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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, Ste 175, Midland, TX 79705
- Contact party: Darrin Steed 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: Darrin Steed Title Operations Engineer

Signature: Darrin Steed Date: 11/06/97

- * 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.

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 footline 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 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, P. O. Box 2088, Santa Fe, New Mexico 87501 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.

CHECKLIST for ADMINISTRATIVE INJECTION APPLICATIONS

Operator: CROSS TIMBERS

Well: SENGSA UNIT - 6 WELLS

Contact: DARRIN STED Title: Op. Eng.

Phone: 915-682-8873

DATE IN 12-4-97 RELEASE DATE 12-19-97 DATE OUT 1-10-98

Proposed Injection Application is for:

WATERFLOOD

Expansion Initial

Original Order: R- 3134

Secondary Recovery

Pressure Maintenance

SENSITIVE AREAS

WIPP Capitan Reef

SALT WATER DISPOSAL Commercial Well

Data is complete for proposed well(s)? YES Additional Data Req'd _____

AREA of REVIEW WELLS

100 Total # of AOR

23 # of Plugged Wells

YES Tabulation Complete

YES Schematics of P & A's

YES Cement Tops Adequate

NO AOR Repair Required

INJECTION FORMATION

Injection Formation(s) GRAYBORG

Compatible Analysis Y13

Source of Water or Injectate AREA PRODUCTION + MAKE-UP

PROOF of NOTICE

YES Copy of Legal Notice

YES Information Printed Correctly

YES Correct Operators

YES Copies of Certified Mail Receipts

NO Objection Received

/ Set to Hearing _____ Date _____

NOTES: _____

APPLICATION QUALIFIES FOR ADMINISTRATIVE APPROVAL? YES

COMMUNICATION WITH CONTACT PERSON:

1st Contact: Telephoned Letter 12-9-98 Date Nature of Discussion VERBAL APP - WFX-73

2nd Contact: Telephoned Letter _____ Date Nature of Discussion _____

3rd Contact: Telephoned Letter _____ Date Nature of Discussion _____

CROSS TIMBERS OPERATING COMPANY

SEMGSAU #15 - Convert to Injection

NMOCD Form C-108 Section III

III. Data on injection well.

A. Injection well information (see attached schematic)

1. Lease: SEMGSAU

Well: 15

Location: 500' FNL & 330' FWL, Unit D
Section 32, T-17-S, R-33-E
Lea County, NM

2. Casing: Surface - 8 5/8", 23# @ 417', cmt'd w/275 sxs., circ 59 sxs to surface.

Production - 5 1/2", 15.5# @ 4359', cmt'd w/1350 sxs., circ 243 sxs to surface.

3. Tubing: 2 3/8", 4.7#, J-55, internally plastic coated set @ 4262'.

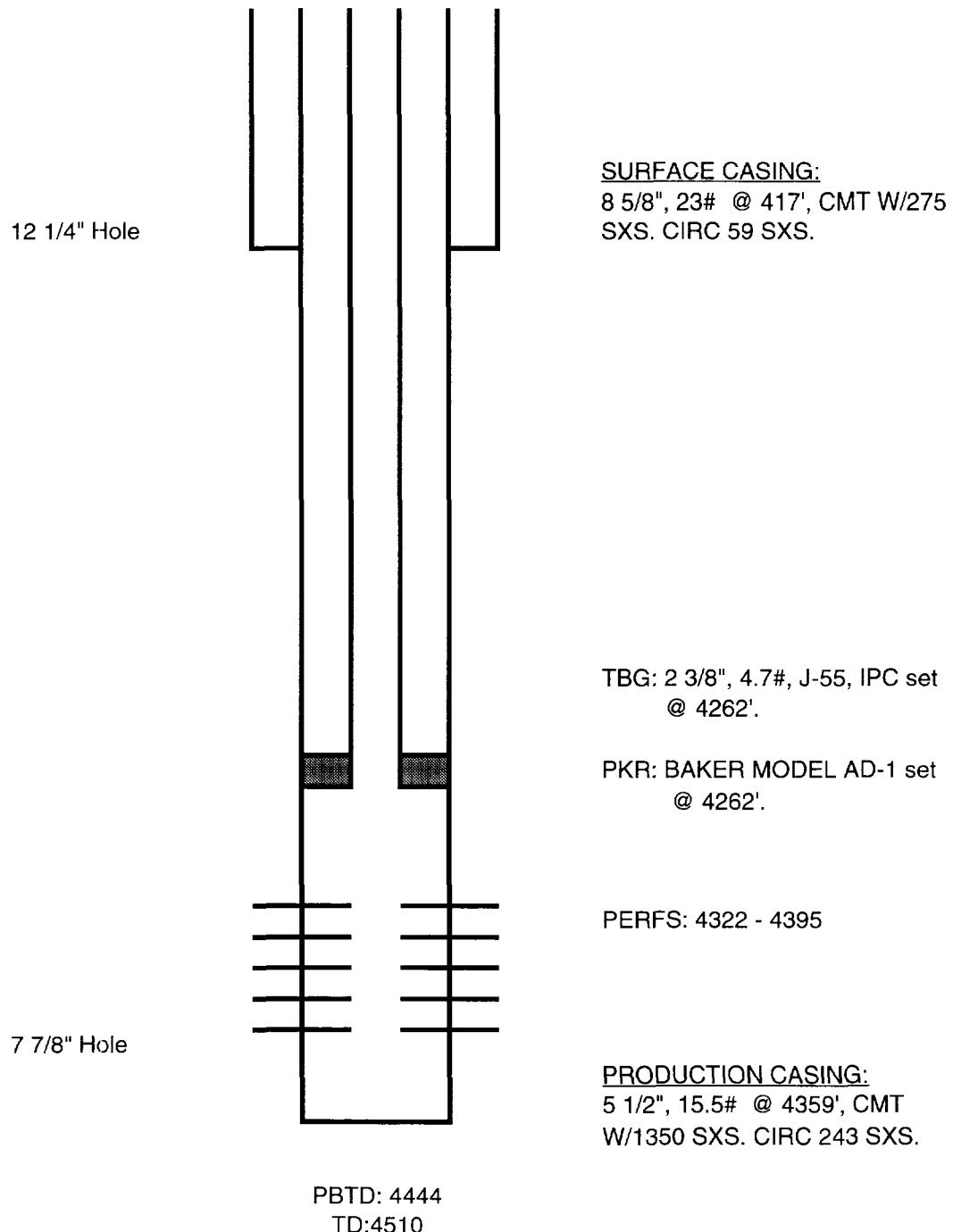
4. Packer: Baker Model AD-1 set @ 4262'.

B. Other well information

1. Injection formation: Grayburg
Field: Maljamar Grayburg San Andres *4218*
2. Existing cased hole perforated from 4322' - 4395'.
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 4300' and is included in this pool. The Abo formation is productive at about 8600'.

WELL: SEMGSAU #15
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 500' FNL, 330' FWL, UNIT D, SEC 32, T17S, R33E, LEA COUNTY, NM
API #: 30-025-33615

PROPOSED INJECTOR



CROSS TIMBERS OPERATING COMPANY

SEMGSAU #106 - Convert to Injection

NMOCD Form C-108 Section III

III. Data on injection well.

A. Injection well information (see attached schematic)

1. Lease: SEMGSAU

Well: 106

Location: 1040' FSL & 420' FEL, Unit P
Section 30, T-17-S, R-33-E
Lea County, NM

2. Casing: Surface - 8 5/8", 23# @ 392', cmt'd w/250
sxs., circ 79 sxs to surface.

Production - 5 1/2", 15.5# @ 4417', cmt'd
w/950 sxs., circ 225 sxs to
surface.

3. Tubing: 2 3/8", 4.7#, J-55, internally plastic
coated set @ 4158'.

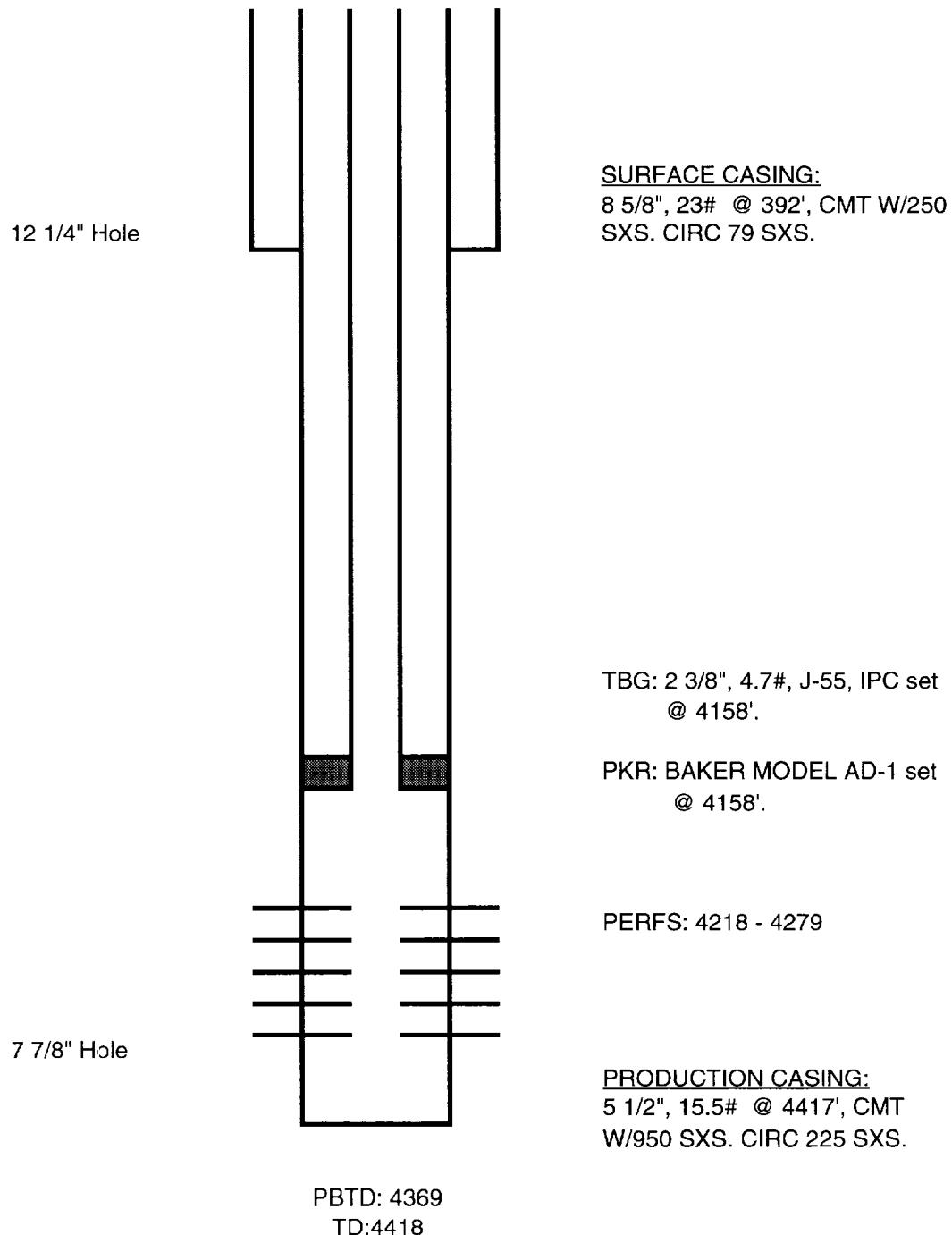
4. Packer: Baker Model AD-1 set @ 4158'.

B. Other well information

1. Injection formation: Grayburg
Field: Maljamar Grayburg San Andres
2. Existing cased hole perforated from 4218' - 4279'.
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 4300' and
is included in this pool. The Abo formation is
productive at about 8600'.

WELL: SEMGSAU #106
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1040' FSL, 420' FEL, UNIT P, SEC 30, T17S, R33E, LEA COUNTY, NM
API #: 30-025-33353

PROPOSED INJECTOR



CROSS TIMBERS OPERATING COMPANY

SEMGSAU #610 - Convert to Injection

NMOCD Form C-108 Section III

III. Data on injection well.

A. Injection well information (see attached schematic)

1. Lease: SEMGSAU

Well: 610

Location: 1310' FSL & 750' FWL, Unit M
Section 29, T-17-S, R-33-E
Lea County, NM

2. Casing: Surface - 8 5/8", 23# @ 348', cmt'd w/250
sxs., circ 17 sxs to surface.

Production - 5 1/2", 15.5# @ 4397', cmt'd
w/900 sxs., TOC ~ 300' by
Temp Survey.

3. Tubing: 2 3/8", 4.7#, J-55, internally plastic
coated set @ 4192'.

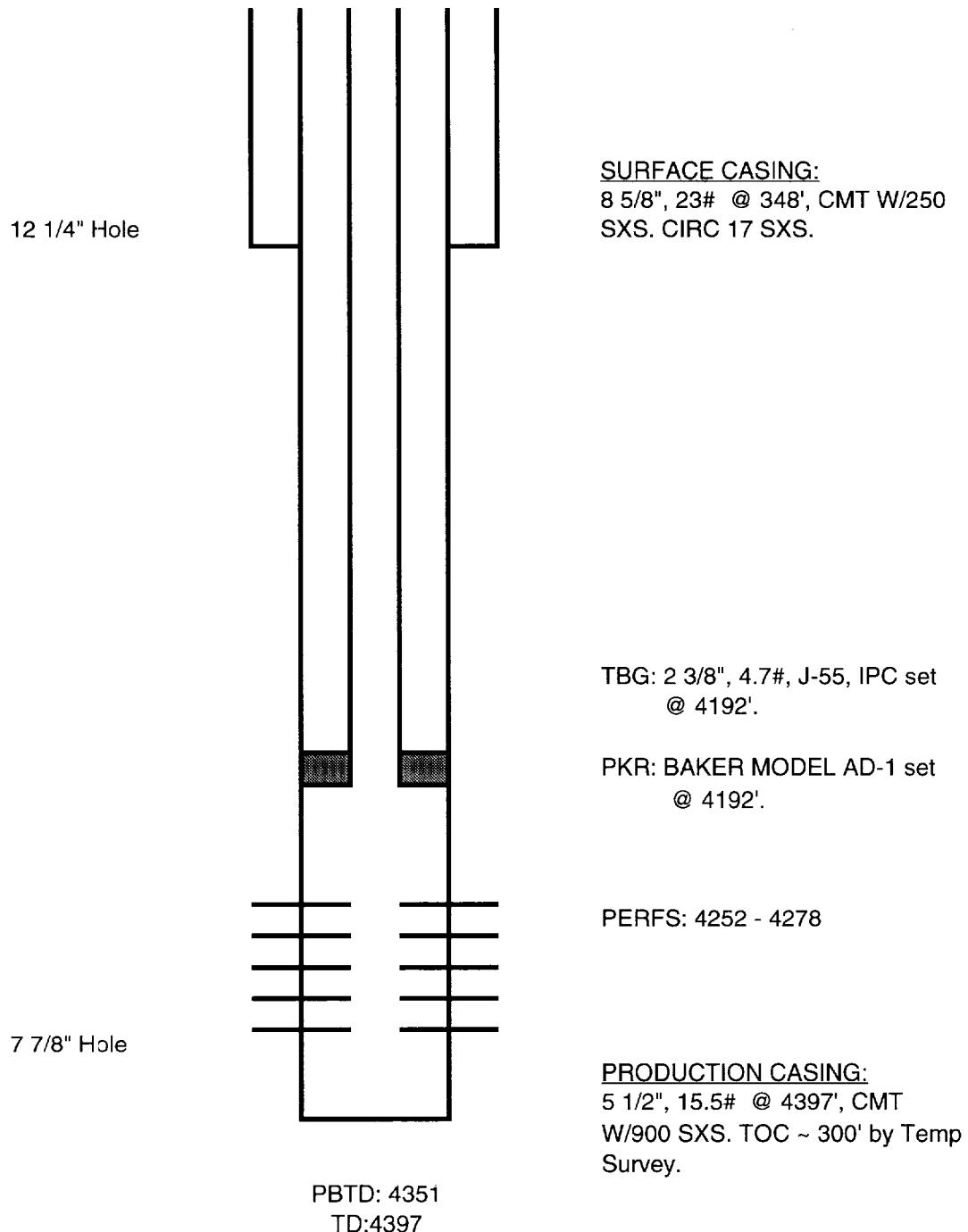
4. Packer: Baker Model AD-1 set @ 4192'.

