



J.O. EASLEY INC.
ESTABLISHED 1979
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119 South Roselawn, Suite 302
Artesia, New Mexico 88210

Telephone (505) 746-1070
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March 12, 1997

Mr. David Catanach
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: C-108
Maljamar Grayburg Waterflood Unit
Lea County, New Mexico

Dear Mr. Catanach:

Enclosed is an original and one copy of the C-108 for 2 new injection wells within The Wiser Oil Company's Maljamar Grayburg Waterflood Unit.

If you have any questions, please feel free to give me a call at 505-624-9677.

Sincerely,

J. O. EASLEY, INC.

Bonita L. Limpus Jones
Consulting Landman

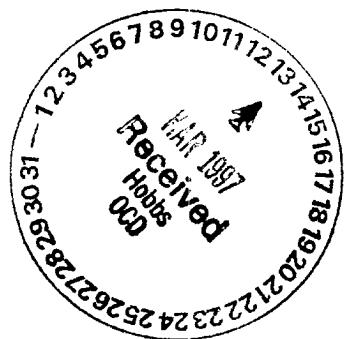
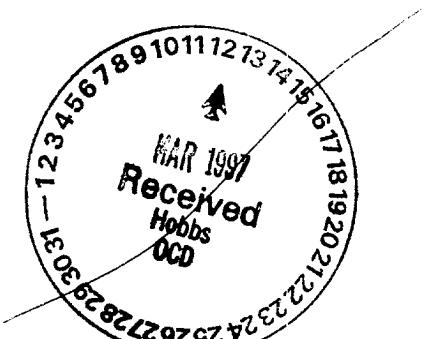
/bj

Enclosures

cc/enclosure Mr. Jerry Sexton
New Mexico Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88241

Mr. Matt Eagleston
The Wiser Oil Company
8115 Preston Road, Suite 400
Dallas, Texas 75225

Mr. Mike Jones
The Wiser Oil Company
P. O. Box 2568
Hobbs, New Mexico 88241



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: P. O. Box 2568, Hobbs, NM 88241
CONTACT PARTY: Mike Jones (505) PHONE: 392-9797
- III. WELL DATA: Complete the data required on the reverse side of this form for each well processed 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-1538 Mal jamar Grayburg Unit
- 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 sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- * X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted.)
- * XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground 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: Michael R. Burch, CPL

TITLE: Agent

SIGNATURE: Michael R. Burch, Jr., Jr.

DATE: 3-12-97

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

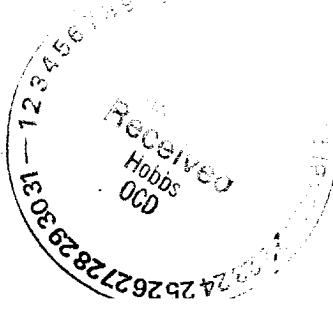
All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

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, PO Box 2088, Santa Fe, NM 87504-2088 within 15 days.

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

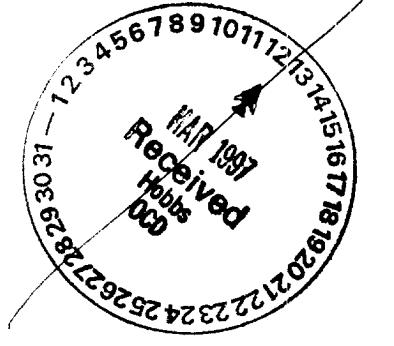
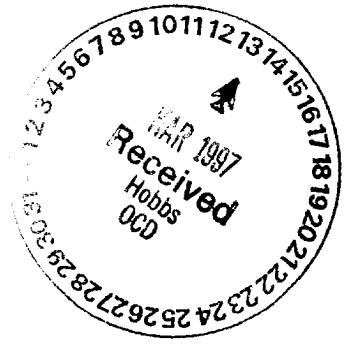
NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.



