



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

**GOVERNOR**

11/13/95

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:

Wiser Oil Co      Maljamar Grayburg Unit      21-K      4-17-32  
Operator      Lease & Well No.      Unit      S-T-R      152-E      4-17-32

and my recommendations are as follows:

62

Yours very truly,

*[Signature]*

Jerry Sexton  
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: The Wiser Oil Company
- Address: 207 West McKay
- Contact party: Perry L. Hughes Phone: 505/885-5433
- 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-3148
- 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: Perry L. Hughes Title: Authorized Agent  
Signature: Perry L. Hughes Date: 10/30/95

\* 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 footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

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

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

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

ATTACHMENT TO FORM C-108

THE WISER OIL COMPANY  
MALJAMAR GRAYBURG UNIT  
Wells No. 17, 20, 21 & 152

**SECTION**

I.-V. Complete on Form C-108

V. Map:

See attached Exhibit "A".

VI. Well Data

See attached Exhibit "B" for a tabulation of data on all active wells in the area of review. Attached are wellbore diagrams of all plugged & abandoned wells in the area of review.

VII. Proposed Operations:

1. Proposed average daily rate of 250 BWPD/well.  
Proposed maximum daily rate of 500 BWPD/well.
2. The system is closed.
3. Proposed average injection pressure of 950 psi.  
Proposed maximum injection pressure of 2500 psi.
4. Injection Water Source:
  - a. Produced water
  - b. Fresh Water from The Wiser Oil Company's water well in SW/4 of Section 1-T17S-R32E.

Water compatibility studies of produced water from the Maljamar Grayburg Unit and the fresh water from The Wiser Oil Company's Ogallala source in Section 1 have previously been conducted. No

incompatibility has been found in these tests or others conducted for waterfloods in this area when testing Ogalala water and produced Grayburg and San Andres water.

5. Not Applicable.

VII. Geologic Data of Injection Zone:

The proposed injection zone is in the Grayburg-San Andres from 3314'-4400'. The Grayburg consists primarily of quartz sand with dolomite cementation. The San Andres formation consists primarily of dolomite with intermingled stringers of quartz sand with dolomite cementation.

Surface formation is Cretaceous and has no known sources of drinking water. Also, there are no known underground sources of drinking water overlying or underlying the proposed injection zone.

IX. Stimulation Program:

Small acid job of approximately 2,000 gallons/well.

X. Logging and Test Data:

Logs for Maljamar Grayburg Unit #'s 17, 20 & 21 are on file at the OCD Hobbs office and logs for Maljamar Grayburg Unit #152 will be sent upon completion.

XI. There is no known fresh water within one mile of the wells.

XII. Not Applicable.

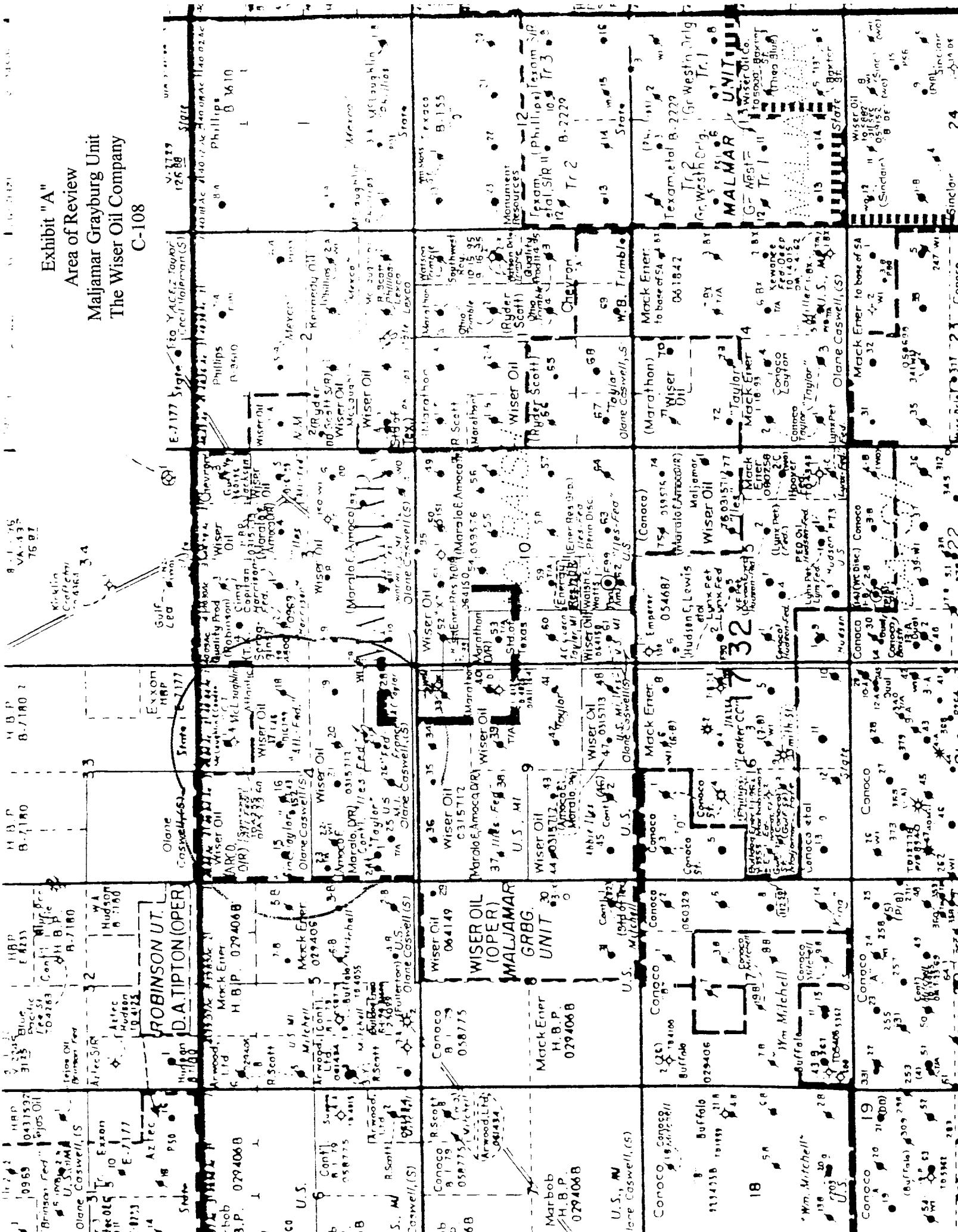
XIII. Proof of Notice:

1. Copies of this C-108 Application have been mailed to the surface owners and to each leasehold operator within one-half mile of the proposed injection wells. An Affidavit of such notice is attached Exhibit "C". Copies of the return receipts will be furnished upon request. Notice is being published in the Hobbs New Sun. An Affidavit of Publication will be forwarded as soon as possible.