B. Other well information

1. Injection formation: Grayburg
Field: Maljamar Grayburg San Andres
2. Existing cased hole perforated from 4252' - 4278'.
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 4300' and
is included in this pool. The Abo formation is
productive at about 8600'.

WELL: SEMGSAU #610
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1310' FSL, 750' FWL, UNIT M, SEC 29, T17S, R33E, LEA COUNTY, NM
API #: 30-025-32888

PROPOSED INJECTOR



CROSS TIMBERS OPERATING COMPANY

SEMGSAU #614 - Convert to Injection

NMOCD Form C-108 Section III

III. Data on injection well.

A. Injection well information (see attached schematic)

1. Lease: SEMGSAU

Well: 614

Location: 1070' FSL & 1888' FWL, Unit N
Section 29, T-17-S, R-33-E
Lea County, NM

2. Casing: Surface - 8 5/8", 23# @ 357', cmt'd w/250
sxs., circ 84 sxs to surface.

Production - 5 1/2", 15.5# @ 4394', cmt'd
w/850 sxs., circ 34 sxs to
surface.

3. Tubing: 2 3/8", 4.7#, J-55, internally plastic
coated set @ 4190'.

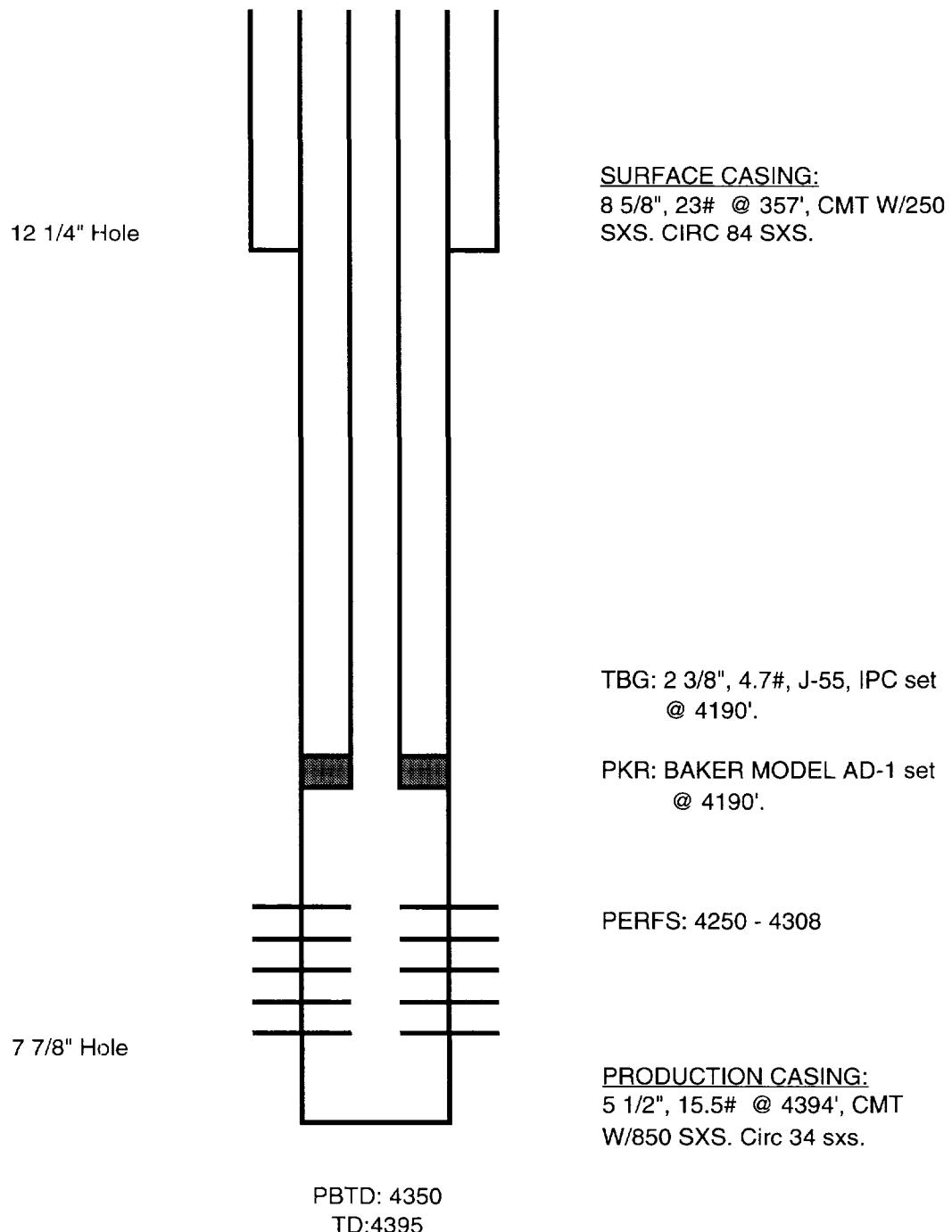
4. Packer: Baker Model AD-1 set @ 4190'.

B. Other well information

1. Injection formation: Grayburg
Field: Maljamar Grayburg San Andres
2. Existing cased hole perforated from 4250' - 4308'.
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 4300' and
is included in this pool. The Abo formation is
productive at about 8600'.

WELL: SEMGSAU #614
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1070' FSL, 1888' FWL, UNIT N, SEC 29, T17S, R33E, LEA COUNTY, NM
API #: 30-025-33337

PROPOSED INJECTOR



CROSS TIMBERS OPERATING COMPANY

SEMGSAU #710 - Convert to Injection

NMOCD Form C-108 Section III

III. Data on injection well.

A. Injection well information (see attached schematic)

1. Lease: SEMGSAU

Well: 710

Location: 1165' FSL & 2010' FEL, Unit O
Section 29, T-17-S, R-33-E
Lea County, NM

2. Casing: Surface - 8 5/8", 23# @ 404', cmt'd w/250
sxs., circ 50 sxs to surface.

Production - 5 1/2", 15.5# @ 4394', cmt'd
w/850 sxs., circ 80 sxs to
surface.

3. Tubing: 2 3/8", 4.7#, J-55, internally plastic
coated set @ 4212'.

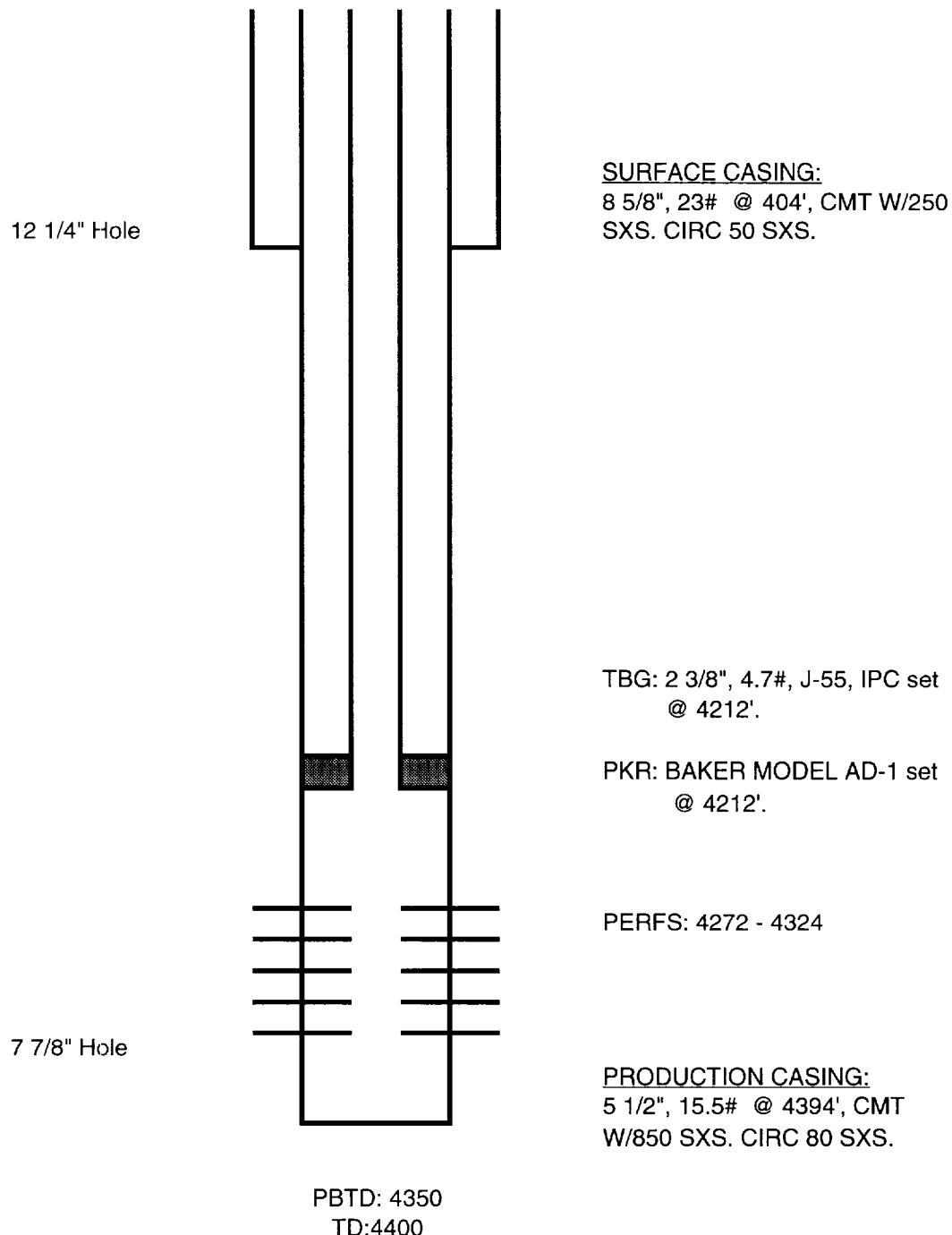
4. Packer: Baker Model AD-1 set @ 4212'.

B. Other well information

1. Injection formation: Grayburg
Field: Maljamar Grayburg San Andres
2. Existing cased hole perforated from 4272' - 4324'.
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 4300' and
is included in this pool. The Abo formation is
productive at about 8600'.

WELL: SEMGSAU #710
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1165' FSL, 2010' FEL, UNIT O, SEC 29, T17S, R33E, LEA COUNTY, NM
API #: 30-025-33338

PROPOSED INJECTOR



CROSS TIMBERS OPERATING COMPANY

SEMGSAU #714 - Convert to Injection

NMOCD Form C-108 Section III

III. Data on injection well.

A. Injection well information (see attached schematic)

1. Lease: SEMGSAU

Well: 714

Location: 1200' FSL & 900' FEL, Unit P
Section 29, T-17-S, R-33-E
Lea County, NM

2. Casing: Surface - 8 5/8", 23# @ 340', cmt'd w/250
sxs., circ 93 sxs to surface.

Production - 5 1/2", 15.5# @ 4450', cmt'd
w/900 sxs., TOC ~ 680' by
Temp Survey.

3. Tubing: 2 3/8", 4.7#, J-55, internally plastic
coated set @ 4222'.

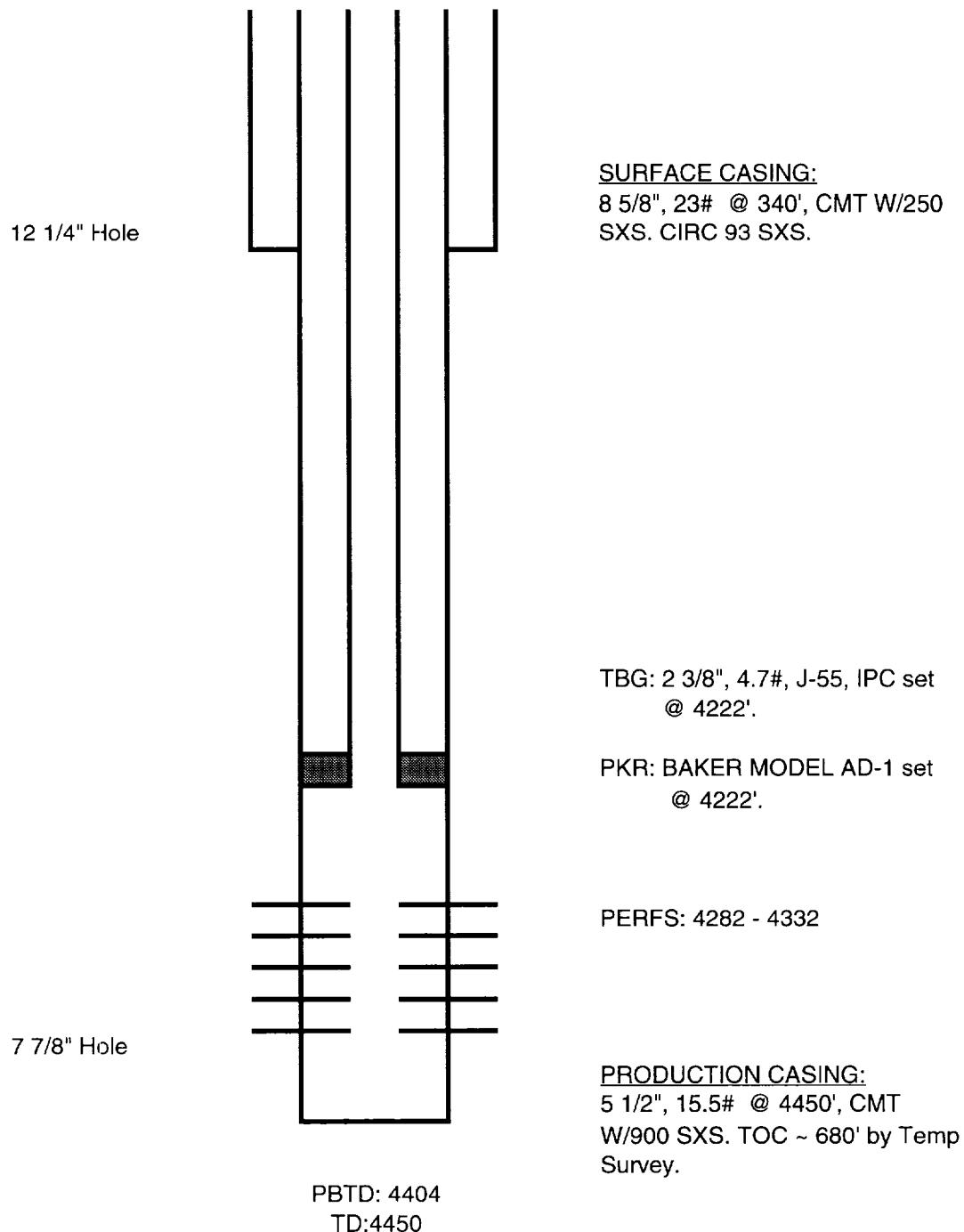
4. Packer: Baker Model AD-1 set @ 4222'.