C-108
APPLICATION FOR AUTHORIZATION TO INJECT
MALJAMAR GRAYBURG UNIT

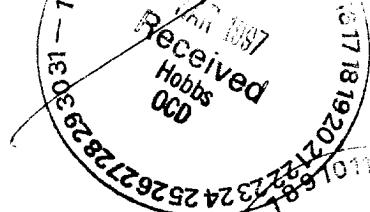
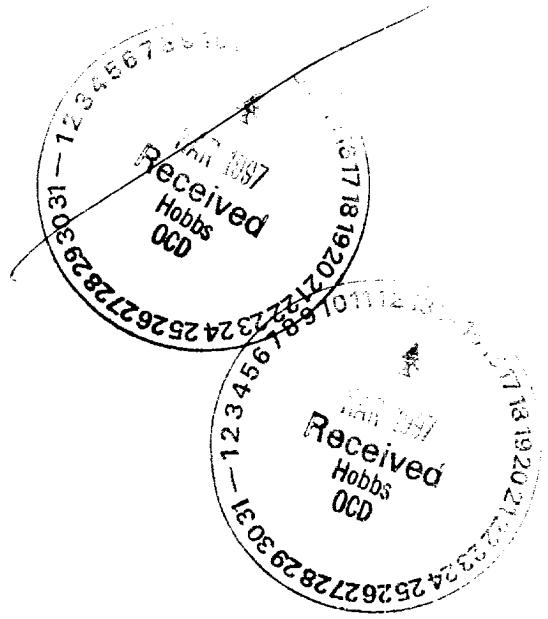
III. WELL DATA

The following data sheets describe the 2 Water Injection Wells for which this application is submitted by The Wiser Oil Company.



INJECTION WELL DATA SHEET

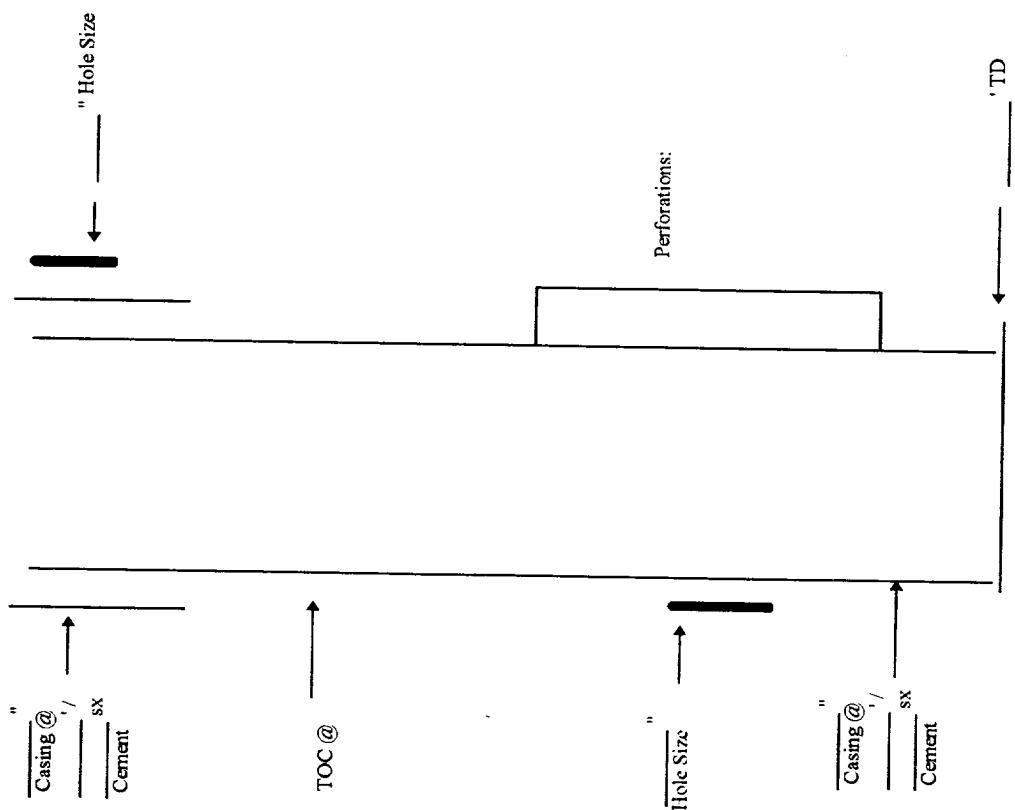
OPERATOR	The Wiser Oil Co.		
WELL NO.	#63		
LEASE Maljamar Grayburg Unit			
660' FSL, 1980' FEL, Unit O			
FOOTAGE LOCATION			
	SECTION	TOWNSHIP	RANGE
<u>Schematic</u>			
<u>Well Construction Data</u>			
Surface Casing Size	8 5/8"	"	Cemented with feet determined by _____ sx.
TOC	Surface	"	225
Hole Size	12 1/4"	"	
<u>Intermediate Casing</u>			
Size	12 1/4"	"	Cemented with feet determined by _____ sx.
TOC	Surface	"	
Hole Size	12 1/4"	"	
<u>Long String</u>			
Size	5 1/2"	"	Cemented with feet determined by _____ sx.
TOC	2312	"	350
Hole Size	7 7/8"	"	Calculation
Total Depth	4100	"	
Injection Interval	feet to _____ (perforated or open-hole; indicate which)	set in a _____ (type of internal coating)	
Tubing Size	2 3/8"	lined with _____ (type of internal coating)	feet
<u>Other type of tubing / casing seal if applicable</u> <u>Other Data</u>			
1. Is this a new well drilled for injection? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, for what purpose was the well originally drilled? Oil Production - TA			
2. Name of the Injection formation <u>Grayburg-San Andres Vacuum</u> 3. Name of Field or Pool (if applicable) <u>Maljamar Grayburg San Andres</u> 4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e., sacks of cement or plug(s) used <u>3876-82', 3886-92', 4002-14'</u> 5. Give the names and depths of any over or underlying oil or gas zones (pools) in this area. _____			
4100 T.D.			
Perforations: 3876-82' 3886-92' 4002-14'			
Casing @ 4100' / 5 1/2" 350 Sx Cmt			