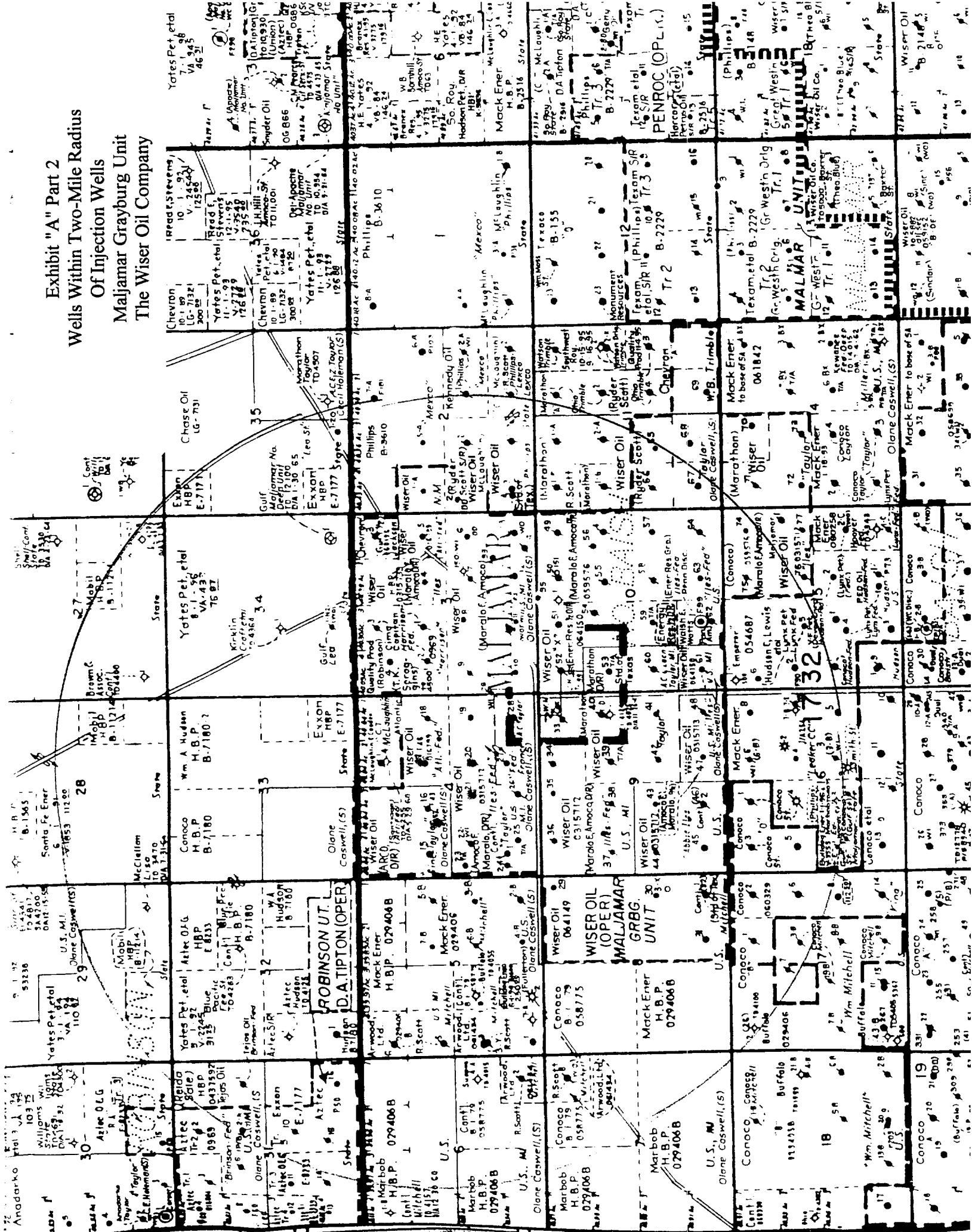
**Exhibit "A"**

**Area of Review**  
**Maljamar Grayburg Unit**  
**The Wiser Oil Company**  
**C-108**

C-108



**Exhibit "A" Part 2  
Wells Within Two-Mile Radius  
Of Injection Wells  
Maljamar Grayburg Unit  
The Wiser Oil Company**



**EXHIBIT "B"**  
**ATTACHMENT TO FORM C-108**

**TABULATION OF DATA ON ACTIVE WELLS IN AREA OF REVIEW**

OPERATOR - WELL NAME LOCATION	COMPLETION DATE	TD	PBTD	CASING SIZE	CASING DEPTH	CEMENT SACKS/TOP	PRODUCING INTERVAL	STIMULATION	CURRENT STATUS
Majamar Grayburg Unit #9 660' FWL & 1980' FSL Unit L, Section 3-T17S-R32E	10/16/63	4149'		8 5/8"	373'	225	3950-4090	F 40,000#	P & A
				5 1/2"	4149'	350			
Majamar Grayburg Unit #15 1980' FNL & 660' FWL Unit E, Section 4-T17S-R32E	09/14/60	4174'	4163'	8 5/8"	335'	200	3881-4060	A 3000 gal F 70,000#	Producing
				5 1/2"	4174'	300			
Majamar Grayburg Unit #16 1980' FNL & 1980' FWL Unit F, Section 4-T17S-R32E	04/30/60	4195'	4176'	8 5/8"	297'	250	3878-4170	A 1800 gal F 45,000#	P & A
				5 1/2"	4193'	300			
TOC - 3003'									
Majamar Grayburg Unit #17 1980' FNL & 1980' FEL Unit G, Section 4-T17S-R32E	04/20/60	4240'	4227'	8 5/8"	301'	250	4077-4085	A 3500 gal F 51,000#	Producing
				5 1/2"	4239'	300			
Majamar Grayburg Unit #20 1980' FSL & 1980' FEL Unit J, Section 4-T17S-R32E	10/05/60	4209		8 5/8"	308'	200	3426-4186	A 1000 gal F 60,000#	P & A
				5 1/2"	4209'	450			
Majamar Grayburg Unit #21 1980' FSL & 2310' FWL Unit K, Section 4-T17S-R32E	09/13/60	4189		8 5/8"	813'	200	3884-4152	A 1000 gal F 150,000#	Producing
				5 1/2"	4189'	450			
Majamar Grayburg Unit #22 1980' FSL & 990' FWL Unit L, Section 4-T17S-R32E	11/11/60	4010'	4000'	8 5/8"	287'	200	3856-3988	A 3000 gal F 78,000#	Injecting
				5 1/2"	4010'	400			

**EXHIBIT "B"**  
**ATTACHMENT TO FORM C-108**

**TABULATION OF DATA ON ACTIVE WELLS IN AREA OF REVIEW**

OPERATOR - WELL NAME LOCATION	COMPLETION DATE	TD	PBTD	CASING SIZE	CASING DEPTH	CEMENT SACKS/TOP	PRODUCING INTERVAL	STIMULATION	CURRENT STATUS
Maljamar Grayburg Unit #23 2010' FSL & 330' FWL Unit L, Section 4-T17S-R32E	03/26/62	4118	4024'	8 5/8"	297'	200 400	3848-3980	A 1250 gal F 249,000#	TA
Maljamar Grayburg Unit #24 990' FSL & 330' FWL Unit M, Section 4-T17S-R32E	03/28/62	4118	4115'	8 5/8" 5 1/2"	293' 4118'	200 350	3828-4090	F 50,000#	P & A
Maljamar Grayburg Unit #25 660' FSL & 990' FWL Unit M, Section 4-T17S-R32E	11/30/60	4015		8 5/8" 5 1/2"	292' 4015'	200 400	3844-3966	F 46,000#	TA
Maljamar Grayburg Unit #27 990' FSL & 1980' FEL Unit O, Section 4-T17S-R32E	12/20/60	4038'		8 5/8" 5 1/2"	318' 4038'	175 400	3864-4026	F 157,700#	Producing
Maljamar Grayburg Unit #28 660' FSL & 660' FEL Unit P, Section 4-T17S-R32E	12/14/60	4090'	4078'	8 5/8" 5 1/2"	308' 4090'	200 350	3912-4046	A 2900 gal F 31,000#	P & A
Maljamar Grayburg Unit #33 670' FNL & 770' FEL Unit A, Section 9-T17S-R32E	09/20/64	4050'		8 5/8" 5 1/2"	259' 4050'	225 200	3888-4016	F 42,000#	P & A
Maljamar Grayburg Unit #34 330' FNL & 1980' FEL Unit B, Section 9-T17S-R32E	12/08/61	4060'		8 5/8" 5 1/2"	294' 4050'	200 350	3834-3990		P & A