B. Other well information

1. Injection formation: Grayburg
Field: Maljamar Grayburg San Andres
2. Existing cased hole perforated from 4282' - 4332'.
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 4300' and
is included in this pool. The Abo formation is
productive at about 8600'.

WELL: SEMGSAU #714
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1200' FSL, 900' FEL, UNIT P, SEC 29, T17S, R33E, LEA COUNTY, NM
API #: 30-025-33869

PROPOSED INJECTOR



NAME	OPERATOR	LOCATION	COMPL DATE	TYPE	TD	CSG SIZE	DEPTH SET	SX CMT	PERFS	COMMENTS
CMU #90	The Wiser Oil Co.	1980' FNL, 660' FWL, Unit E, Sec 28, T17S, R33E	18/28/57	OIL	4765	8 5/8"	1407'	500	4531-4631'	Est. TOC @ 3376'
CMU #236	The Wiser Oil Co.	2460' FNL, 1308' FWL, Unit E, Sec 28, T17S, R33E	101/4/96	OIL	4900	8 5/8"	365	325	4224-4698	Active Prod.
CMU #242	The Wiser Oil Co.	1330' FSL, 1330' FWL, Unit K, Sec 28, T17S, R33E	4/21/96	OIL	4803	8 5/8"	496	300	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"	345	150	4200-4352	Active WIW
CMU #98	The Wiser Oil Co.	660' FSL, 660' FWL, Unit M, Sec 28, T17S, R33E	12/21/57	OIL	4440	8 5/8"	354	250	4299-4337	WO in 12/77
Philimex #14	Phillips Petr.	569' FSL, 507' FWL, Unit M, Sec 28, T17S, R33E	10/18/81	SWD	12752	11 3/4"	376	480	4830-5220	Plugged back to 6609
CMU #281	The Wiser Oil Co.	330' FSL, 1210' FWL, Unit M, Sec 28, T17S, R33E	1/31/97	OIL	4775	8 5/8"	391	325	4273-4454	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"	444	325	4200-4363	Active Prod.
SEMGSAU #411	Cross Timbers Oper.	1345' FNL, 100' FWL, Unit E, Sec 29, T17S, R33E	2/21/82	OIL	4073	8 5/8"	1299	900	3900-4073	P&A 4/15/83
SEMGSAU #412	Cross Timbers Oper.	1295' FNL, 1295' FWL, Unit D, Sec 29, T17S, R33E	2/2/82	OIL	4425	8 5/8"	1305	800	4081-4276	CIBP @ 4250
SEMGSAU #402	Cross Timbers Oper.	1980' FNL, 660' FEL, Unit E, Sec 29, T17S, R33E	7/16/43	OIL	4320	9 5/8"	1120	650	4051-4204	Active Prod.
SEMGSAU #403	Cross Timbers Oper.	1980' FNL, 1980' FWL, Unit F, Sec 29, T17S, R33E	6/1/44	OIL	4300	8 5/8"	1214	550	4185-4277	Conv to inj 9/85 TA 12/93
SEMGSAU #409	Cross Timbers Oper.	2615' FNL, 25' FWL, Unit E, Sec 29, T17S, R33E	10/14/78	OIL	4359	8 5/8"	1300	650	4296-4326	P&A 12/83

NAME	OPERATOR	LOCATION	COMPL DATE	TYPE	TD	CSG SIZE	DEPTH SET	SX CNT	PERFS	COMMENTS
SEMGSAU #410	Cross Timbers Oper.	2615' FNL, 1420' FWL, Unit F, Sec 29, T17S, R33E	12/6/78	OIL	4377	8 5/8"	1316	650	4083-4088	TA 5/95
SEMGSAU #504	Cross Timbers Oper.	1980' FNL, 1980' FEL, Unit G, Sec 29, T17S, R33E	10/4/58	OIL	4440	8 5/8"	1270	400	4200-4306	Conv to inj 12/80 P&A 5/83
SEMGSAU #505	Cross Timbers Oper.	2310' FNL, 990' FEL, Unit H, Sec 29, T17S, R33E	9/4/58	OIL INJ	4485	8 5/8" 5 1/2"	254 4485	250 150	4137-4472	Conv to inj 10/67 TA 12/93
SEMGSAU #507	Cross Timbers Oper.	2615' FNL, 2615' FEL, Unit G, Sec 29, T17S, R33E	3/5/80	OIL	4380	8 5/8"	1300	660	4305-4354	TA 5/95
SEMGSAU #709	Cross Timbers Oper.	2250' FSL, 1225' FEL, Unit I, Sec 29, T17S, R33E	10/31/81	OIL	4450	8 5/8"	1314	660	4218-4414	TA 12/91
SEMGSAU #702	Cross Timbers Oper.	1980' FSL, 1980' FEL, Unit J, Sec 29, T17S, R33E	3/1/44	OIL INJ	4400	8 5/8" 7"	5 1/2" 4"	3950 3678-4449	1000 250	Conv to inj 9/67 Active WIW
SEMGSAU #704	Cross Timbers Oper.	1650' FSL, 990' FEL, Unit I, Sec 29, T17S, R33E	11/1/54	OIL INJ	4360	8 5/8"	297	300	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"	368	250	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"	407	275	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"	353	220	4244-4322	Active Prod.
SEMGSAU #705	Cross Timbers Oper.	1395' FSL, 2615' FEL, Unit P, Sec 29, T17S, R33E	12/14/71	OIL	4450	8 5/8" 5 1/2"	4404	800	4178-4300	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"	1254	550	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"	3736-4439	100	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"	405	275	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"	810	350	4272-4284	P&A 773
SEMGSAU #708	Cross Timbers Oper.	100' FSL, 2590' FEL, Unit O, Sec 29, T17S, R33E	4/10/73	OIL	4316	8 5/8"	819	500	4278-4292	TA 12/91
SEMGSAU #615	Cross Timbers Oper.	1900' FSL, 2630' FWL, Unit K, Sec 29, T17S, R33E	11/26/96	OIL	4400	8 5/8"	418	275	4278-4297	Active Prod.
SEMGSAU #603	Cross Timbers Oper.	1980' FSL, 1980' FWL, Unit K, SEC 29, T17S, R33E	4/14/49	OIL INJ	4300	8 5/8"	1260	50	4115-4300	Conv to inj 12/71 P&A 793
SEMGSAU #613	Cross Timbers Oper.	1930' FSL, 1516' FWL, Unit K, Sec 29, T17S, R33E	5/23/96	OIL	4325	8 5/8"	394	250	4250-4277	Active Prod.
SEMGSAU #601	Cross Timbers Oper.	1980' FSL, 660' FEL, Unit L, Sec 29, T17S, R33E	10/31/43	OIL INJ	4253	8 5/8"	1265	50	4253-4272	Conv to inj 8/67 P&A 1284
SEMGSAU #609	Cross Timbers Oper.	450' FWL, 1920' FSL, Unit L, Sec 29, T17S, R33E	1/10/92	OIL INJ	4420	9 5/8"	1248	650	4153-4278	CBP @ 4315 Active W/W
SEMGSAU #606	Cross Timbers Oper.	1310' FSL, 100' FWL, Unit M, Sec 29, T17S, R33E	2/6/73	OIL	4294	8 5/8"	833	400	4170-4271	Active Prod.
SEMGSAU #607	Cross Timbers Oper.	1455' FSL, 1330' FWL, Unit K, Sec 29, T17S, R33E	10/28/80	OIL	4360	8 5/8"	1302	660	4177-4265	Active Prod.
SEMGSAU #605	Cross Timbers Oper.	1330' FSL, 1330' FWL, Unit K, Sec 29, T17S, R33E	11/15/47	OIL	4320	10"	20	150	4189-4370	P&A 10/80
SEMGSAU #616	Cross Timbers Oper.	2590' FWL, 775' FSL, Unit N, Sec 29, T17S, R33E	5/8/97	OIL	4359	8 5/8"	394	250	4254-4300	Active Prod.
SEMGSAU #602	Cross Timbers Oper.	660' FSL, 1980' FWL, Unit N, Sec 29, T17S, R33E	8/18/43	OIL INJ	4312	8 1/4"	1300	25	4060-4312	Conv to inj 12/67 P&A 3/82

NAME	OPERATOR	LOCATION	COMPL DATE	TYPE	TD	CSG SIZE	DEPTH SET	SX CMT	PERFS	COMMENTS
SEMGSAU #612	Cross Timbers Oper.	710' FSL, 1425' FWL, Unit N, Sec 29, T17S, R33E	5/31/95	OIL	4473	8 5/8"	333	250	4280-4339	Active Prod.
SEMGSAU #604	Cross Timbers Oper.	660' FSL, 660' FWL, Unit M, Sec 29, T17S, R33E	12/15/43	OIL	4444	8 5/8"	1260	50	4236-4326	Conv to inj 10/81 Active VVW
SEMGSAU #611	Cross Timbers Oper.	710' FSL, 50' FWL, Unit M, Sec 29, T17S, R33E	5/24/95	OIL	4463	8 5/8"	3939	75		
SEMGSAU #608	Cross Timbers Oper.	125' FSL, 1345' FWL, Unit N, Sec 29, T17S, R33E	12/31/91	OIL	4550	8 5/8"	357	250	4234-4324	Active Prod.
SEMGSAU #202	Cross Timbers Oper.	1980' FNL, 1980' FEL, Unit G, Sec 30, T17S, R33E	10/14/44	OIL	4303	8 5/8"	4463	800		
SEMGSAU #203	Cross Timbers Oper.	2310' FNL, 1650' FEL, Unit G, Sec 30, T17S, R33E	7/29/53	OIL	4278	8 5/8"	5 1/2"	4550	1070	
SEMGSAU #301	Cross Timbers Oper.	1980' FNL, 660' FEL, Unit H, Sec 30, T17S, R33E	3/12/44	OIL	4285	8 5/8"	7"	3927	100	4132-4189 P&A 6/83
SEMGSAU #105	Cross Timbers Oper.	2490' FSL, 1595' FEL, Unit I, Sec 30, T17S, R33E	4/15/80	OIL	4350	8 5/8"	5"	3915	150	4114-4192 TA 7/93
SEMGSAU #101	Cross Timbers Oper.	1980' FSL, 1980' FEL, Unit J, Sec 30, T17S, R33E	12/10/43	OIL	4281	8 5/8"	5 1/2"	4350	160	4118-4213 Active Prod. 4230-4308
SEMGSAU #110	Cross Timbers Oper.	1650' FSL, 2310' FEL, Unit J, Sec 30, T17S, R33E	5/8/97	OIL	4377	8 5/8"	4"	3927	300	4119-4249 Conv to inj 9/67 P&A 1/86
SEMGSAU #109	Cross Timbers Oper.	1980' FSL, 1470' FEL, Unit J, Sec 30, T17S, R33E	12/12/96	OIL	4355	8 5/8"	5 1/2"	3740-4281	100	
SEMGSAU #102	Cross Timbers Oper.	1980 FSL, 660' FEL, Unit I, Sec 30 T17S, R33E	2/8/44	OIL	4364	8 5/8"	4377	950	4181-4218	Active Prod.
SEMGSAU #108	Cross Timbers Oper.	1900 FSL, 104' FEL, Unit I, Sec 30, T17S, R33E	6/8/96	OIL	4405	8 5/8"	5 1/2"	3626-4363	403	4223-4282 Active Prod.

5-1/1

69/15

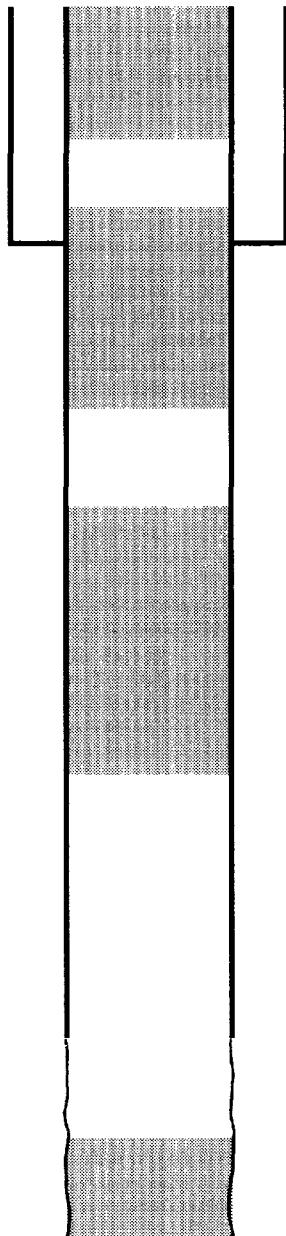
NAME	OPERATOR	LOCATION	COMPL DATE	TYPE	TD	CSG SIZE	DEPTH SET	SX CMT	PERFS	COMMENTS
SEMGSAU #104	Cross Timbers Oper.	1355' FSL, 1135' FEL, Unit P, Sec 30, T17S, R33E	1/5/77	OIL	4350	8 5/8"	1305	650	4186-4252	Active Prod.
SEMGSAU #103	Cross Timbers Oper.	660' FNL, 660' FEL, Unit P, Sec 30, T17S, R33E	3/4/44	OIL INJ	4355	8 5/8" 5 1/2"	1235 3951	550 300	4276-4306	P&A 3/86
US Minerals #4	Phillips Petr.	660' FSL, 1980' FEL, Unit O, Sec 30, T17S, R33E	1/30/69	OIL	4381	9 5/8" 4 1/2"	355 4381	350 145	4220-4324	Conv to inj 10/67
US Minerals #5	Phillips Petr.	990' FSL, 1650' FEL, Unit O, Sec 30, T17S, R33E	4/28/81	OIL	4500	8 5/8" 5 1/2"	1265 4449	570 950	4250-4350	CIBP @ 4400
Williams #1		660' FNL, 660' FEL, Unit A, Sec 31, T17S, R33E	1/25/44	OIL	4290	8 5/8" 7"	1274 4050	75 100	4235-4305	P&A 5/80
Williams #1-X		330' FNL, 330' FEL, Unit A, Sec 31, T17S, R33E	7/11/50	OIL	4314	8 5/8" 7"	1340 4015	150 100	4200-4290	P&A 6/59
Fee MA "B" #3	OXY USA	950' FNL, 990' FEL, Unit A, Sec 31, T17S, R33E	2/7/61	OIL	8870	13 3/8" 8 5/8" 5 1/2"	297 2799 8869	250 950 1175	8668-8722	
Fee MA "B" #2	OXY USA	800' FNL, 2145' FEL, Unit B, Sec 31, T17S, R33E	6/23/60	OIL	8935	13 3/8" 8 5/8" 5 1/2"	297 2799 8930	225 950 1195	8654-8692	
Fee MA "B" #1	Agua, Inc.	1980' FNL, 1980' FEL, Unit G, Sec 31, T17S, R33E	3/31/60	SWD	9020	13 3/8" 5 1/2"	296 4894	225 175	4720-4780	
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
SEMGSAU #904	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 4448-4460	Active Prod.
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.