INJECTION WELL DATA SHEET

OPERATOR	The Wiser Oil Co.	LEASE	Majamar Grayburg Unit
WELL NO.	#155 (Drilling is Pending) (Replaces MGBU	1880' FNL, 2080' FWL, Unit F	
		FOOTAGE LOCATION	
		SECTION	TOWNSHIP
		10	17S
			32E

Schematic



Well Construction Data

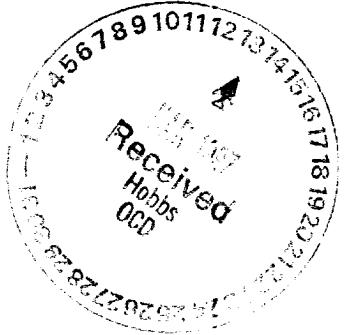
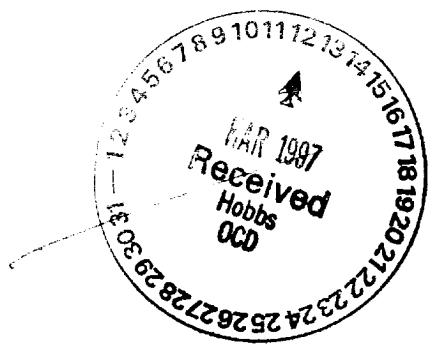
<u>Surface Casing</u>	<u>Size</u>	<u>TOC</u>	<u>Hole Size</u>	<u>Intermediate Casing</u>	<u>Size</u>	<u>TOC</u>	<u>Hole Size</u>	<u>Long String</u>	<u>Size</u>	<u>TOC</u>	<u>Hole Size</u>	<u>Total Depth</u>	<u>Injection Interval</u>
	"				"				"				
	Cemented with				Cemented with				Cemented with				
	feet determined by				feet determined by				feet determined by				
	"				"				"				"