**EXHIBIT "B"**  
**ATTACHMENT TO FOR**

**EXHIBIT "B"**  
**ATTACHMENT TO FORM C-108**

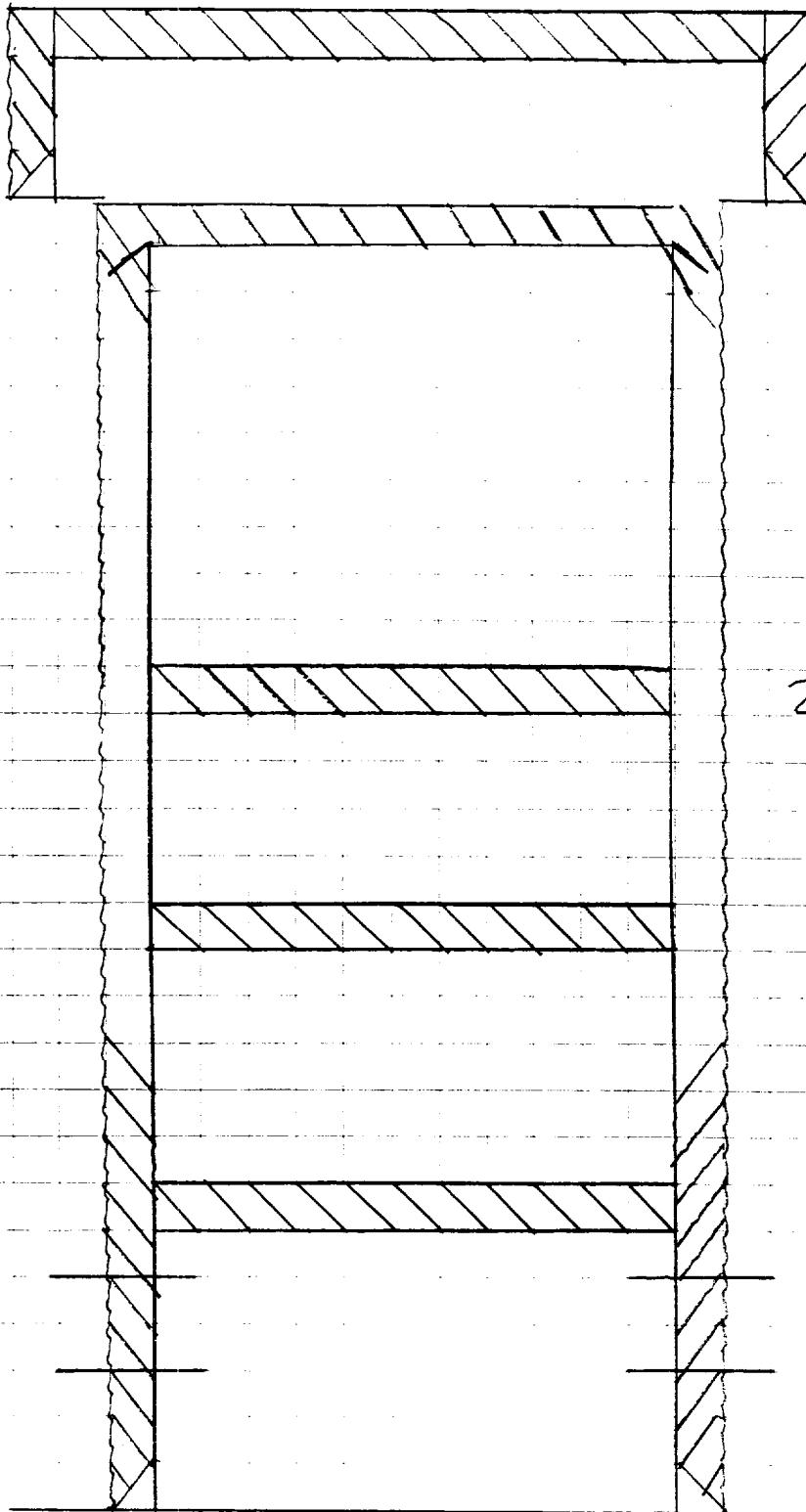
## TABULATION OF DATA ON ACTIVE WELLS IN AREA OF REVIEW

OPERATOR - WELL NAME LOCATION	COMPLETION DATE	TD	PBTD	CASING SIZE	CASING DEPTH	CEMENT SACKS/TOP	PRODUCING INTERVAL	STIMULATION	CURRENT STATUS
Maljamar Grayburg Unit #35 330' FNL & 2310' FWL Unit C, Section 9-T17S-R32E	08/11/61	4020'		8 5/8"	293'	200	3848-3976	A 1000 gal F 103,000#	TA
Maljamar Grayburg Unit #36 330' FNL & 990' FWL Unit D, Section 9-T17S-R32E	08/08/61	3990'		8 5/8" 5 1/2"	302' 3990'	200 350	3796-3950	F 57,000#	P & A
Maljamar Grayburg Unit #72 50 FWL & 1400' FSL Unit L, Section 3-T17S-R32E	08/08/81	4300'	4254'	8 5/8"	370'	450	3921-4244	A 3300 gal F 101,000#	SI

**EXHIBIT "B"**  
**ATTACHMENT TO FOI**

## TABULATION OF DATA ON ACTIVE WELLS IN AREA OF REVIEW

Maljar Jr Grayburg Unit #  
The Wiser Oil Company  
Unit L, 1600' FWL + 1920' FSL, Section 3-T17S-R32E  
Completed: 10-16-63 TD: 4149  
Plugged + Abandoned: 5-75



8 5/8 set @ 373" w/ 225 sx

Spot 80 sx 489'

25 sx @ 1204'

25 sx cmt @ 2604'

35 sx cmt @ 3810'

Perfs 3950 - 4090

5 1/2" set @ 4149 w/ 350 sx  
TD 4149'