NAME	OPERATOR	LOCATION	COMPL DATE	TYPE	TD	CSG SIZE	DEPTH SET	SX CMT	PERFS	COMMENTS
SEMGSAU #803	Cross Timbers Oper.	660' FNL, 1980' FEL, Unit B, Sec 32, T17S, R33E	5/11/44	OIL INJ	4325	8"	1280	50	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"	4045	102		Conv to inj 2/74 P&A 10/83
Carper State #1		777' FNL, 330' FWL, Unit D, Sec 32, T17S, R33E	7/10/61	DH	8809	11 3/4"	314	275		P&A 7/61
Cockburn State #1		660' FNL, 660' FWL, Unit D, Sec 32, T17S, R33E	3/1/44	DH	4473	8 5/8"	1262	50		Re P&A 3/18/80
Cockburn State #2		660' FNL, 1980' FEL, Unit C, Sec 32, T17S, R33E	7/28/44	DH	5200	8 5/8"	7"	4028	100	P&A 4/80
Cockburn "A" State #4	OXY USA	990' FNL, 1980' FEL, Unit B, Sec 32, T17S, R33E	3/28/66	OIL	8820	13 3/8"	334	320	8632-8695	
Carper State #7 A		2310' FNL, 1650' FWL, Unit F, Sec 32, T17S, R33E	6/15/62	DH	4601	8 5/8"	1402	300		P&A 6/62
Corbin State "A" 5	OXY USA	1980' FNL, 1980' FEL, Unit F, Sec 32, T17S, R33E	5/24/88	OIL	13705	13 3/8"	456	475	4362-4447	Re-entry
State CD #2		2310' FNL, 990' FWL, Unit L, Sec 32, T17S, R33E	1/20/66	DH	4766	8 5/8"	328	300		P&A 12/66
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.
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.
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.
Cockburn #1		990' FNL, 380' FWL, Unit D, Sec 33, T17S, R33E	4/5/61	DH	8940	13 3/8"	309	340		P&A 2/85

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23 Schematics
Check OK

WELL: SEMGSAU #202
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1980' FNL, 1980' FEL, UNIT G, SEC 30, T17S, R33E, LEA COUNTY, NM

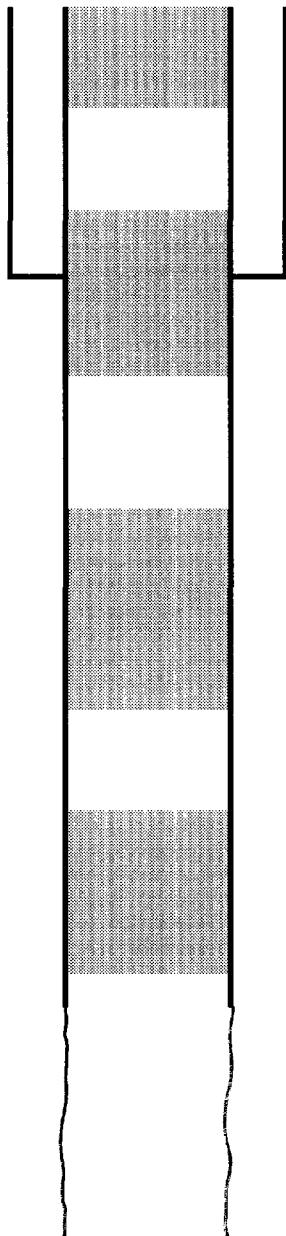


PLUGS SET AS FOLLOWS:

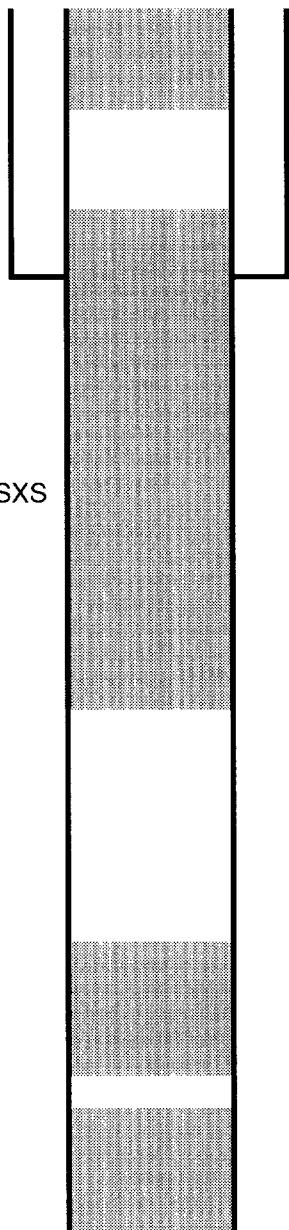
1. 4253 - 4303 W/10 SX.
2. 2209 - 2453 W/100 SX.
3. 1000 - 1270 W/100 SX
4. 0 - 346 W/120 SX.

TD:4303

WELL: SEMGSAU #411
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1345' FNL, 100' FWL, UNIT E, SEC 29, T17S, R33E, LEA COUNTY, NM



WELL: SEMGSAU #409
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 2615' FNL, 25' FWL, UNIT E, SEC 29, T17S, R33E, LEA COUNTY, NM

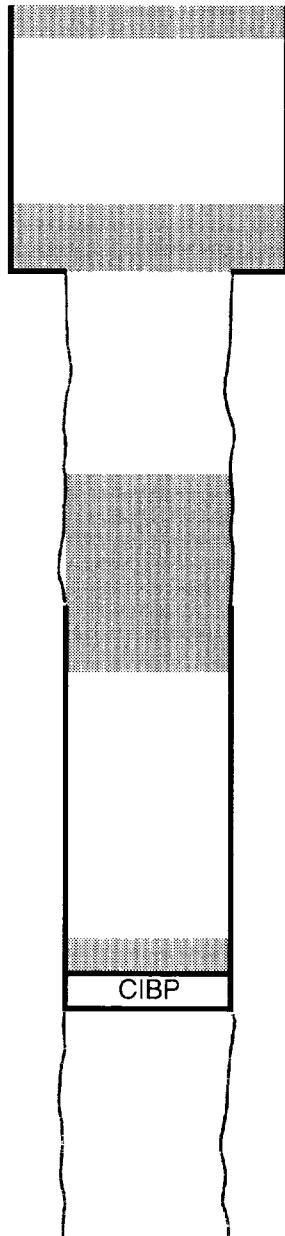


PLUGS SET AS FOLLOWS:

1. SQZ PERFS 4296 - 4326 W200 SXS
2. 3693 - 4163 W/47 SXS
3. SQZ PERF 2650 W/565 SXS
4. 1100 - 2232 W/115 SXS
5. 0 -200 W/20 SXS

TD:4359

WELL: SEMGSAU #904
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

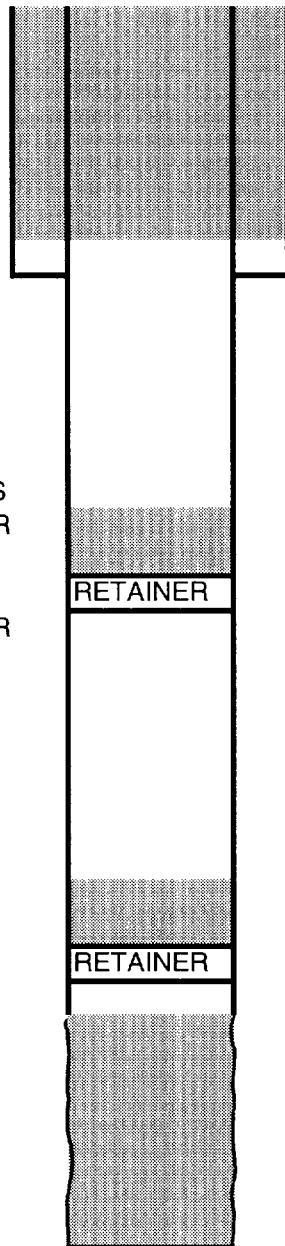
PLUGS SET AS FOLLOWS:

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
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FNL, 1980' FEL, UNIT B, SEC 32, T17S, R33E, LEA COUNTY, NM



PLUGS SET AS FOLLOWS:

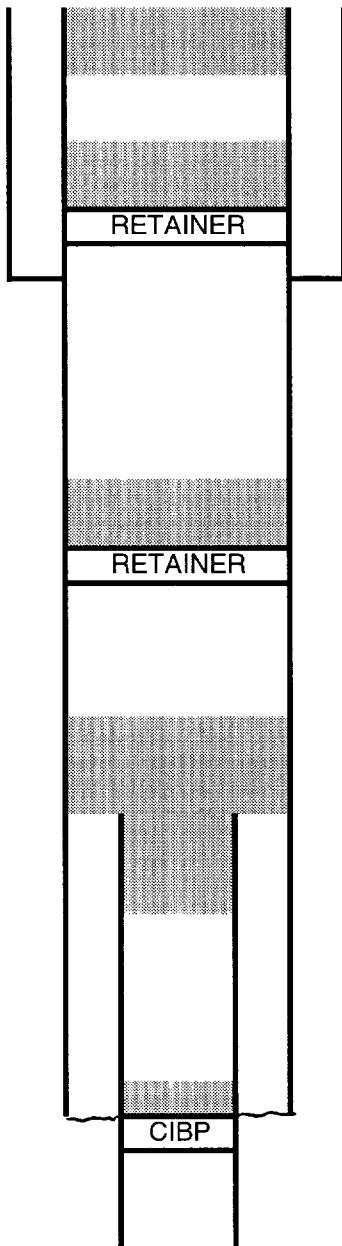
1. SQZ OH 4045 - 4300 W/150 SXS
2. DUMPED 37 SXS ON RETAINER
@ 3947.
3. SQZ PERF @ 2800 W/500 SXS
4. DUMPED 37 SXS ON RETAINER
@ 2697.
5. SQZ PERF @ 1200 W/250 SXS
6. 0 - 50 W/15 SXS

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

PRODUCTION CASING:
7" @ 4045', CMT W/102 SX

TD:4325

WELL: SEMGSAU #504
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1980' FNL, 1980' FEL, UNIT G, SEC 29, T17S, R33E, LEA COUNTY, NM

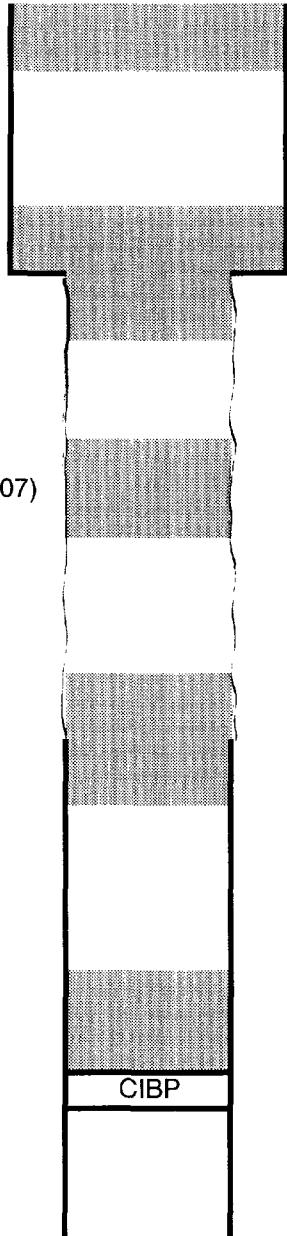


PLUGS SET AS FOLLOWS:

1. CIBP @ 4130 W/10 SXS
2. 3600 - 3900 W/25 SXS
3. SQZ PERF 2900 W/300 SXS
4. RETAINER @ 2863 W/16 SXS
5. RETAINER @ 1189 W/15 SXS
6. 0 - 282 W/ 30 SXS.

TD:4440

WELL: SEMGSAU #707
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 100' FSL, 1430' FEL, UNIT O, SEC 29, T17S, R33E, LEA COUNTY, NM



PLUGS SET AS FOLLOWS:

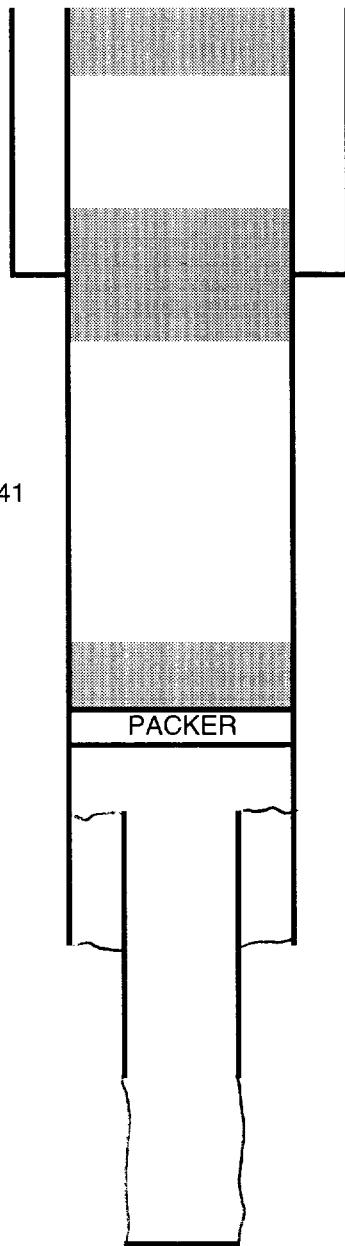
1. CIBP @ 4207 W/5 SXS (4167-4207)
2. PULLED 1738 OF 5 1/2".
3. 1688 - 1788 W/25 SXS
4. 1280 - 1380 W/40 SXS
5. 740 - 840 W/ 30 SXS
6. 0 - 30 W/10 SXS

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

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

TD:4430

WELL: SEMGSAU #603
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1980' FSL, 1980' FWL, UNIT K, SEC 29, T17S, R33E, LEA COUNTY, NM

