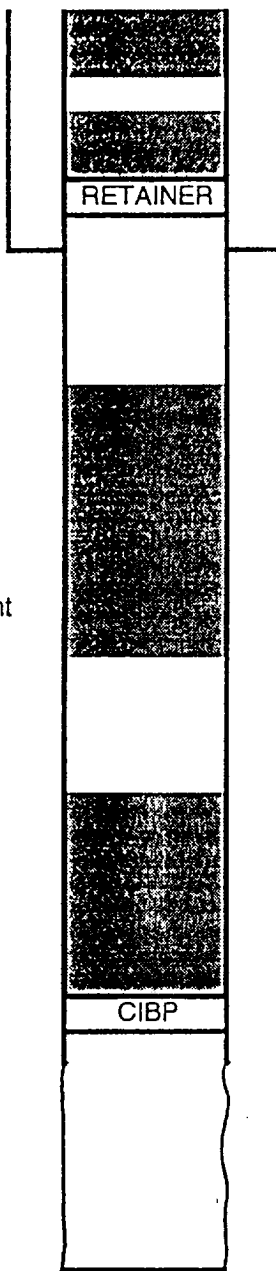
SURFACE CASING:

8 5/8" @ 1280', CMT W/50 SX

PRODUCTION CASING:

7" @ 4045', CMT W/102 SX

WELL: SEMGSAU 10-04 (Tract 10, Well #4)
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 330' FNL, 2310' FWL, UNIT C, SEC 32, T17S, R33E, LEA COUNTY, NM



SURFACE CASING:

7" @ 1231', CMT W/50 SX

PLUGS SET AS FOLLOWS:

1. CIBP @ 4039 W/50 SXS CMT,
Top of plug @ 3426,
2. 1986 - 2599 W/50 SXS.
3. Perf 1230 & pmp 150 sxs, circ cmt
4. Retainer @ 1091.
5. 785 - 1091 W/25 SXS.
6. 0 - 214 W/15 SXS.

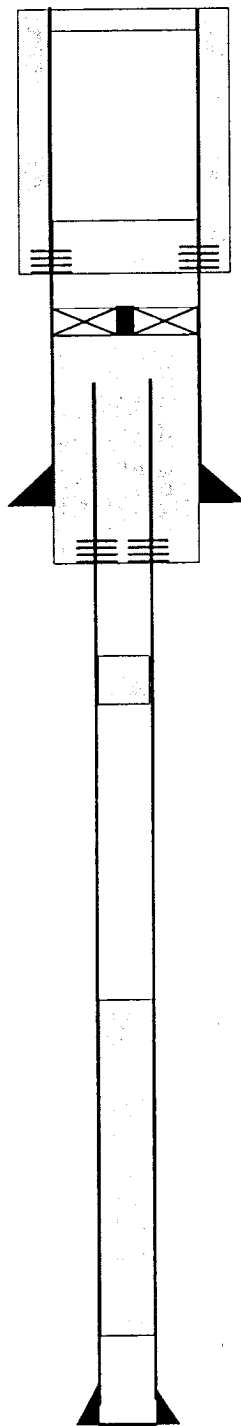
PRODUCTION CASING:

5 1/2" @ 4096', CMT W/120 SX

TD:4298

Wyatt "A" Federal #3

1650' FNL & 330' FWL, Unit E, Sec 33, T17S, R33E



Cut 5-1/2" csg @ 1025'

Surface Csg
7" @ 1330' Cmt'd w/50 sx

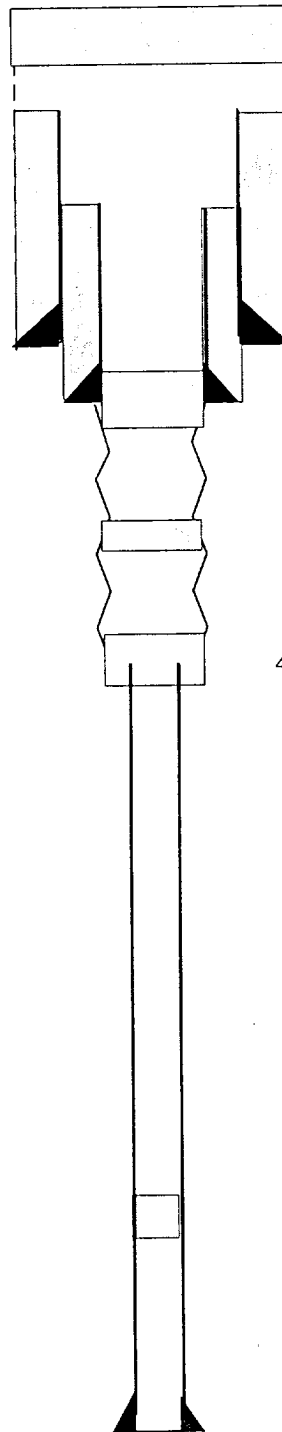
Plugs Set as follows:

1. 3,546'-2,200' - 209 sx
2. 1,960' -1,860' - 15 sx
3. Shot sqz holes @ 1,485'. Set CICR @ 945' & sqz'd 170 sx
4. Perf sqz holes @ 900'. Sqz'd w/40 sx
5. 10 sx surface plug.