<u>perforated or open-hole; Indicate which</u> <u>Tubing Size</u> _____	<u>feet to</u> <u>lined with</u> _____	<u>feet</u> <u>(type of internal coating)</u> _____
		<u>set in a</u> <u>feet</u> <u>packer at</u> _____
<u>Other type of tubing / casing seal if applicable</u> <u>Other Data</u> 1. Is this a new well drilled for injection? <u>X</u> Yes _____ If no, for what purpose was the well originally drilled? <u>Drilling is pending</u> _____		

2. Name of the injection formation Grayburg-San Andres Vacuum
3. Name of Field or Pool (if applicable) Majamar Grayburg San Andres

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e., sacks of cement or plugs(s) used

5. Give the names and depths of any over or underlying oil or gas zones (pools) in this area.



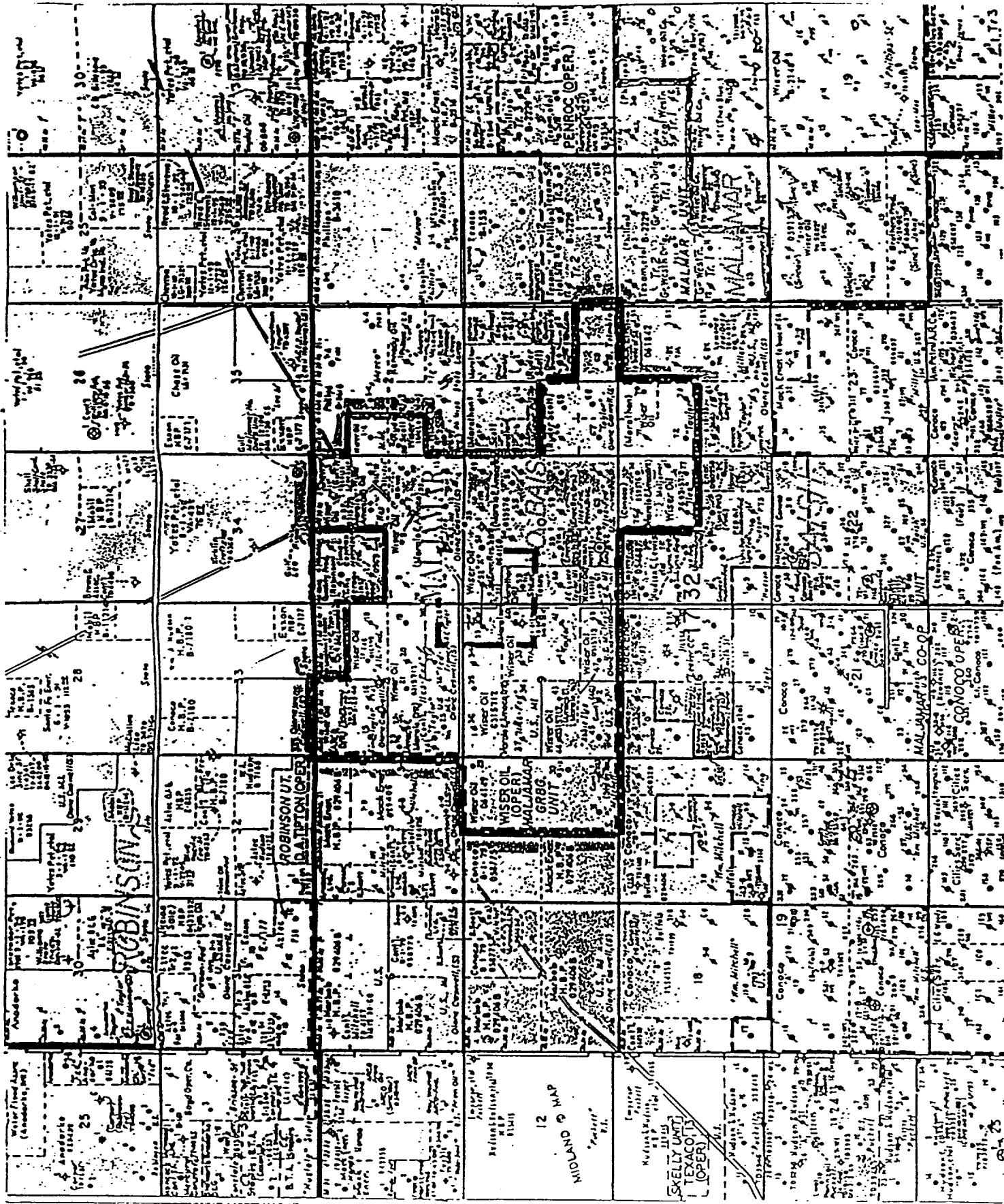
C-108
APPLICATION FOR AUTHORIZATION TO INJECT

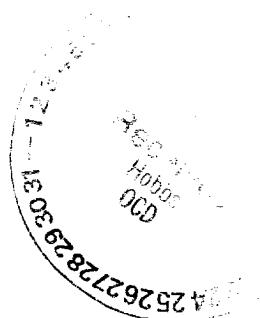
MALJAMAR GRAYBURG UNIT

V. AREA OF REVIEW

The attached maps show all wells and leases within two miles of the proposed injection wells with a one-half mile radius circle drawn around each proposed injection well.