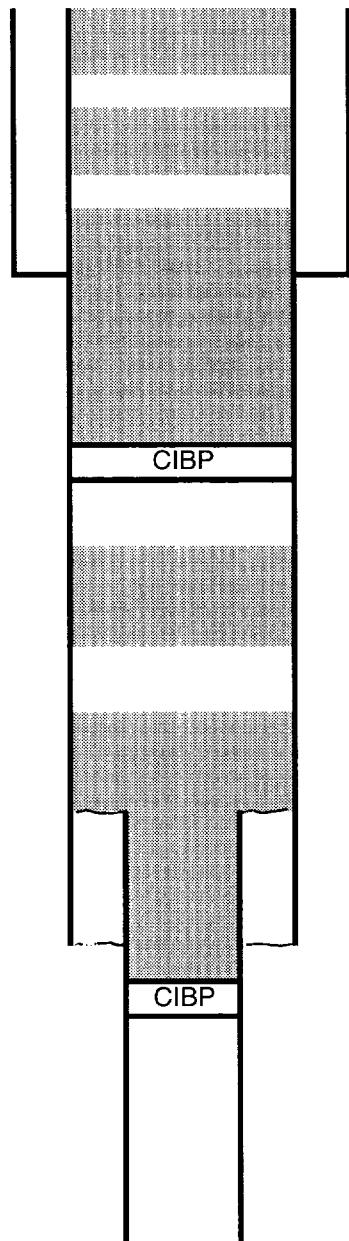


PLUGS SET AS FOLLOWS:

1. SPOTTED 25 SX ON PKR @ 3641
2. SPOTTED 25 SX @ 1300
3. SPOTTED 10 SX @ SURF

TD:4300

WELL: SEMGSAU #601
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1980' FSL, 660' FWL, UNIT L, SEC 29, T17S, R33E, LEA COUNTY, NM

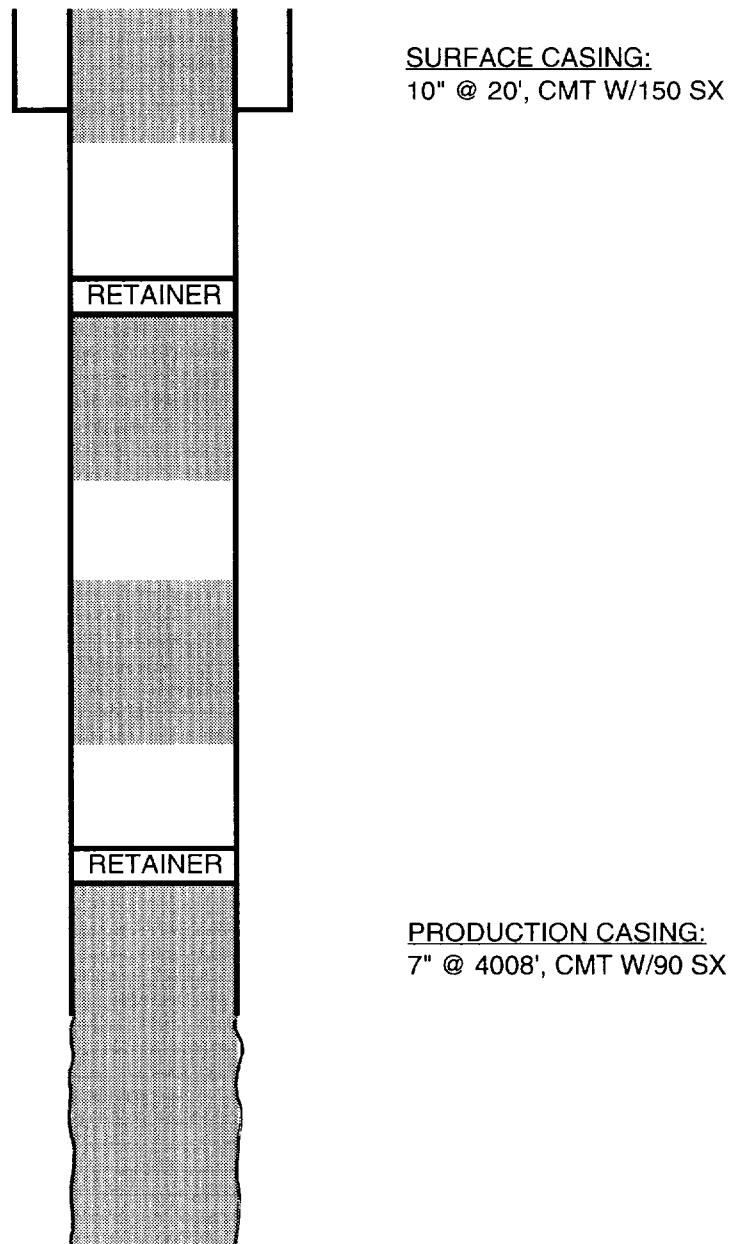


PLUGS SET AS FOLLOWS:

1. CIBP @ 4019
2. 3705 - 4019 W/30 SXS
3. 2420 - 3104 W/100 SXS
4. CIBP @ 2204
5. 897 - 2204 W/220 SXS
6. 657 - 806 W/25 SXS
7. 0 - 122 W/25 SXS

TD:4253

WELL: SEMGSAU #605
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1330' FSL, 1330' FWL, UNIT K, SEC 29, T17S, R33E, LEA COUNTY, NM

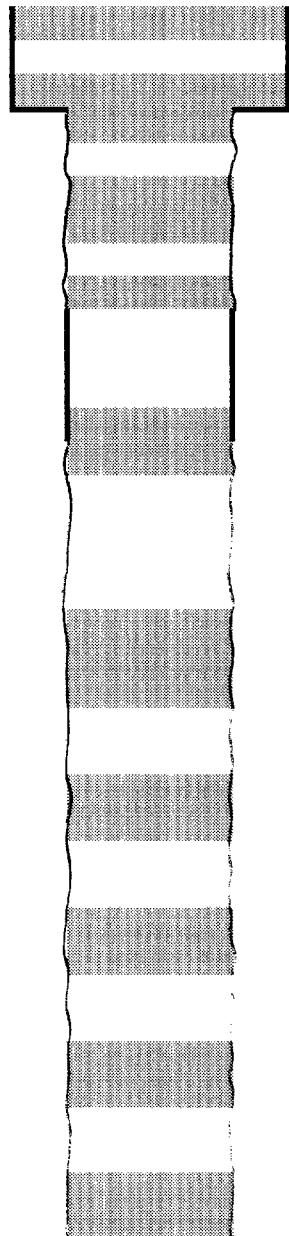


PLUGS SET AS FOLLOWS:

1. RETAINER @ 3809 W/100 SXS
2. PUT 500 SXS BELOW RET.
3. 2043 - 3148 W/125 SXS
4. RETAINER @ 961
5. PUT 500 SXS BELOW RET.
6. 0 - 30 W/10 SXS

TD:4320

WELL: CARPER STATE #1
FIELD: CORBIN ABO
LOCATION: 777' FNL, 330' FWL, UNIT D, SEC 32, T17S, R33E, LEA COUNTY, NM



PLUGS SET AS FOLLOWS:

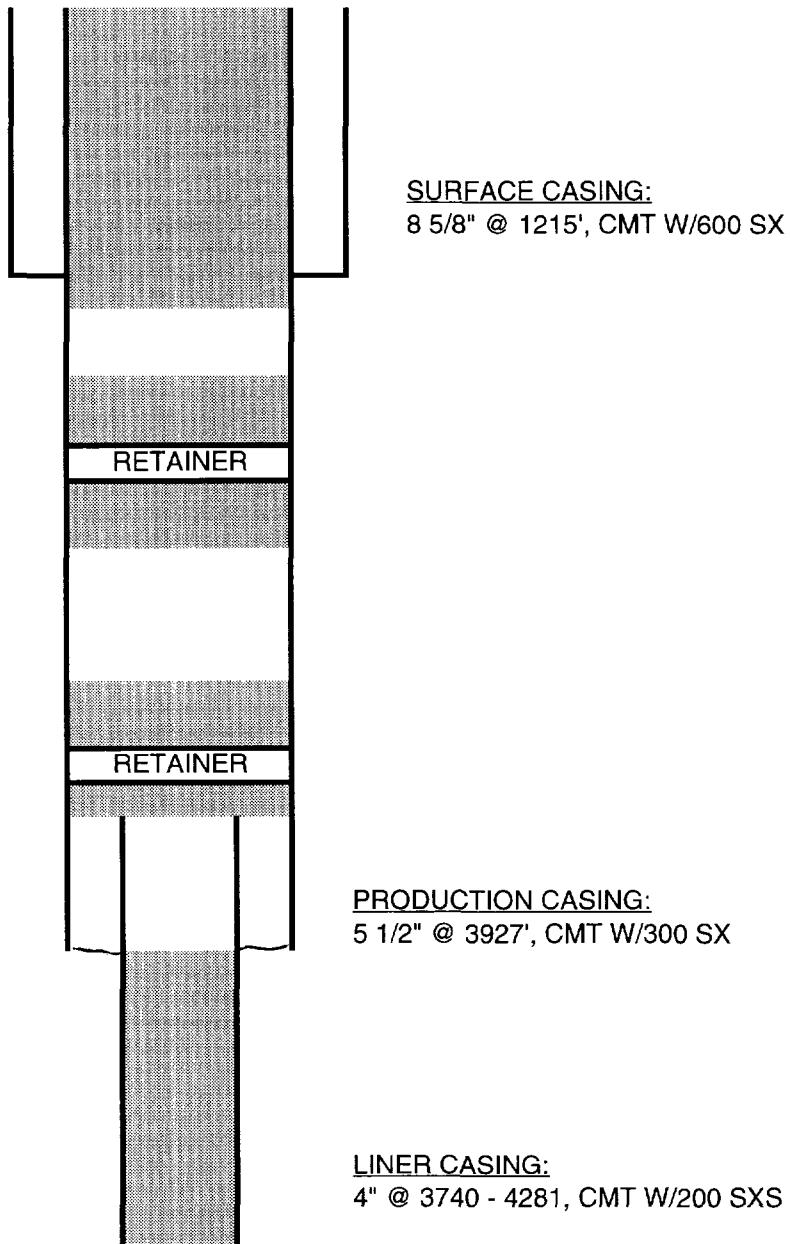
1. 8729 - 8809 W/25 SXS
2. 8420 - 8640 W/25 SXS
3. 6870 - 6950 W/25 SXS
4. 5820 - 5900 W/25 SXS
5. 4120 - 4200 W/25 SXS
6. 2860 - 2940 W/25 SXS
7. 1970 - 2010 W/25 SXS
8. 1160 - 1200 W/25 SXS
9. 290 - 330 W/25 SXS
10. 0 - 20 W/10 SXS

SURFACE CASING:
11 3/4" @ 315', CMT W/275 SX

PRODUCTION CASING:
8 5/8" @ 2915', CMT W/250 SX
PULLED CSG TO 2010

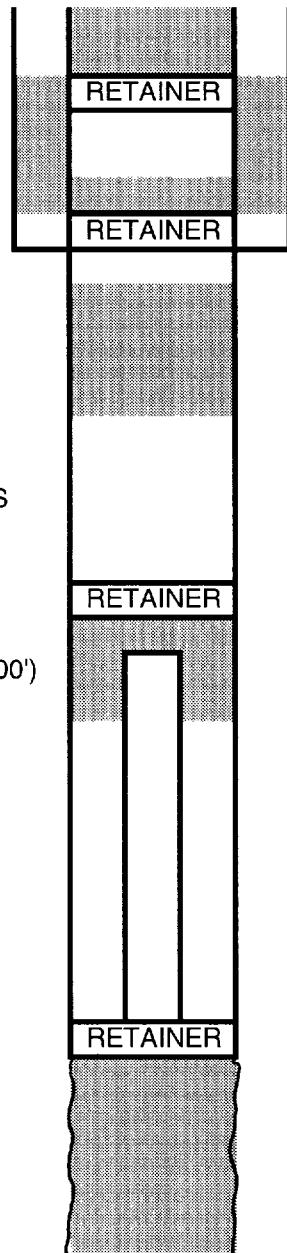
TD:8809

WELL: SEMGSAU #101
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 1980' FSL, 1980' FEL, UNIT J, SEC 30, T17S, R33E, LEA COUNTY, NM



TD:4281

WELL: SEMGSAU #602
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FSL, 1980' FWL, UNIT N, SEC 29, T17S, R33E, LEA COUNTY, NM



SURFACE CASING:
8 1/4" @ 1300', CMT W/25 SX

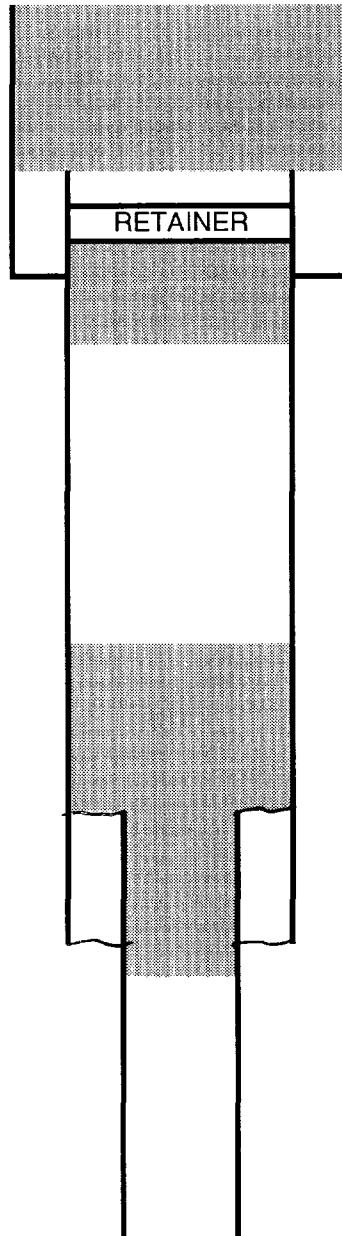
PLUGS SET AS FOLLOWS:

1. SQZ OH 4060 - 4312 W/500 SXS
7" CSG COLLAPSED @ 2162.
2. CUT TBG @ 2110.
3. SQZ 7" CSG LEAK @ 208 - 240
W/550 SXS.
4. RETAINER @ 2000 W/4 SXS (100')
5. SQZ PERF @ 2100 W/300 SXS
6. RETAINER @ 1265 W/25 SXS
7. SQZ PERF @ 1300 W/200 SXS
8. RETAINER @ 425 W/75 SXS
9. SQZ PERF @ 500 W/100 SXS

PRODUCTION CASING:
7" @ 4060', CMT W/200 SX

TD:4312

WELL: SEMGSAU #203
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 2310' FNL, 1650' FEL, UNIT G, SEC 30, T17S, R33E, LEA COUNTY, NM