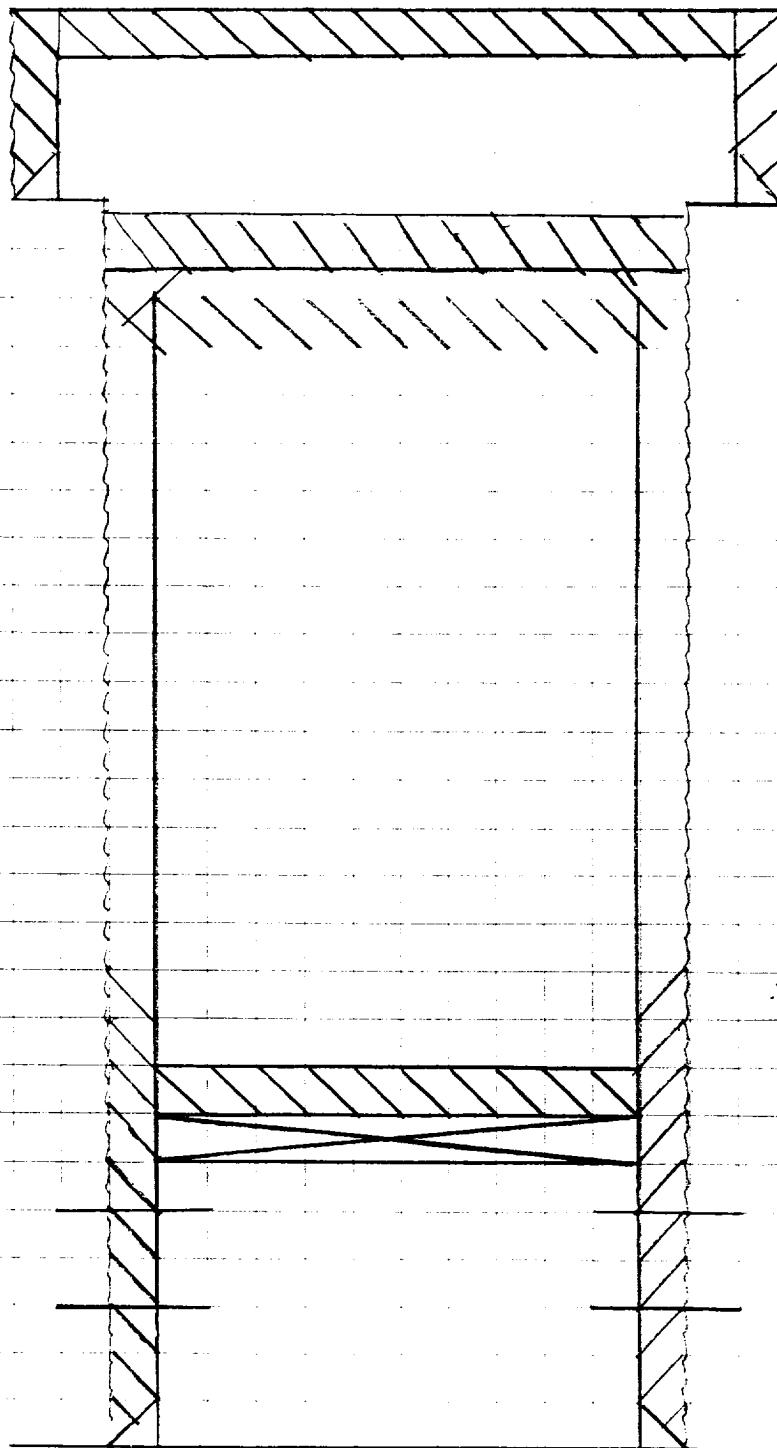
Mal mar Grayburg Unit # 16

The Wiser Oil Company

Unit F, 1980' FNL + 1980 FWL, Section 4-T17S-R32E

Completed : 04-30-60 TD: 4195'

Plugged + Abandoned: 10-12-74



8 $\frac{1}{8}$  set @ 297' w/ 250 sx  
Spot 50 sx @ 347'  
Cut + pulled 5 $\frac{1}{2}$ " csg  
@ 744'  
Spot 50 sx @ 744'

TOC 3003'

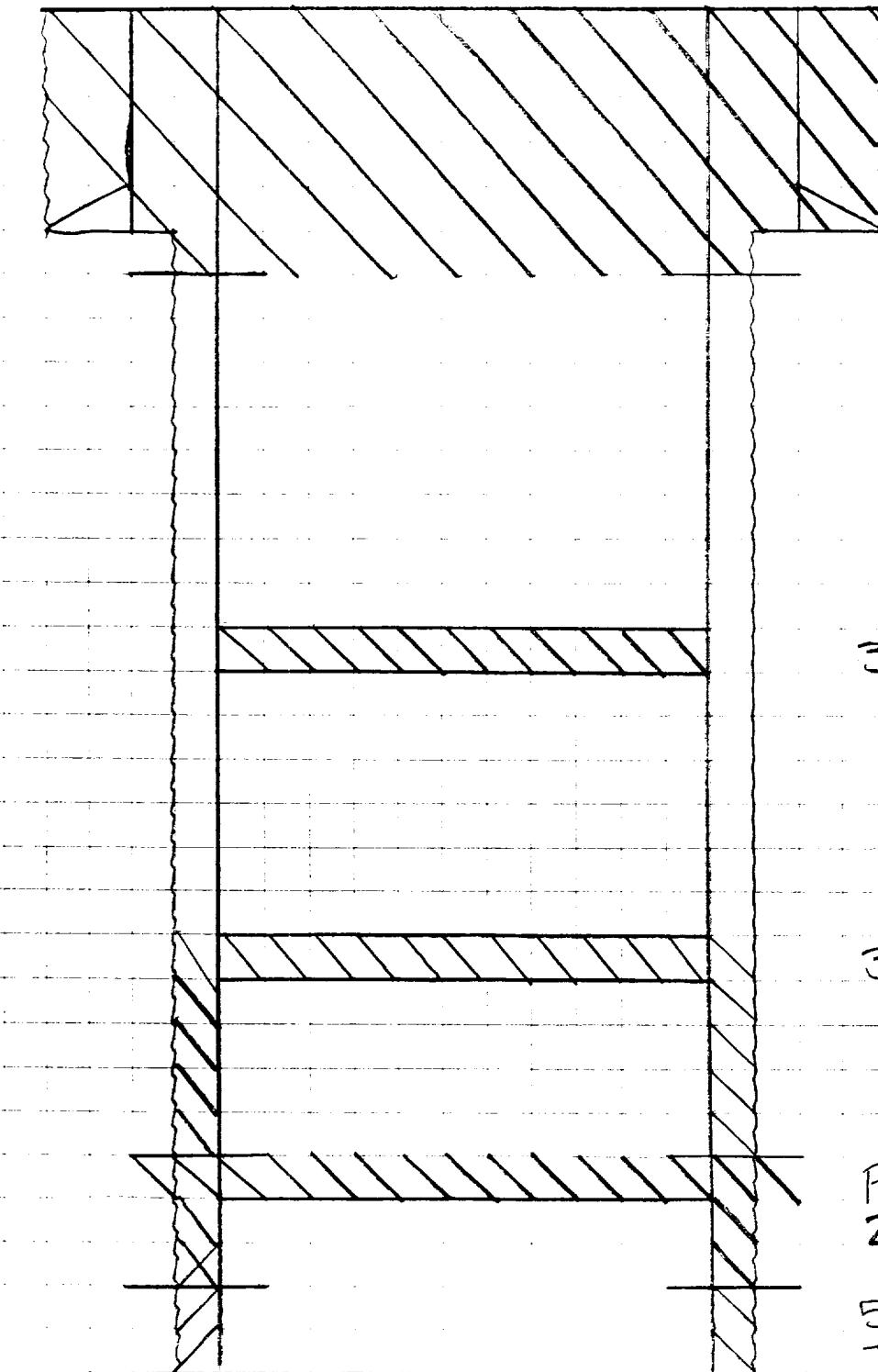
CBP @ 3801 w/ 35 sx cmt  
on top

Perfs 3878-4170

5 $\frac{1}{2}$ " csg set @ 4193 w/ 300 sx  
TD 4195

Malje near Grayburg Unit #20  
The Wiser Oil Company

Unit J, 1980' FSL + 1980' FEL, Section 4-T17S-R32E  
Completed: 10-5-60 TD: 4209'  
Plugged + Abandoned: 9-11-75



8 $\frac{5}{8}$ " csg @ 308' w/ 200 sx  
Perf 5 $\frac{1}{2}$ " @ 356'  
Pump 75 sx down 5 $\frac{1}{2}$ "  
circ to surf. via 8 $\frac{5}{8}$ "  
5 $\frac{1}{2}$ " left full.