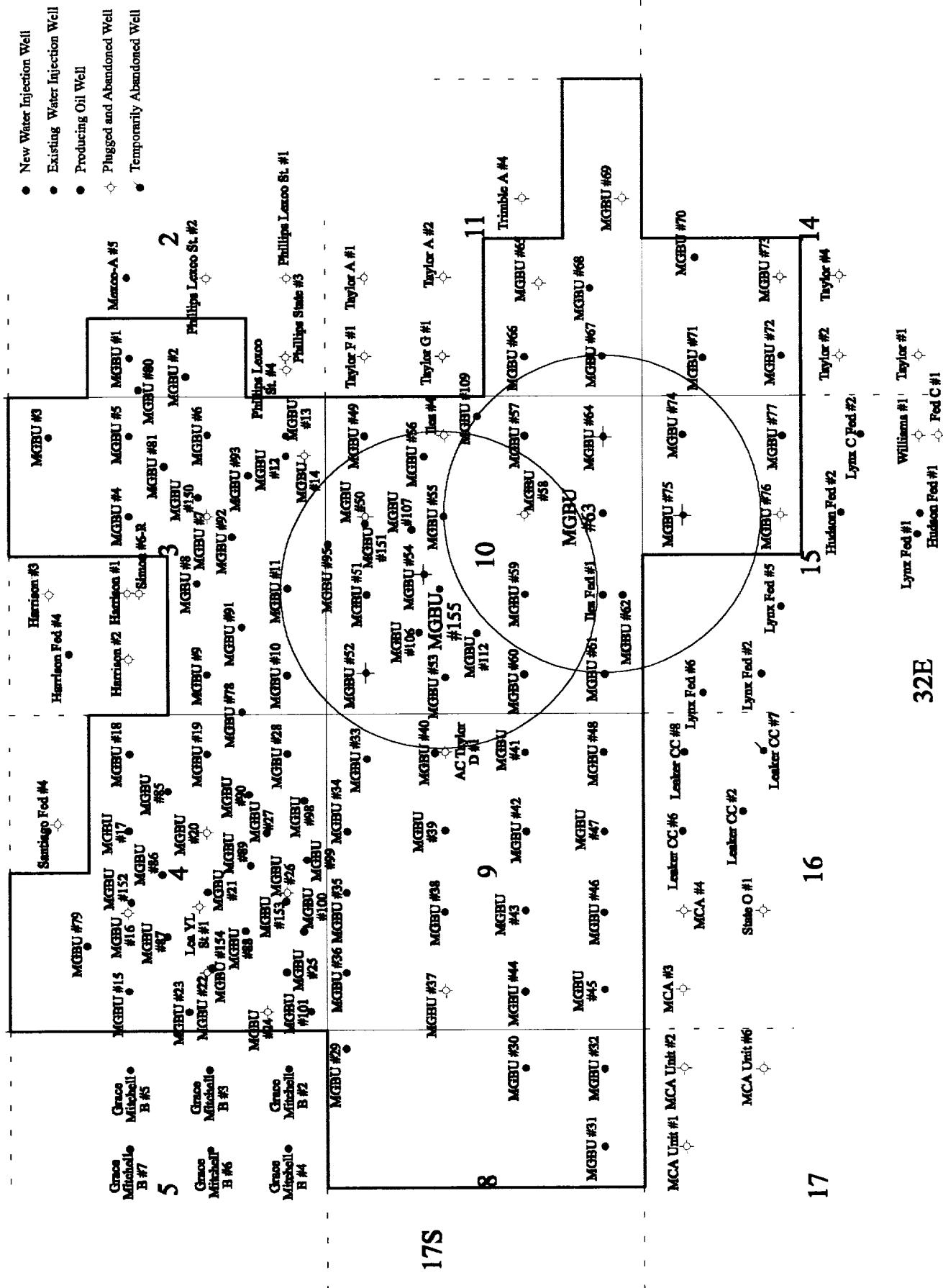






**Maljamar Grayburg Unit
Lea County, New Mexico**

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C-108
APPLICATION FOR AUTHORIZATION TO INJECT

MALJAMAR GRAYBURG UNIT

VI. HALF MILE WELLS

The following is a table showing data for all wells which penetrate the proposed injection zone and which lie within the area of review.

Immediately following the table are schematics for the 11 wells within the area of review which have been plugged and abandoned as noted on the table.



WELLS WITHIN MGBU AREA OF REVIEW

Township 17 South, Range 32 East

Section 3

NAME	OPERATOR	LOCATION	SEC	TSHP	RG	COMPL DATE	TYPE	TOTAL DEPTH	HOLE SIZE	CSG SET	SX CMT	PERFS	TBG/PAKR	COMMENTS	LEASE
MGBU #11	The Wiser Oil Co.	660' FNL, 2080' FWL, Unit N	3	17S	32E	12-10-93	Θ WTW	4290'	8 5/8" 5 1/2"	1245' 3964'	50 100	3959-4263' 3855'	4" 3855'	Converted to WTW	LC 059576
Section 10															
MGBU #95	The Wiser Oil Co.	15' FNL, 2478' FEL, Unit B	10	17S	32E	7-26-93	O	4426'	12 1/4" 7 7/8"	8 5/8" 5 1/2"	1129'	630	3961-4120' 4171-4338'	2 7/8" @ 4275'	Estimated TOC 2127'
MGBU #50	The Wiser Oil Co.	660' FNL, 1980' FEL, Unit B	10	17S	32E	Conv. 12-5-61	Θ WW P&A	4124'	Unk 7 7/8" 7 7/8"	8 5/8" 5 1/2" 4"	1161' 3975' 3982'	75 100 375	3958-62'		TOC 2600 by Temp. Log Conv to WIW 12-5-61 P&A 10-8-76
MGBU #151	The Wiser Oil Co.	660' FNL, 2127' FEL, Unit B	10	17S	32E	11-9-93	WTW	4439' 4403'	12 1/4" 7 7/8"	8 5/8" 5 1/2"	1141' 4439'	600	3946-4246' 4337-48'	2 3/8" @ 3864'	SI BLM LC-059576