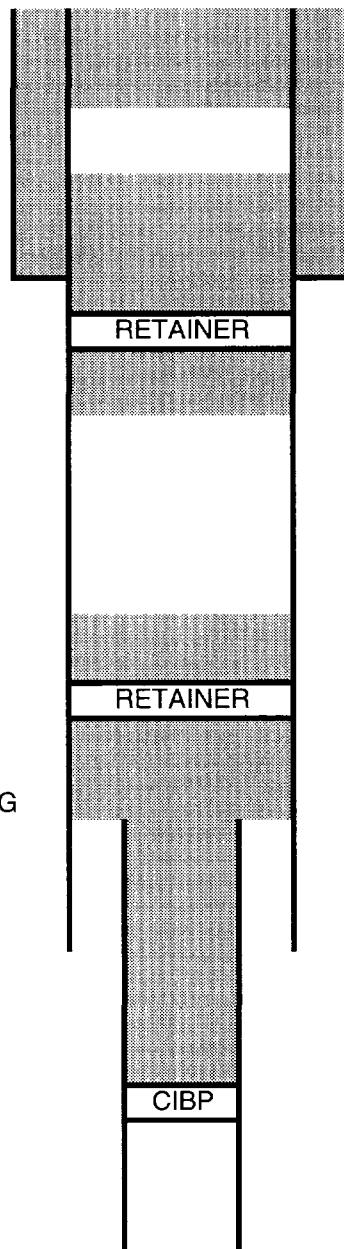


PLUGS SET AS FOLLOWS:

1. CMT PLUG @ 3800
2. 3660 - 3800 W/100 SXS
3. RETAINER @ 1096 W/100 SXS
4. SQZ PERF @ 1185 W/350 SXS
5. CUT CSG @ 872'
6. 0 - 880 W/260 SXS

TD:4278

WELL: SEMGSAU #103
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FSL, 660' FEL, UNIT P, SEC 30, T17S, R33E, LEA COUNTY, NM



SURFACE CASING:
8 5/8" @ 1235', CMT W/550 SXS

PLUGS SET AS FOLLOWS:

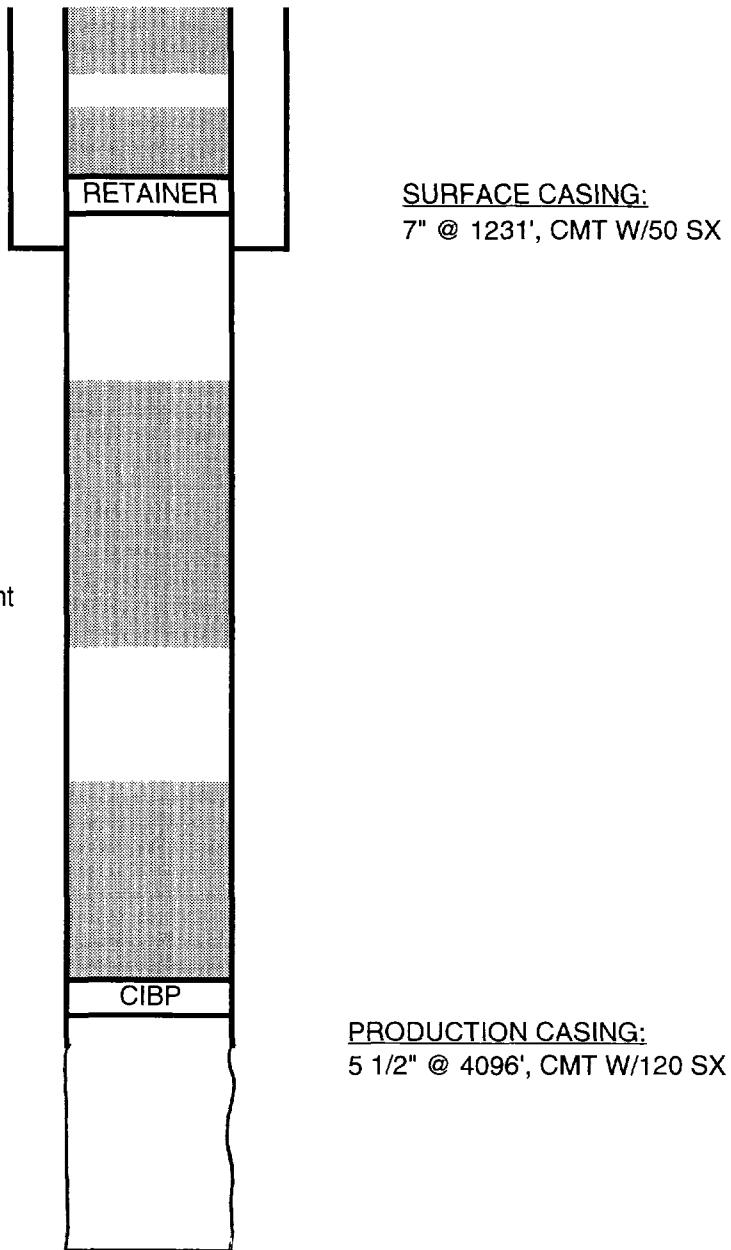
1. CIBP @ 4125 W/25 SXS
3635 - 4125
2. RETAINER @ 3605 W/25 SXS
3421 - 3605
3. RETAINER @ 1308
4. SQZ CSG LEAK 1393 - 1422
W/450 SXS
5. SQZ SURF CSG @ 1235 - 1237
W/150 SXS
6. PMP 250 SXS DOWN SURF CSG
@ SURF.
7. 0 - 313 W/ 37 SXS

PRODUCTION CASING:
5 1/2" @ 3951', CMT W/300 SXS

LINER CASING:
4" @ 3666 - 4355, CMT W/100 SXS

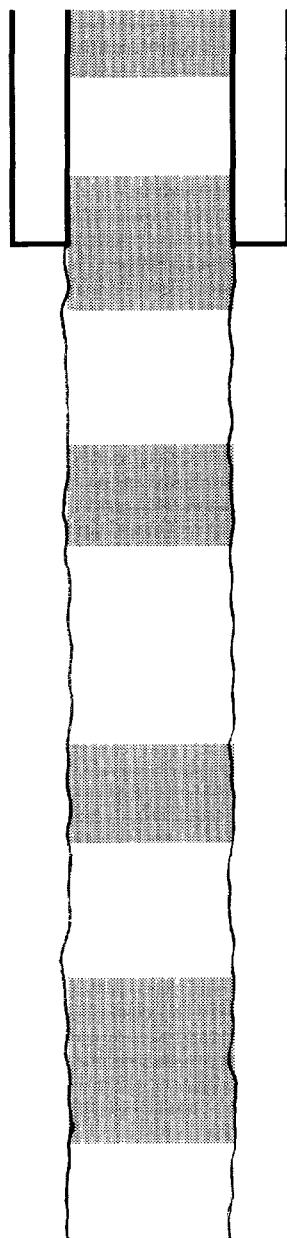
TD:4355

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



TD:4298

WELL: Carper State A #7
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 2310' FNL, 1650' FWL, UNIT F, SEC 32, T17S, R33E, LEA COUNTY, NM



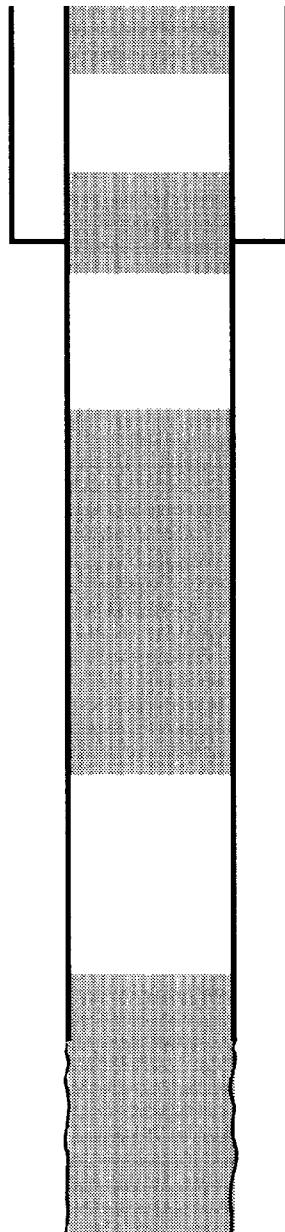
SURFACE CASING:
8 5/8" @ 1402', CMT W/350 SX

PLUGS SET AS FOLLOWS:

1. 4380 - 4420 W/15 SXS.
2. 3680 - 3720 W/15 SXS.
3. 2500 - 2540 W/15 SXS.
4. 1372 - 1428 W/20 SXS.
5. SURF W/10 SXS.

TD:4601

WELL: Williams #1-X
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 330' FNL, 330' FEL, UNIT A, SEC 31, T17S, R33E, LEA COUNTY, NM

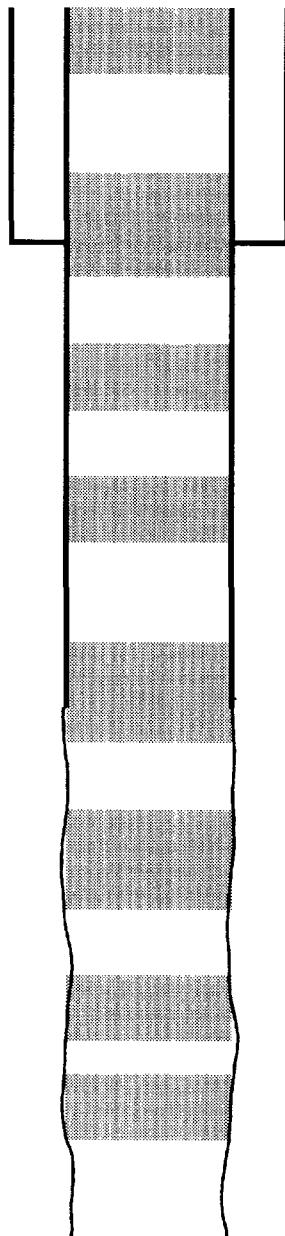


PLUGS SET AS FOLLOWS:

1. 3975 - 4314 W/20 SXS.
2. 1761 - 2100 W/20 SXS.
3. 1240 - 1320 W/20 SXS.
4. 0 - 75 W/15 SXS.

TD:4314

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

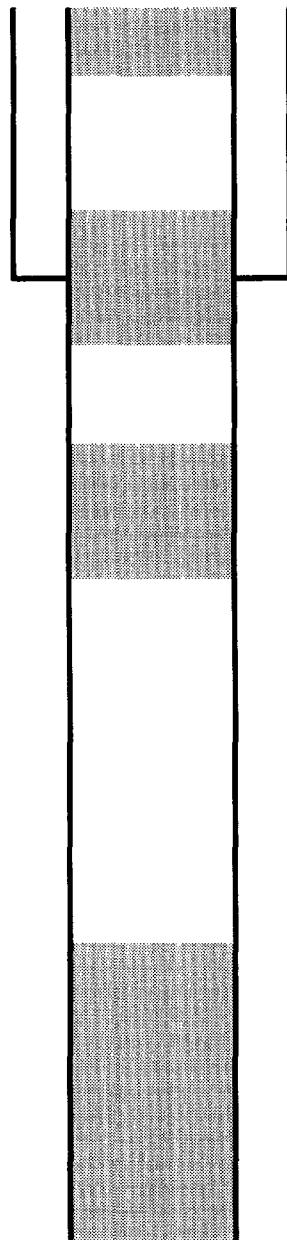
PLUGS SET AS FOLLOWS:

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

WELL: State CD #2
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 2310' FNL, 990' FWL, UNIT L, SEC 32, T17S, R33E, LEA COUNTY, NM

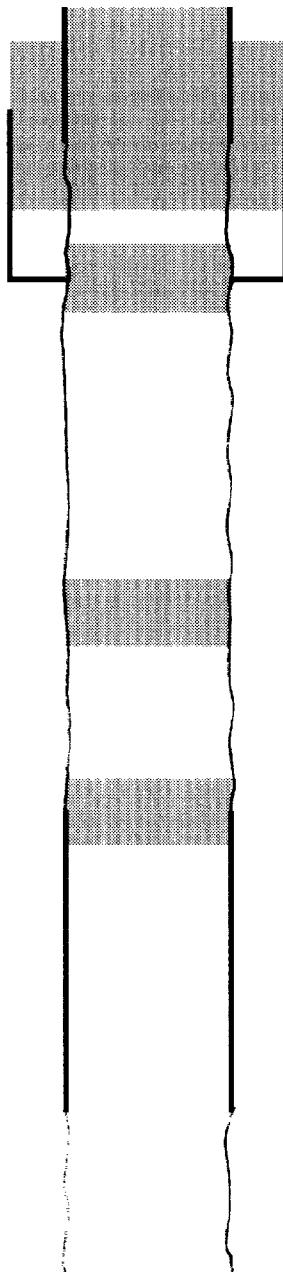


PLUGS SET AS FOLLOWS:

1. 4300 - 4468 W/25 SXS.
2. 1050 W/35 SXS.
3. 290 - 368 W/25 SXS.
4. 0 - 30 W/10 SXS.

TD:4766

WELL: Cockburn State #2
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FNL, 1980' FEL, UNIT C, SEC 32, T17S, R33E, LEA COUNTY, NM



7" @ 207', CMT W/175 SXS.
TOC @ 23'

TOP OF 8 5/8" @ 210'.

SURFACE CASING:
8 5/8" @ 1262', CMT W/50 SX

PLUGS SET AS FOLLOWS:

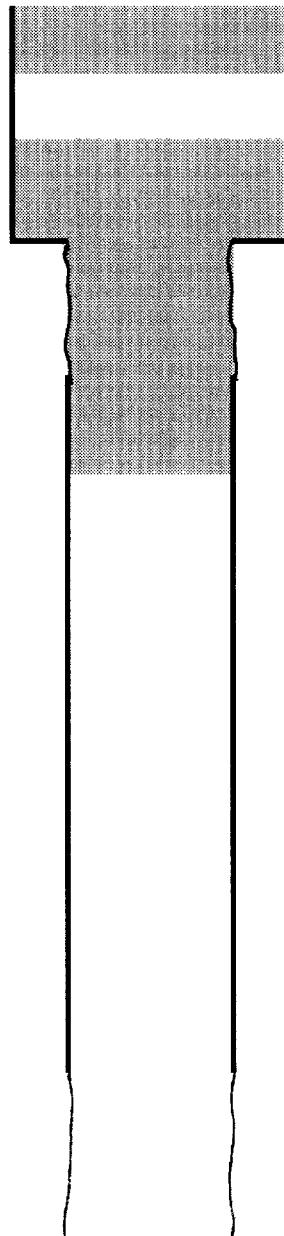
1. 3211 - 5200 W/MUD
2. 3211 CMT W/10 SXS.
3. MUD TO 2450.
4. 2450 CMT W/10 SXS.
5. MUD TO 1270.
6. 1270 CMT W/10 SXS.
7. 7" CSG RUN TO 207
8. 0 - 653 W/200 SXS.

7" CSG CUT AND PULLED 3211'

PRODUCTION CASING:
7" @ 4663', CMT W/50 SX

TD:5200

WELL: Cockburn State #1
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FNL, 660' FWL, UNIT D, SEC 32, T17S, R33E, LEA COUNTY, NM



SURFACE CASING:
8 5/8" @ 1262', CMT W/50 SX

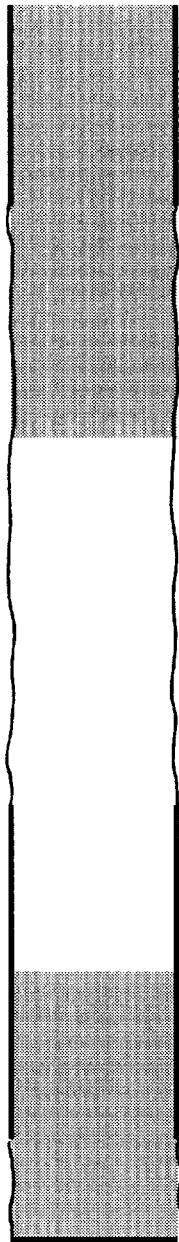
PLUGS SET AS FOLLOWS:

1. 1313 - 1675 W/ 200 SXS.
2. 956 - 1313 W/200 SXS.
3. 0 - 30 W/10 SXS.