35 sx @ 1150'

35 sx @ 2500'

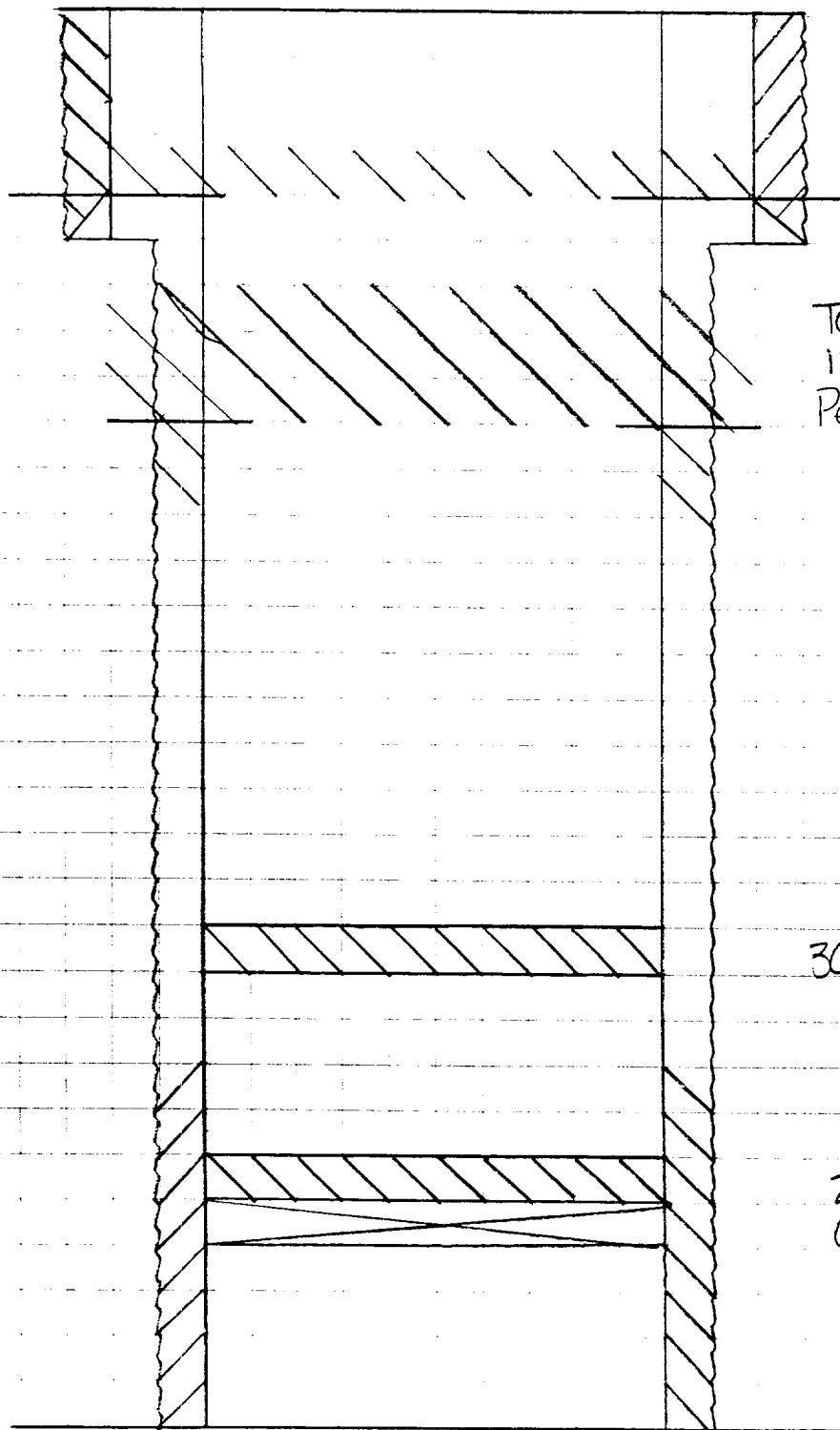
Perf 3426-4186  
25 sx 3616-3800

5 $\frac{1}{2}$ " csg @ 4209' w/ 450 sx  
TD 4209'



DETROIT  
LIBRARIES

Maljanc Grayburg Unit #1  
The Wiser Oil Company  
Unit M, 980' FCL + 330' FWL, Section 4-T17S-R32E  
Completed: 03-28-63 TD: 4118'  
Plugged + Abandoned: 10-14-76



Perf 4 holes in 5 $\frac{1}{2}$ " @ 200'.  
Pump 40 sx down 5 $\frac{1}{2}$ "  
did not circ.

8 $\frac{5}{8}$ " set @ 293' w/ 200 sx

TOC 540'  
130 sx down 5 $\frac{1}{2}$  x 8 $\frac{5}{8}$ "  
Perf 5 $\frac{1}{2}$ " csg @ 1000'

30 sx cmt plug 2580-2330

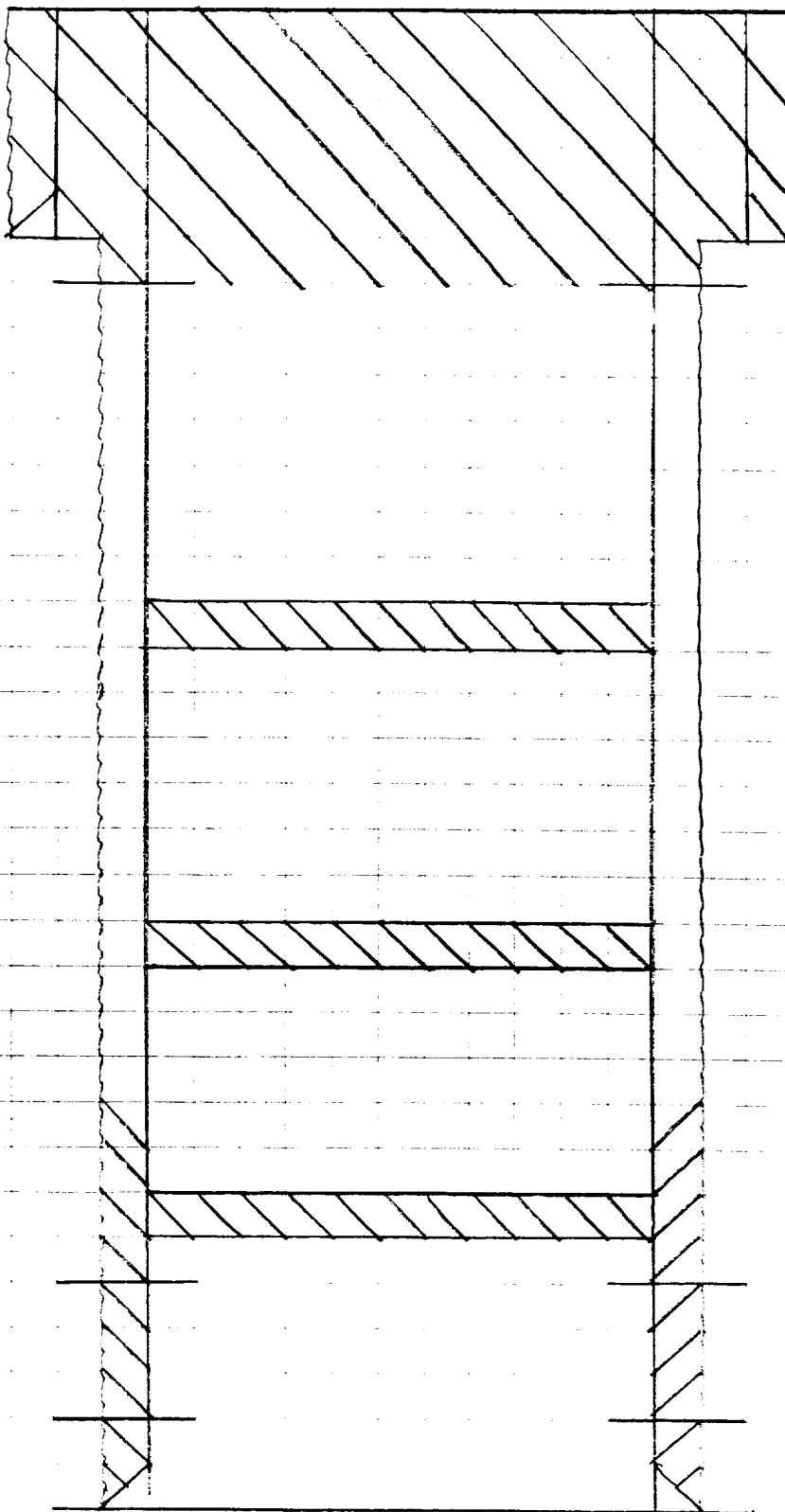
25 sx cmt plug 3700-3500  
CIBP @ 3710'