MGBU #51	The Wiser Oil Co.	660' FNL, 1980' FWL, Unit C	10	17S	32E	11-10-93	O	4233'		8 5/8" 5 1/2"	1056' 3863'	50 100	3903-4203'	2 3/8" @ 3641'	Estimated TOC 3352'
MGBU #52	The Wiser Oil Co.	660' FNL, 690' FWL, Unit D	10	17S	32E	pre 1948	Θ WW P&A	4301'		8 5/8" 5 1/2"	1161' 3986'	75 100	Unknown		Estimated TOC 3475' Conv to WIW 2-1-62 P&A 10-8-76
MGBU #53	The Wiser Oil Co.	1980' FNL, 610' FWL, Unit E	10	17S	32E	11-9-62	O	4070'	11" 7 7/8"	8 5/8" 5 1/2"	302' 4070'	200 350	3882-96' 3988-94'	2 3/8" @ 3980'	Estimated TOC 2282' TA 4-5-89
MGBU #54	The Wiser Oil Co.	1650' FNL, 2310' FWL, Unit F	10	17S	32E	1-6-51	Θ WW P&A	4221'		8 5/8" 5 1/2"	1100' 3820'	100	Unknown		Estimated TOC 3309' Conv to WIW 11-8-62 P&A 10-6-76
MGBU #106	The Wiser Oil Co.	1534' FNL, 1372' FWL, Unit F	10	17S	32E	2-7-96	O	4425'	12 1/4" 7 7/8"	8 5/8" 5 1/2"	460' 4425'	300 1800	3881-4041' 4139-79'	2 7/8" @ 4200'	LC-064150
MGBU #112	The Wiser Oil Co.	2497' FNL, 1335' FWL, Unit F	10	17S	32E	6-4-96	O	4450'	12 1/4" 7 7/8"	8 5/8" 5 1/2"	495' 4452'	300 1350	3861-4034'	2 3/8" @ 4041	Estimated TOC 3173'
MGBU #55	The Wiser Oil Co.	1980' FNL, 1980' FEL, Unit G	10	17S	32E	8-18-62	Θ P&A	4120'	11" 7 7/8"	8 5/8" 5 1/2"	302' 4218'	200 350	3894-3900' 3923-33'	2 3/8" @ 4046-52'	Estimated TOC 2332' P&A 10-15-76 Re-entry for WIW Pending
MGBU #107	The Wiser Oil Co.	1413' FNL, 2238' FEL, Unit G	10	17s	32E	6-2-96	O	4450'	12 1/4" 7 7/8"	8 5/8" 5 1/2"	495' 4450'	300 1700	3910-4070'	2 3/8" @ 4119'	Estimated TOC 2918' NM 059576