PRODUCTION CASING:
7" @ 4028', CMT W/100 SX

TD:4473

WELL: Williams #1
FIELD: MALJAMAR GRAYBURG SAN ANDRES
LOCATION: 660' FNL, 660' FEL, UNIT A, SEC 31, T17S, R33E, LEA COUNTY, NM



SURFACE CASING:
7" @ 355', CMT W/175 SX
(1980, TOC 30')

PLUGS SET AS FOLLOWS:

1. 4293 W/100 SXS.
2. 0 - 574 W/225 SXS.

7" CSG RUN TO 4050, CMT W/100 SXS.
CUT & PULLED UNKNOWN AMOUNT
(1950)

TD:4290

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 850 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. Chemical analysis of injection fluid will be produced
water from the existing waterflood and any makeup water
will be supplied by Conoco (see attached water
analysis).

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.

AUG 29 1997



CHEMICAL SPECIALTIES FOR PETROLEUM & DRILLING
 P.O. BOX 69337
 ODESSA, TX 79769
 (915) 381-2595

LABORATORY WATER ANALYSIS

COMPANY:	CROSS TIMBERS	PH:	6.520
LEASE:	SEMGSAU	SULFIDE AS H ₂ S:	26
WELL NO:	TRIPLEX DISCHARGE	CARBON DIOXIDE:	
FORMATION:			

COUNTY, STATE:	SPECIFIC GRAVITY: 1.086		
DATE SAMPLED:	08-26-97	DISSOLVED OXYGEN:	
SAMPLED BY:	BOBBY CARNES	WATER B/D:	
ATTENTION:	RAY MARTIN		

CATIONS	Mg/L	ME/L	ANIONS	Mg/L	ME/L
Calcium	4,800	240	Bicarbonate	74.42	1.22
Magnesium	244	20	Sulfate	5,300	110
Sodium	48,030	2,088	Chloride	79,400	2,237
Total Hardness	13,000				
Barium	0	0.01			
Iron	3.75	0.13			

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 .

BAKER
Performance Chemicals
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

- 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 wells were 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. See attached mailing list and registered mail certificates for Proof of Notice.

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
P. O. Box 1980
Hobbs, NM 88240

Mr. Olane Caswell
1702 Gillham
Brownfield, TX 79316

Caviness Cattle Company
Star Route
Causey, NM 88113

Darr Angell
P. O. Box 190
Lovington, NM 88260

Conoco Inc.
10 Desta Dr., Ste. 100W
Midland, TX 79705-4500

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

Devon Energy Corporation
20 N. Broadway, Ste. 1500
Oklahoma City, OK 73102-8260

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

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

Phillips Petroleum Company
4001 Penbrook
Odessa, TX 79762

Wiser Oil Company
8115 Preston Rd., Ste. 400
Dallas, TX 75225

Agua Inc.
P. O. Box 92090
Pasadena, CA 91109-2090

AFFIDAVIT OF PUBLICATION

NOV 20 1997

State of New Mexico,
County of Lea.

I, KATHI BEARDEN

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

November 16 1997

and ending with the issue dated

November 16 1997

Kathi Bearden

Publisher

Sworn and subscribed to before

me this 14th day of

November 1997

Jodi Henson

Notary Public.

My Commission expires
October 18, 2000
(Seal)

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

LEGAL NOTICE

November 16, 1997

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

SEMGSAU #15	Sec. 32, T-17-S, R-33-E	Lea County, NM
SEMGSAU #106	Sec. 30, T-17-S, R-33-E	Lea County, NM
SEMGSAU #610	Sec. 29, T-17-S, R-33-E	Lea County, NM
SEMGSAU #614	Sec. 29, T-17-S, R-33-E	Lea County, NM
SEMGSAU #710	Sec. 29, T-17-S, R-33-E	Lea County, NM
SEMGSAU #714	Sec. 29, T-17-S, R-33-E	Lea County, NM

The formation to be injected into is the Grayburg at a depth of 4218' - 4395'. The maximum expected injection rate is 500 BWPD per well at a maximum injection pressure of 850 psig.

Questions can be addressed to:

Cross Timbers Operating Company
3000 N. Garfield, Suite 175

Midland, Texas 79705

Attention: Darrin Steed

Phone: (915) 682-8873

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

Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501
#15552

01102696000 01513838

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

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services
- Complete items 3, 4a, and 4b
- Print your name and address on the reverse of this form so that we can return this card to you
- Attach this form to the front of the mailpiece, or on the back if space does not permit
- Write "Return Receipt Requested" on the mailpiece below the article number
- The Return Receipt will show to whom the article was delivered and the date delivered

3. Article Addressed to:

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

5. Received By: (Print Name)
J. E. S. / J. E. S.

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery
Consult postmaster for fee.

4a. Article Number
P 497 360 772

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
11-7-97

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services
- Complete items 3, 4a, and 4b
- Print your name and address on the reverse of this form so that we can return this card to you
- Attach this form to the front of the mailpiece, or on the back if space does not permit
- Write "Return Receipt Requested" on the mailpiece below the article number
- The Return Receipt will show to whom the article was delivered and the date delivered

3. Article Addressed to:

Gaviness Cattle Company
Star Route
Causey, NM 88113

5. Received By: (Print Name)
X

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery
Consult postmaster for fee.

4a. Article Number
P 497 360 774

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
11-6-97

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services
- Complete items 3, 4a, and 4b
- Print your name and address on the reverse of this form so that we can return this card to you
- Attach this form to the front of the mailpiece, or on the back if space does not permit
- Write "Return Receipt Requested" on the mailpiece below the article number
- The Return Receipt will show to whom the article was delivered and the date delivered

3. Article Addressed to:

Conoco Inc
10 Vista Dr., Ste. 100W
Midland, TX 79705-4000

5. Received By: (Print Name)
Blanca Gonzales

6. Signature: (Addressee or Agent)
Blanca Gonzales

PS Form 3811, December 1994

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery
Consult postmaster for fee.

4a. Article Number
P 497 360 776

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
11-7-97

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services
- Complete items 3, 4a, and 4b
- Print your name and address on the reverse of this form so that we can return this card to you
- Attach this form to the front of the mailpiece, or on the back if space does not permit
- Write "Return Receipt Requested" on the mailpiece below the article number
- The Return Receipt will show to whom the article was delivered and the date delivered

3. Article Addressed to:

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

5. Received By: (Print Name)
L. E. S. / L. E. S.

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery
Consult postmaster for fee.

4a. Article Number
P 497 360 771

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
NOV 14 1997

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services
- Complete items 3, 4a, and 4b
- Print your name and address on the reverse of this form so that we can return this card to you
- Attach this form to the front of the mailpiece, or on the back if space does not permit
- Write "Return Receipt Requested" on the mailpiece below the article number
- The Return Receipt will show to whom the article was delivered and the date delivered

3. Article Addressed to:

Mr. Olane Caswell
1702 Gillham
Brownfield, TX 79314

5. Received By: (Print Name)
R. O. LANE CASWELL

6. Signature: (Addressee or Agent)
X

PS Form 3811, December 1994

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery
Consult postmaster for fee.

4a. Article Number
P 497 360 773

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
11-7-97

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services
- Complete items 3, 4a, and 4b
- Print your name and address on the reverse of this form so that we can return this card to you
- Attach this form to the front of the mailpiece, or on the back if space does not permit
- Write "Return Receipt Requested" on the mailpiece below the article number
- The Return Receipt will show to whom the article was delivered and the date delivered

3. Article Addressed to:

P. 497 360 775

Receipt for Certified Mail
Insurance Coverage Provided
Don't Use for International Mail (See Reverse)

Recipient Address	<i>P. 497 360 775</i>
Delivery Point	<i>Box 190</i>
Delivery Date	<i>S 2/6</i>
Delivery Time	<i>1:10</i>
Total Weight	<i>.36</i>
Total Value	<i>3.00</i>

PS Form 3811, December 1994

I also wish to receive the following services (for an extra fee):

1. Addressee's Address
2. Restricted Delivery
Consult postmaster for fee.

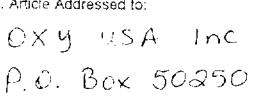
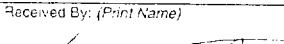
Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?	
SENDER: 4C Complete items 1 and/or 2 for additional services • Complete Parts 2, 4a, and 4b • Print your name and address on the reverse of this form so that we can return this letter to you • Attach this form to the front of the mail piece, or on the back if space does not permit • Write "Postage and Legal Deposit" on the envelope below the addressee's name • The return address with whom the article was delivered is the date forwarded	
3 Article Addressed To <p style="text-align: center;"><i>Devon Energy Corp.</i></p> <p style="text-align: center;">20 N. Broadway, Ste. 1500</p> <p style="text-align: center;">OKlahoma City, OK 73102- 8260</p>	
4a Article Number <p style="text-align: center;"><i>P 491 360 778</i></p>	
4b Service Type <input checked="" type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD	
5 Date of Delivery <p style="text-align: center;"><i>11-12-97</i></p>	
6 Received By (Print Name) <p style="text-align: center;"><i>X Belly 2</i></p>	
7 Addressee's Address (Only if requested and fee is paid)	
PS Form 3811, December 1994	
Domestic Return Receipt	

SENDER: <input type="checkbox"/> I provide items 1 and/or 2 for additional services. <input checked="" type="checkbox"/> Complete items 3, 4a, and 4b. <input type="checkbox"/> Print your name and address on the reversal of this form so that we can return this card to you <input type="checkbox"/> Attach this form to the front of the mailpiece, or on the back if space does not permit. <input type="checkbox"/> Write "Return Receipt Requested" on the mailpiece below the article number. <input type="checkbox"/> The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: <p style="text-align: center;"><i>Pennzoil E+P Company</i></p> <p style="text-align: center;"><i>P.O. Box 50090</i></p> <p style="text-align: center;"><i>Midland TX 79710-0090</i></p>		4a. Article Number <p style="text-align: center;"><i>P 497 360 780</i></p>
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Mailing Use <input type="checkbox"/> COD
		5. Date of Delivery <p style="text-align: center;"><i>10/11/12</i></p>
		6. Addressee's Address (Only if requested and fee is paid)
7. Signature (Addressee or Agent) <p style="text-align: center;"><i>X</i></p>		
PS Form 3811 December 19-4		
Domestic Return Receipt		

SENDER: <ul style="list-style-type: none"> • Complete items 1 and/or 2 for additional services • Complete items 3, 4a, and 4b • Print your name and address on the reverse or this form so that we can return this card to you • Attach this form to the front of the mail piece, or on the back if you do not print it. • Write "Return Receipt Requested" on the mailpiece below the article number. The Return Receipt will show to whom the article was delivered and the date delivered. 		I also wish to receive the following services (for an extra fee): <ul style="list-style-type: none"> <input type="checkbox"/> Addressee's Address <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
3. Article Addressed to: <p style="text-align: center;"><i>Weser Oil Company 8115 Preston Rd., Ste. 400 Dallas, TX 75225</i></p>		4a. Article Number P 497 360 782
		4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD Date of Delivery 11-16-97
5. Received By (Print Name) <p style="text-align: center;"><i>[Signature]</i></p>		6. Addressee's Address (Only if requested and fee is paid)
6. Signature (Addressee or Agent) <p style="text-align: center;"><i>X [Signature]</i></p>		

SENDER: • Consumer items 1 and/or 2 for additional services. • Complete items 3, 4a, and 4b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): <input type="checkbox"/> Addressee's Address <input type="checkbox"/> Restricted Delivery Consult postmaster for fee
3. Article Addressed to: <i>Chevron USA</i> <i>P. O. Box 1150</i> <i>Midland, TX 79702</i>		4a. Article Number <i>P 497 360 777</i> 4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
		7. Date of Delivery <i>NOV 07 1987</i>
3. Received By: (Print Name) 		8. Addressee's Address (Only if requested and fee is paid)
6. Signature (Addressee or Agent) 		

SENDER: <ul style="list-style-type: none"> ■ Complete items 1 and/or 2 for additional services. ■ Complete items 3, 4a, and 4b. ■ Print your name and address on the reverse of this form so that we can return this card to you. ■ Attach this form to the front of the mailpiece, or on the back if space does not permit. ■ Write "Return Receipt Requested" on the mailpiece below the article number. ■ The Return Receipt will show to whom the article was delivered and the date delivered. 	
Is your RETURN ADDRESS completed on the reverse side?	
I also wish to receive the following services (for an extra fee):	
<input type="checkbox"/> Addressee's Address <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to:	4a. Article Number P 497 360 779
	4b. Service Type <input type="checkbox"/> Registered g Cent. <input type="checkbox"/> Express Mail <input type="checkbox"/> Insurance <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD
5. Received By: (Print Name)	7. Date of Delivery 11-10-1991
6. Signature: (Addressee or Agent) 	8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service. Is your RETURN ADDRESS completed on the reverse side?	SENDER: <ul style="list-style-type: none"> <input type="checkbox"/> Complete items 1 and/or 2 for additional services. <input type="checkbox"/> Complete items 3, 4a, and 4b. <input type="checkbox"/> Print your name and address on the reverse of this form so that we can return this card to you. <input type="checkbox"/> Attach this form to the front of the mailpiece, or on the back if space does not permit. <input type="checkbox"/> Write "Return Receipt Requested" on the mailpiece below the article number. The Return Receipt will show to whom the article was delivered and the date delivered. 	
	I also wish to receive the following services (for an extra fee):	
3. Article Addressed to: <i>Phillips Petroleum Company 4001 Penbrook Odessa TX 79762</i>	14a. Article Number <i>P 497 360 781</i>	
	14b. Service Type <input checked="" type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insure <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD	
5. Received By: (Print Name)	7. Date of Delivery <i>11-7-97 Jan</i>	
	8. Addressee's Address <i>111 W. 1st Street Odessa TX 79761</i>	
6. Signature (Addressee or Agent) <i>X Kathy Thomas</i>		

Thank you for using Return Receipt Service.