5 $\frac{1}{2}$ " set @ 4118 w/ 350 sx  
TD 4118'

Maljamar Grayburg Unit : 28

The Wiser Oil Company

Unit P, 660' FSL + 660' FEL, Section 4-T17S-R32E  
Completed: 12-14-69 TD: 4090  
Plugged & Abandoned: 09-11-73



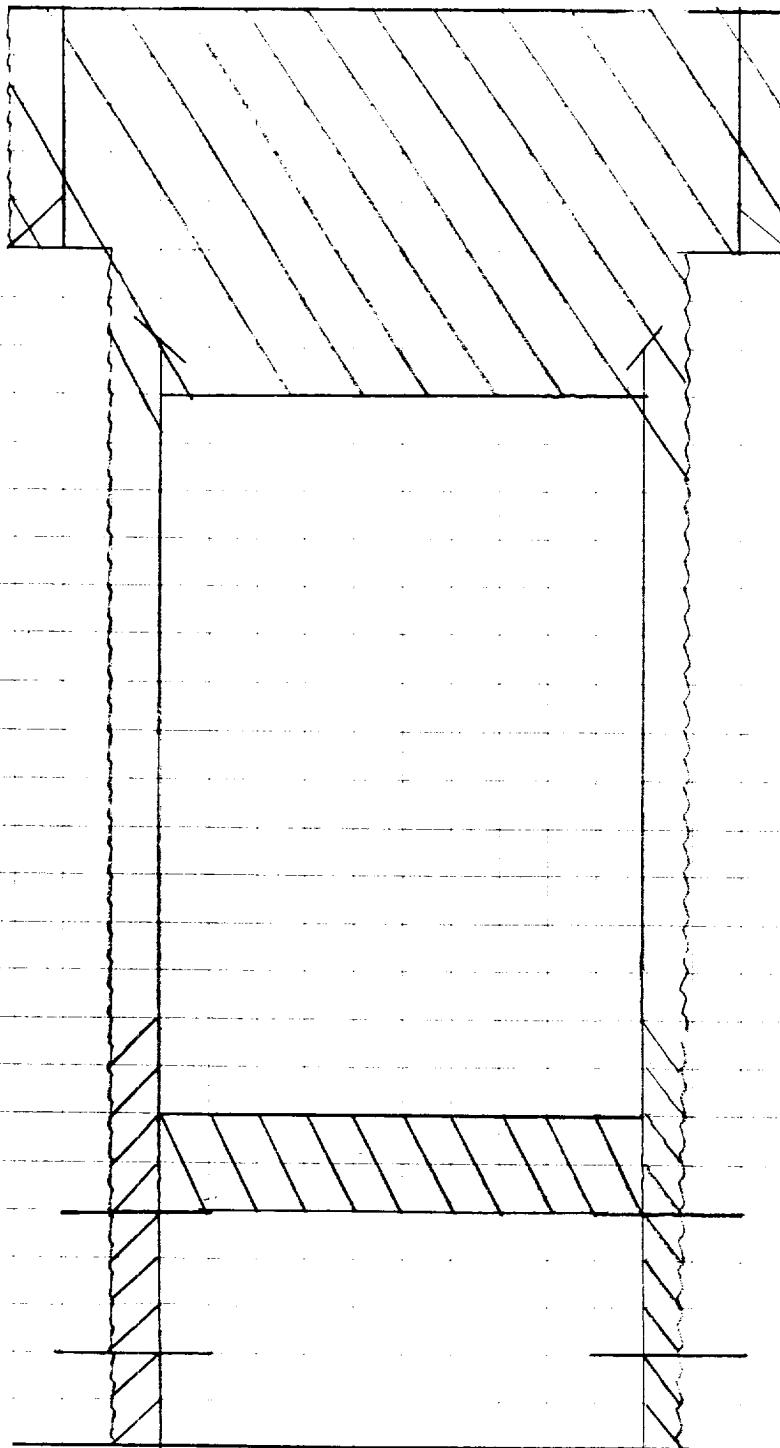
25 sx @ 3800'

Perf 3812-4046

5 1/2" csg @ 4090 w/ 350:  
TD 4090'

631 1905  
Attained

May 19 Errolburg Unit # 73  
The Wiser Oil Company  
Unit A, 670' FNL + 770' FEL, Section 9-T17S-R32E  
Completed: 09/20/64 TD: 4050'  
Plugged + Abandoned: 24/12/89



8 9/16" csg @ 250 w/ 225 sx

5 1/2" csg cut + pulled @  
374'  
Set 180 sx cmt plug  
450' - surface

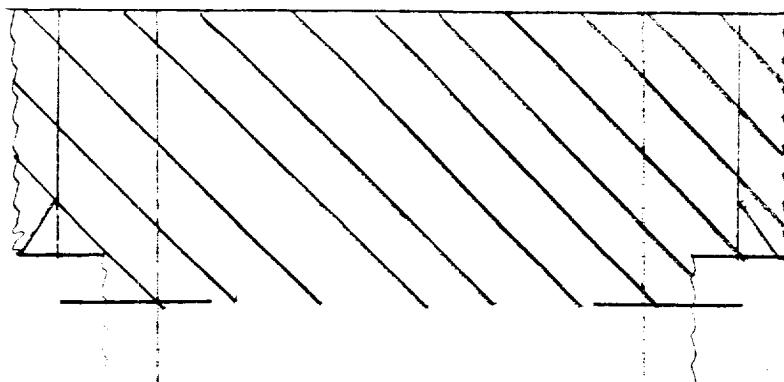
Cmt plug 3643-3888

Perfs 3882-4016

5 1/2" csg @ 4050' w/ 200 sx  
TD 4050'

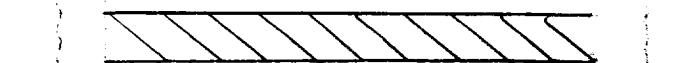
RECEIVED  
OCT 1995  
SPECIAL COLLECTIONS  
UNIVERSITY LIBRARIES  
UNIVERSITY OF TORONTO LIBRARIES