Production Csg
5-1/2" @ 3,716'
Cmt'd w/50 sx

Wyatt-Phillips #5

990' FNL & 1650' FWL, Unit C, Sec 33, T17S, R33E



8-5/8" csg cut @ 410'

7" csg cut @ 858'

Surface Csg
8" @ 1,200' Cmt'd w/100 sx

Intermediate Csg
7" @ 1,220' Cmt'd w/50 sx

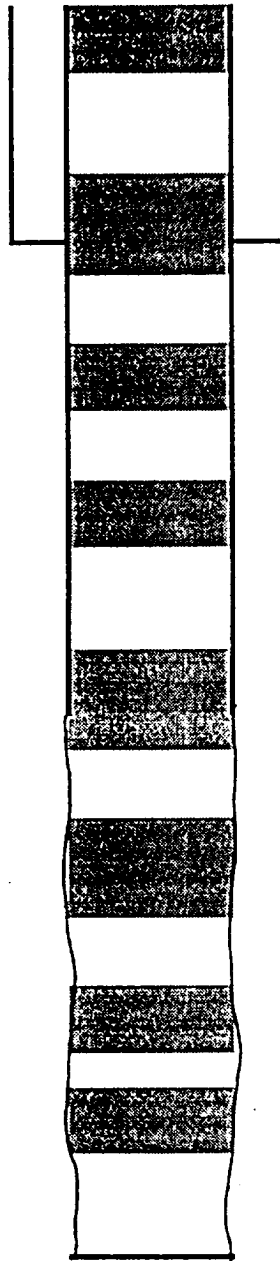
4" csg cut @ 2,013"

Production Csg:
4" @ 4,305' Cmt'd w/100 sx

Plugs Set as follows:

1. 3,671'-3,591'.
2. 2,025'-1,950'.
3. 1,540'-1,465'.
4. 1,240-1,165'
5. 12'-0'

WELL: Cockburn #1
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 990' FNL, 380' FWL, UNIT D, SEC 33, T17S, R33E, LEA COUNTY, NM



SURFACE CASING:

13 3/8" @ 309', CMT W/340 SX

PLUGS SET AS FOLLOWS:

1. 6210 W/50 SXS.
2. 5600 W/50 SXS.
3. 5000 W/50 SXS.
4. 4620 W/50 SXS.
5. 3000 W/50 SXS.
6. 1500 W/75 SXS.
7. 360 W/75 SXS.
8. 0 - 75 W/50 SXS.

PRODUCTION CASING:

8 5/8" @ 4557', CMT W/1900 SX

TD:8940



AUG 29 1997

CHEMICAL SPECIALTIES FOR PETROLEUM & DRILLING

P.O. BOX 69337
ODESSA, TX 79769
(915) 381-2595

LABORATORY WATER ANALYSIS

COMPANY: CROSS TIMBERS
LEASE: SEMGSAU
WELL NO: TRIPLEX DISCHARGE
FORMATION:

PH: 6.520
SULFIDE AS H₂S: 26
CARBON DIOXIDE:

COUNTY, STATE:
DATE SAMPLED: 08-26-97
SAMPLED BY: BOBBY CARNES
ATTENTION: RAY MARTIN

SPECIFIC GRAVITY: 1.086
DISSOLVED OXYGEN:
WATER B/D:

CATIONS	Mg/L	ME/L
Calcium	4,800	240
Magnesium	244	20
Sodium	48,030	2,088
Total Hardness	13,000	
Barium	0	0.01
Iron	3.75	0.13

ANIONS	Mg/L	ME/L
Bicarbonate	74.42	1.22
Sulfate	5,300	110
Chloride	79,400	2,237

Dissolved Solids: 137,852 Conductivity 180,000 micromhos/cm

CaCO₃ Scaling Tendency:

Stability index @: 80°F	-0.52
100°F	-0.30
120°F	.00
160°F	0.81

CaSO₄ Scaling Tendency:

Ksp Temperature Used: 90 °F

Calculated Saturation: 16.35 ME/L

C a S O 4 I S I N D I C A T E D .

WATER ANALYSIS REPORT

Lab ID No. : 012791.002

Analysis Date: January 29, 1992

Company : Cross Timbers
Field :
Lease/Unit : SEMGSAU
Well ID. : Fresh Water
Sample Loc.: Water Tank Inlet

Sampled By : J. L. Enriquez
Sample Date: 8-December-1991
Salesperson: Clyde Wilhoit
Formation : San Andres
Location : Lovington, N. M.

CATIONS	MG/L	MEQ/L	ANIONS	MG/L	MEQ/L
Calcium as Ca++	54	3	Hydroxyl as OH-	0	0
Magnesium as Mg++	17	1	Carbonate as CO3=	0	0
Sodium as Na+ (Calc)	28	1	Bicarbonate as HCO3-	195	3
Barium as Ba++	Not Determined		Sulfate as SO4=	34	1
Oil Content	0		Chloride as Cl-	50	1

Total Dissolved Solids, Calculated:

378 mg/L.

Calculated Resistivity: 0.213 ohm-meters
mg/L. Hydrogen Sulfide: 0
mg/L. Carbon Dioxide: 8
mg/L. Dissolved Oxygen: 5.5

pH: 8.300
Specific Gravity 60/60 F.: 0.998
Saturation Index @ 80 F.: -0.404
@ 140 F.: +0.496

Total Hardness: 205 mg/L. as CaCO3
Total Iron: 0.05 mg/L. as Fe++

PROBABLE MINERAL COMPOSITION		
COMPOUND	MG/L	MEQ/L
Ca(HCO3)2	220	2.7
CaSO4	0	0.0
CaCl2	0	0.0
Mg(HCO3)2	35	0.5
MgSO4	43	0.7
MgCl2	9	0.2
NaHCO3	0	0.0
Na2SO4	0	0.0
NaCl	71	1.2

Calcium Sulfate Scaling Potential
Not Present

Estimated Temperature of Calcium
Carbonate Instability is
105 F.

Analyst 10:44 AM