SENDER: <ul style="list-style-type: none">■ Complete items 1 and/or 2 for additional services.■ Complete items 3, 4a, and 4b.■ Print your name and address on the reverse of this form so that we can return this card to you.■ Attach this form to the front of the mailpiece, or on the back if space does not permit.■ Write "Return Receipt Requested" on the mailpiece below the article number.■ The Return Receipt will show to whom the article was delivered and the date delivered.		<p>I also wish to receive the following services (for an extra fee):</p> <p>1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.</p>
3 Article Addressed to: <i>Aqua Inc P.O. Box 92090 Pasadena CA 91109-3090</i>	4a. Article Number <i>P 497360 783</i>	
	4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD	
	7. Date of Delivery <i>11/10/97</i>	
5. Received By: (Print Name)	8. Addressee's Address (Only if requested and fee is paid)	
6. Signature: (Addressee or Agent) <i>X</i>		

PS Form 3811, December 1994

100-985 97 B (1)79

Domestic Return Receipt

January 8, 1998

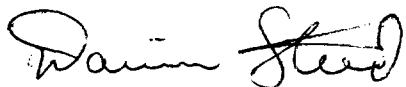
Oil Conservation Division
2040 S. Pacheo Street
Santa Fe, New Mexico 87505

Reference: Cross Timbers Operating C-108 Application

Dear Mr. Stone,

In reference to the our phone conversation, I have enclosed the maps you requested. Let me know if there is anything else you need.

Respectfully yours,



CROSS TIMBERS OPERATING COMPANY
Darrin L. Steed
Operations Engineer

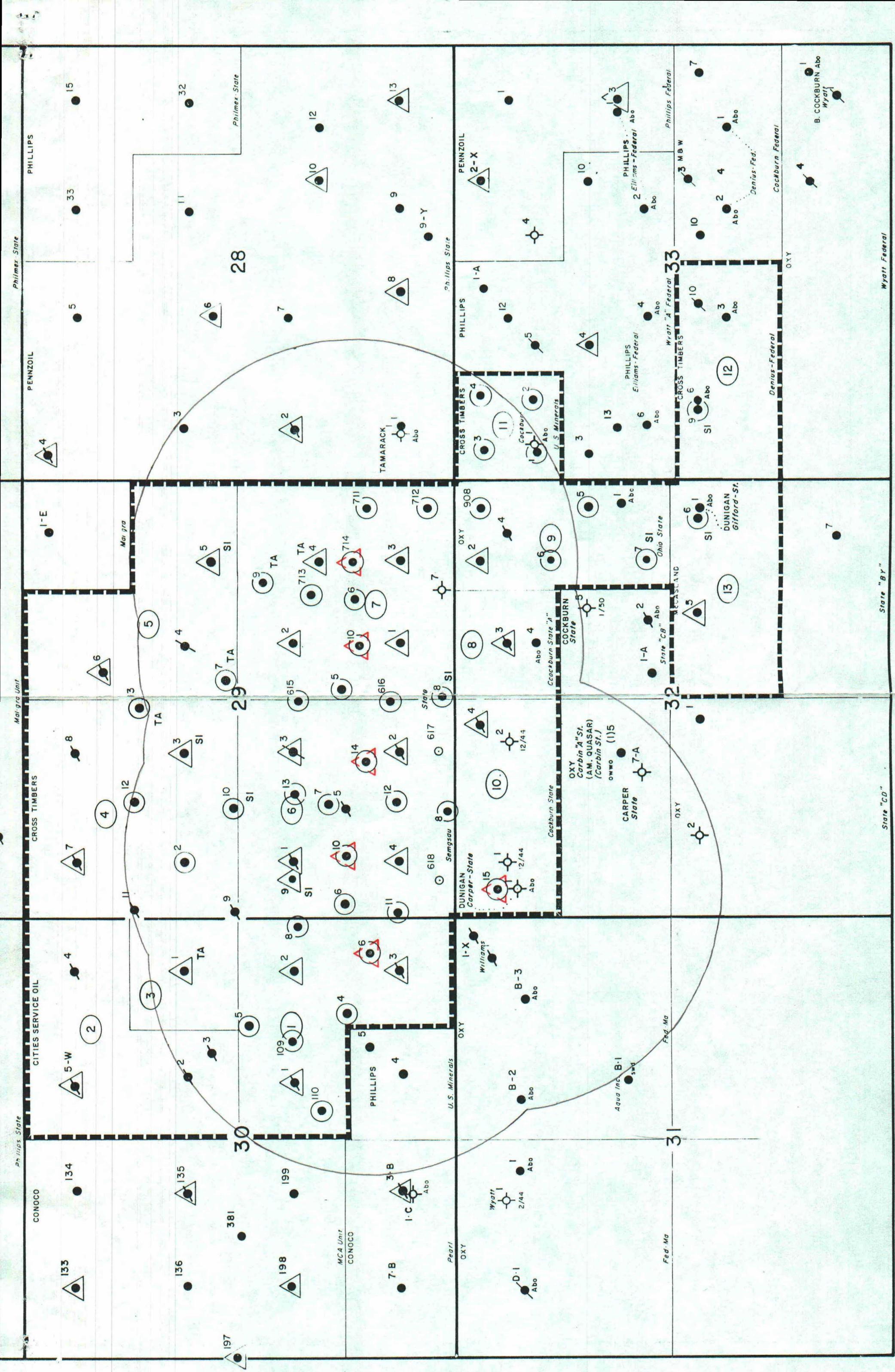
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y:\word\ocd\ocdltr2

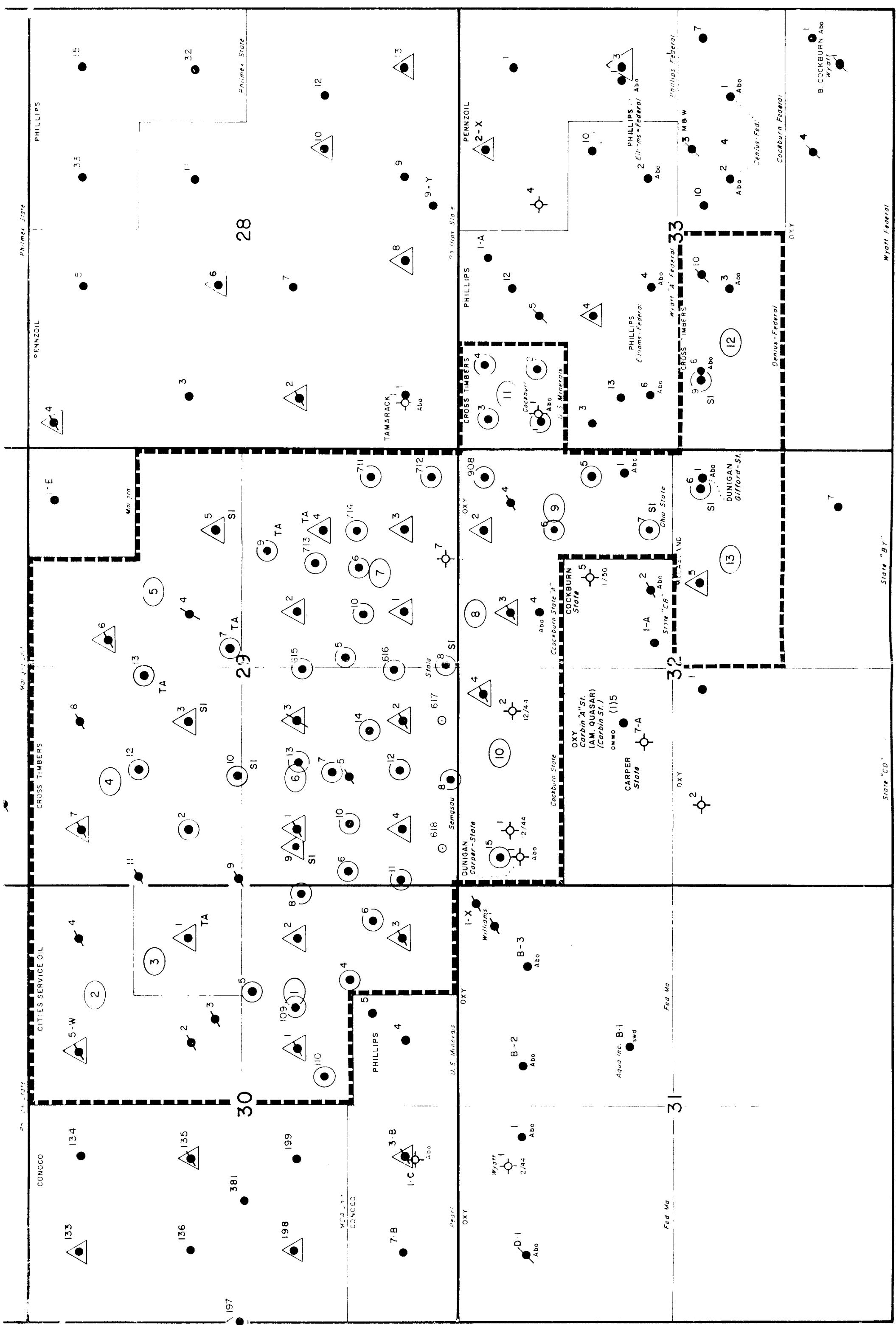
It. Serv. 42 18 Ac (Carper) 160 Disc
 Mack En. 1 Fed. MA 4.1.96 432
 86156 150^{oo} Lion 3-B
 Wyatt 2-B Williams
 TD 4413
 42 19 Ac 1042-15-44 C. Serv. Cit. Serv.
 SWD 1-B 1011,000 9-16-61
 Cities Serv.
 Fed - MA 016726
 Del. Disc P 42
 TD 9020
 PB 4892
 "Fee - MA"
 42 20 Ac 4 Minnie A. Williams, et al., MI
 U.S. M.I. Herschel E. Gary Caviness (S)

consolidated area of
Review around proposed
conversions.

△ Proposed Conversion

ILLEGIBLE





BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 3462
Order No. R-3134

APPLICATION OF CITIES SERVICE OIL
COMPANY FOR A WATERFLOOD PROJECT,
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 28, 1966, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 14th day of October, 1966, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Cities Service Oil Company, seeks permission to institute a waterflood project in the Southeast Maljamar Grayburg-San Andres Unit Area, Maljamar (Grayburg-San Andres) Pool, by the injection of water into the Grayburg-San Andres formation through eleven injection wells in Sections 29, 30, and 32, Township 17 South, Range 33 East, NMPPM, Lea County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

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CASE No. 3462

Order No. R-3134

(5) That the applicant further seeks the establishment of an administrative procedure whereby additional wells, within the said unit area, could be placed on water injection.

(6) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Cities Service Oil Company, is hereby authorized to institute a waterflood project in the Southeast Maljamar Grayburg-San Andres Unit Area, Maljamar (Grayburg-San Andres) Pool, by the injection of water into the Grayburg-San Andres formation through the following-described wells in Township 17 South, Range 33 East, NMPM, Lea County, New Mexico:

Cities Service	Shell St. "A" # 1	1980'	FSL	660'	FWL	Section 29	
Cities Service	Shell St. "A" # 2	660'	FSL	1980'	FWL	Section 29	
Cities Service	PhilMex St. "A" # 6	990'	FNL	2310'	FEL	Section 29	
Cities Service	PhilMex St. "A" # 5	2310'	FNL	990'	FEL	Section 29	
Phillips	PhilMex	# 3	1980'	FNL	1980'	FWL	Section 29
Phillips	PhilMex	# 7	660'	FNL	660'	FWL	Section 29
Shell	State "A"	# 2	1980'	FSL	1980'	FEL	Section 29
Shell	State "A"	# 3	660'	FSL	990'	FEL	Section 29
Cities Service	Ohio Jones "A"	# 1	1980'	FNL	660'	FEL	Section 30
Phillips	U.S. Minerals	# 3	660'	FSL	660'	FEL	Section 30
Cities Service	Cockburn St. "A" # 3	660'	FNL	1980'	FEL	Section 32	

(2) That the subject waterflood project is hereby designated the Southeast Maljamar Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided, however, that the Secretary-Director of the Commission may approve the placing of additional wells, within the said unit area, on water injection as may be necessary to complete an efficient waterflood injection pattern.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

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CASE No. 3462
Order No. R-3134

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

GUYTON B. HAYS, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 4750
Order No. R-3134-A

APPLICATION OF CITIES SERVICE
OIL COMPANY FOR AN UNORTHODOX
LOCATION, LEA COUNTY, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on June 28, 1972, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 10th day of July, 1972, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereon.

(2) That the applicant, Cities Service Oil Company, is the operator of the Southeast Maljamar Grayburg-San Andres Unit Waterflood Project, Maljamar Pool, Lea County, New Mexico.

(3) That the applicant seeks authority to drill a well at an unorthodox location 1155 feet from the South line and 1385 feet from the East line of Section 29, Township 17 South, Range 33 East, NMPM, Lea County, New Mexico, as a producing well in said Southeast Maljamar Grayburg-San Andres Unit Waterflood Project.

(4) That the proposed unorthodox location is necessary to provide an efficient oil producing pattern.

(5) That the applicant also seeks the establishment of an administrative procedure whereby the Secretary-Director of the Commission may authorize additional producing wells and injection wells at orthodox and unorthodox locations within said Southeast Maljamar Grayburg-San Andres Unit Waterflood Project area as may be necessary to complete an efficient production and injection pattern.

(6) That approval of the requested administrative procedure will afford the applicant the opportunity to produce its just and equitable share of the oil in the Maljamar Pool, provided said wells are drilled no closer than 330 feet to the outer boundary of the above-described unit area nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary.

(7) That the subject waterflood project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations, provided however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

IT IS THEREFORE ORDERED:

(1) That the applicant, Cities Service Oil Company, is hereby authorized to drill a well at an unorthodox location 1155 feet from the South line and 1385 feet from the East line of Section 29, Township 17 South, Range 33 East, NMPM, Maljamar Pool, Lea County, New Mexico, as a producing well in its Southeast Maljamar Grayburg-San Andres Unit Waterflood Project.

(2) That Order (2) of Order No. R-3134 is hereby amended to read in its entirety as follows:

"(2) That the subject waterflood project shall continue to be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve such additional producing wells and injection wells at orthodox and unorthodox locations within the Southeast Maljamar Grayburg-San Andres Unit Waterflood Project area as may be necessary to complete an efficient production and injection pattern, provided said wells are drilled no closer than 330 feet to the outer boundary of the Southeast Maljamar Grayburg-San Andres Unit Area nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary, and provided that the application therefor has been filed in accordance with Rule 701 B of the Commission Rules and Regulations, and provided that the application has been sent to all offset operators, if any there be, and no such operator has objected within 15 days. The showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection."

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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CASE NO. 4750
Order No. R-3134-A

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

dr/



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

GOVERNOR

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

REC'D

JAN - 2 1983

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 Oper. Co.

Operator

Lease & Well No. Unit

S-T-R

SEMGSAU #15	Sec. 32, T-17-S, R-33-E	Lea County, NM
SEMGSAU #106	Sec. 30, T-17-S, R-33-E	Lea County, NM
SEMGSAU #610	Sec. 29, T-17-S, R-33-E	Lea County, NM
SEMGSAU #614	Sec. 29, T-17-S, R-33-E	Lea County, NM
SEMGSAU #710	Sec. 29, T-17-S, R-33-E	Lea County, NM
SEMGSAU #714	Sec. 29, T-17-S, R-33-E	Lea County, NM

and my recommendations are as follows:

I think they should re-submit their map w/circles drawn around each individual well w/a map for each well. The map is not readable.

Yours very truly,

Chris Williams

Chris Williams
Supervisor, District 1

/ed