Maloche Gravoua Unit = 34  
 The Wiser Oil Company  
 Unit B, 330' FFL + 1980' FE., Section 9-T-7S-3E  
 Completion: 12-08-51 TD: 4000'  
 Plugged + Abandoned: 09-11-75



8 $\frac{1}{2}$ " csg @ 294' w/ 200' sh  
 Perf 5 $\frac{1}{2}$ " @ 344', form  
 30' sh circ via 3 $\frac{1}{2}$ " sh  
 5 $\frac{1}{2}$ " annulus - 5 $\frac{1}{2}$ " ffl

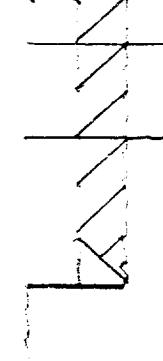
35 sh @ 1000'-1100'



30 sh 2131-2400'



25 sh 3510-3700'



Perf 3834-3930

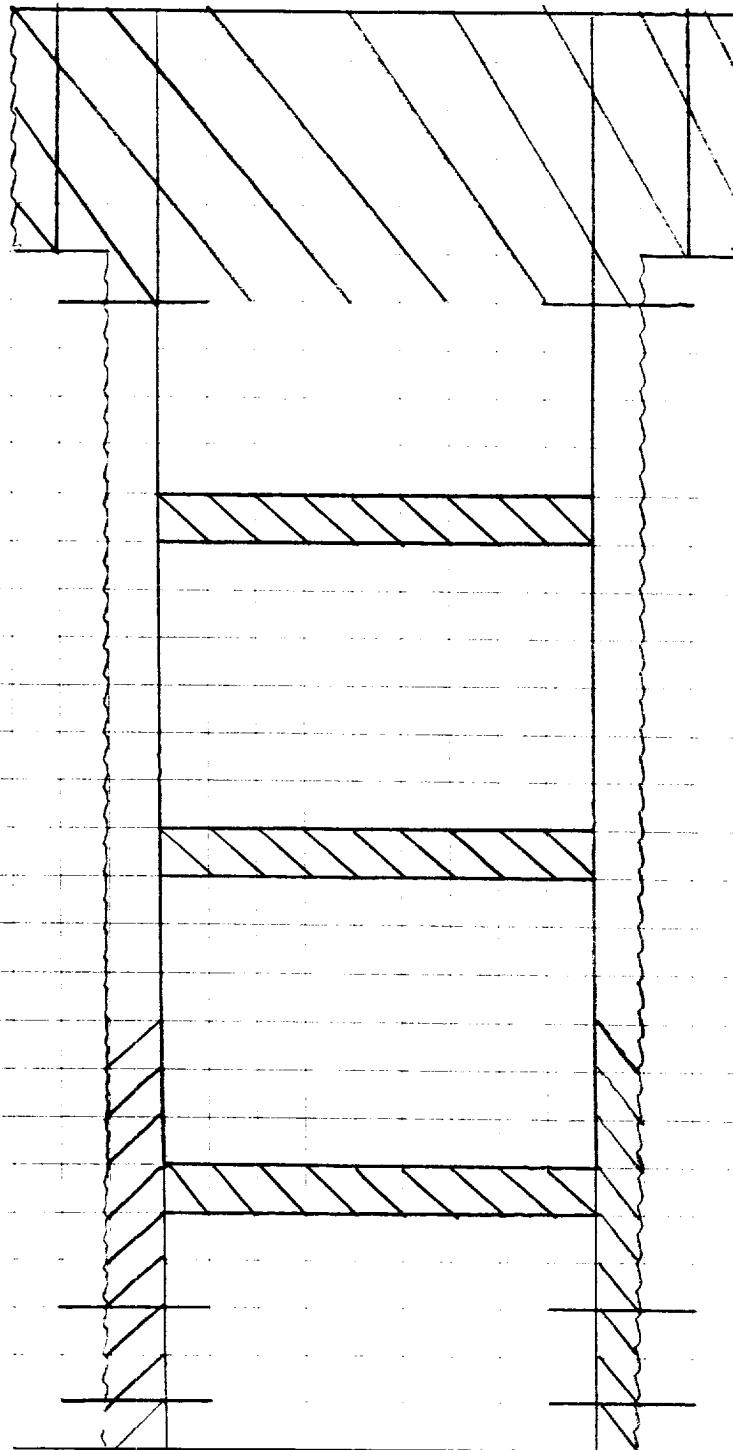


5 $\frac{1}{2}$ " csg @ 4050 w/ 350 sh

TD 4000'



Maljam Grayburn Unit # 3  
The Wiser Oil Company  
Unit D, 330' FNL + 990' FWL, Section 9-T17S-R32E  
Completed: 08-08-61 TD: 3990'  
Plugged & Abandoned 09/11/75



Pump 85 sx into 8 5/8 x  
5 1/2 annulus

8 5/8" csg @ 302' w/ 200 sx  
Perf 5 1/2" csg at 352'

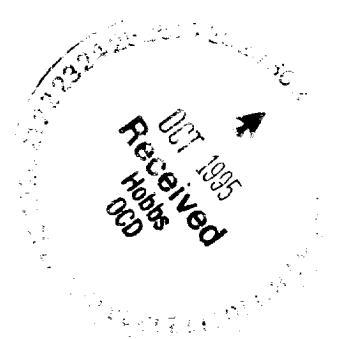
35 sx @ 1000'

30 sx @ 2400'

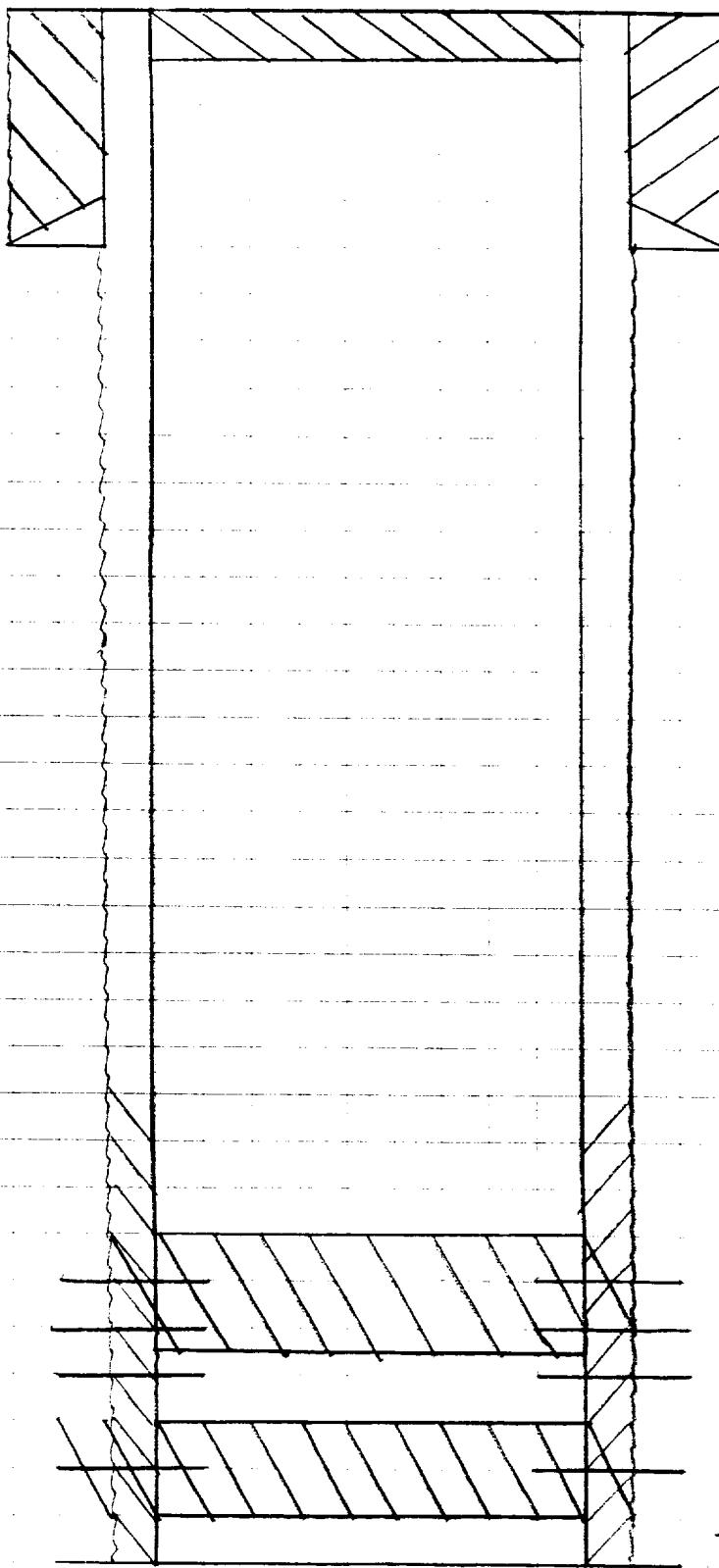
25 sx @ 3100'

Perf 3790 - 3950

5 1/2" csg @ 3990 w/ 350 sx  
TD 3990'



Santiago Federal #4  
Lyn Petroleum Consultants  
Unit E, 810' FNL + 1830' FE, Section 4-T17S-R32E  
Completed: N/A TD: 4150'  
Plugged + Abandoned: 06-11-84



CMT plug - 10 sx surf.

8<sup>5</sup>/<sub>8</sub>" @ 312' w/ 250 sx

CMT Plug 3300-3430  
Perf 3301-3378

Perf 3888-4112  
CMT Plug 3933-4122  
5<sup>1</sup>/<sub>2</sub>" csg @ 4150' w/ 1500 sx  
TD: 4150'

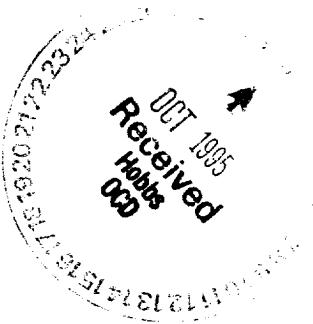
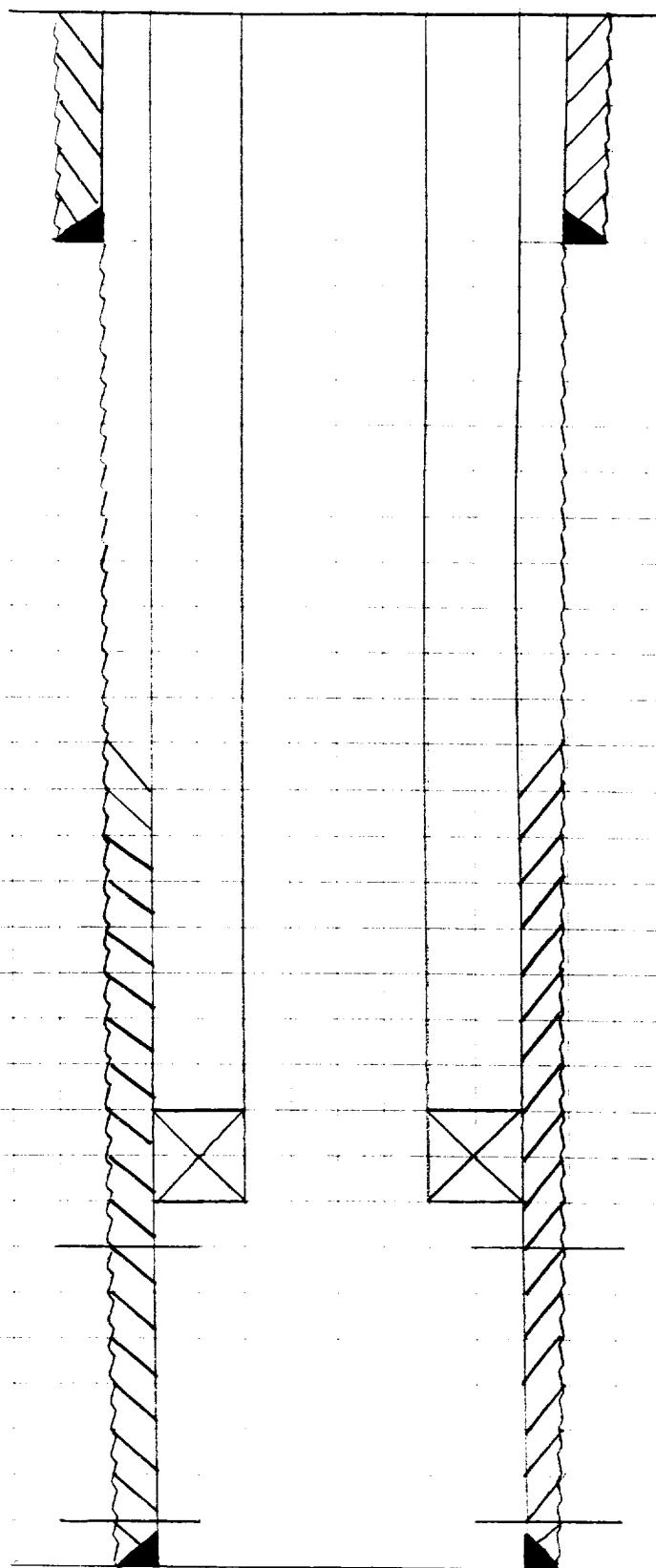
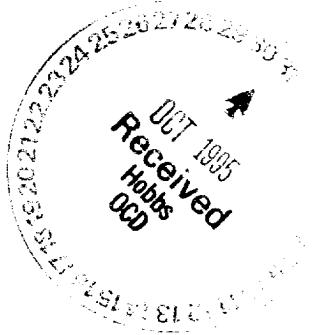


Exhibit "C"

Typical Injection Well Bore  
Maljamar Grayburg Unit





**Exhibit "D"**  
**AFFIDAVIT OF MAILING**

STATE OF NEW MEXICO )  
: ss  
COUNTY OF EDDY )

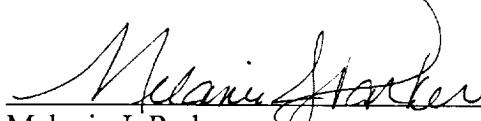
I, Melanie J. Parker, do solemnly swear that a copy of this Application has been mailed by certified mail, return receipt requested, to each of the following interested parties:

Surface Owner:

Olane Caswell  
1702 Gilham  
Brownfield, TX 79316

Offset Operator:

Mack Energy Corporation  
P.O. Box 276  
Artesia, NM 88211-0276

  
Melanie J. Parker

SWORN AND SUBSCRIBED TO before me this 30<sup>th</sup> day of October 1995.

My Commission Expires:

03-08-99

  
Jawn M. Harris  
Notary Public



OFFICIAL SEAL  
Jawn M. Harris

NOTARY PUBLIC—STATE OF NEW MEXICO

My commission expires: 03-08-99