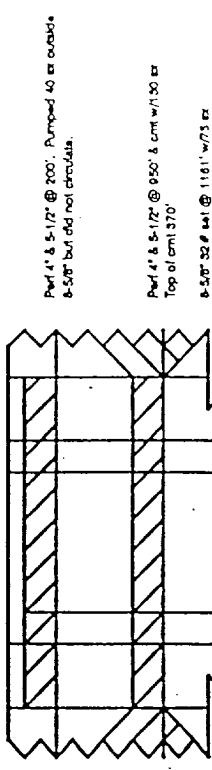
WELLS WITHIN MGBU AREA OF REVIEW

NAME	OPERATOR	LOCATION	SEC	TSHP	RG	COMPL DATE	TYPE	TOTAL DEPTH	HOLE SIZE	CSG SIZE	DEPTH SET	SX CMT	PERFS	TBG/ PAKR	COMMENTS	LEASE
Iles Lease #4	Boller & Rutledge 901 Merchantile Securities Bldg. Dallas 1, TX	1980' FNL, 660' FEL, Unit H	10	17S	32E	2-9-48	Θ P&A	4241'	8 5/8" 5 1/2"	4190'	200 350	3970-82' 4083-87' 4093-4105'	2 3/8" @ 4007'	Estimated TOC 2402' Conv to WIW 9-10-64 P&A 10-18-76 Re-entry for WIW Pending	LC 059576	
MGBU #56	The Wiser Oil Co.	1650' FNL, 990' FEL, Unit H	10	17S	32E	9-11-62	Θ WIW P&A	4190'	8 5/8" 5 1/2"	4190'	300 1150	3907-4077	2 3/8" @ 4121'		LC 059576	
MGBU #109	The Wiser Oil Co.	2509' FNL, 330' FEL, Unit H	10	17S	32E	9-7-96	Ο P&A	4400'	12 1/4" 7 7/8"	4400'	4400'	436'	300		LC 059576	
MGBU #57	The Wiser Oil Co.	1980' FSL, 660' FEL, Unit I	10	17S	32E	10-19-62	Ο P&A	4100'	11" 7 7/8"	4100'	350	3916-26' 4014-20' 4048-60'	2 3/8" @ 3948"	Estimated TOC 2312'	LC 059576	
MGBU #58	The Wiser Oil Co.	1980' FSL, 1980' FEL, Unit J	10	17S	32E	11-20-62	P&A	4100'	11" 7 7/8"	4100'	350	3908-20' 4036-48'	2 3/8" @ 3952'	P&A 9-28-74	LC 059576	
MGBU #59	The Wiser Oil Co.	1980' FSL, 1980' FWL, Unit K	10	17S	32E	9-5-64	Ο WIW P&A	4050'	11" 7 7/8"	4050'	350	3856-94' 4016-26'	2 3/8" @ 3968"	Estimated TOC 2262'	LC 064150	
MGBU #60	The Wiser Oil Co.	1980' FSL, 660' FWL, Unit L	10	17S	32E	5-11-65	Θ WIW P&A	4237'	11" 7 7/8"	4237'	4500'	500 400 3955-73'	2 7/8" @ 4010'	Estimated TOC TA 1-22-95 2457' Conv to WIW 3-31-66 P&A 10-12-76 Re-entry for WIW Pending	Fcc	
MGBU #61	The Wiser Oil Co.	660' FSL, 660' FWL, Unit M	10	17S	32E	7-12-65	Ο P&A	4200'	11" 7 7/8"	4200'	550	3819-96' 3985-89"	2 3/8" @ 3690'	Estimated TOC 1391'	LC 064150	
Iles Federal #1	Walsh & Watts Inc.	660' FSL, 1980' FWL, Unit N	10	17S	32E	11-7-62	Ο WIW P&A	11,713'	17 1/2" 12 1/2" 8 3/4"	13 3/8" 9 5/8" 5 1/2"	380 2000 11,072	10834-52' 10863-76'	2" @ 10,885'	Estimated TOC 6775'	NM 064150	
MGBU #62	The Wiser Oil Co.	330' FSL, 1980' FWL, Unit N	10	17S	32E	6-24-65	Θ WIW P&A	4183'	11" 7 7/8"	4183'	4500'	Unk 400 4117-27'	3819-83' 3905-83'	2 3/8" @ 3878"	Estimated TOC 2946' 4-22-66 P&A 10-21-76 Re-entry for WIW Pending	LC 064150
MGBU #64	The Wiser Oil Co.	660' FSL, 660' FEL, Unit P	10	17S	32E	8-29-64	Θ P&A	4100'	12 1/4" 7 7/8"	4100'	350	3886-96' 4016-20' 4028-36'	2 3/8" @ 3964"	Estimated TOC 2312' P&A 9-14-74	LC 059576	

WELLS WITHIN MGRU AREA OF REVIEW

NAME	OPERATOR	LOCATION	SEC	TSHP	RG	COMPL DATE	TYPE	TOTAL DEPTH	HOLE SIZE	CSG SET	SX C&T	PERFS	TBG/PAKR	COMMENTS	LEASE FEE
Section 11															
MGRU #67	The Wiser Oil Co.	660' FSL, 660' FWL, Unit M	11	17S	32E	4-6-63	O	4110'	12 1/4"	8 5/8"	322'	225	3904-19' 4033-4055'	2 3/8' @ 2322'	Estimated TOC 4062'
Section 15															
MGRU #74	The Wiser Oil Co.	660' FNLL, 660' FEL, Unit A	15	17S	32E	5-2-65	O	4358'	11"	8 5/8"	1027'	400	3829-99' 3901-57'	2 3/8' @ 2315'	Estimated TOC 4017
MGRU #75	The Wiser Oil Co.	660' FNLL, 1980' FEL, Unit B	15	17S	32E	7-21-65	Θ WFW P&A	4200'	11"	8 5/8"	309'	200	3809-79' 3903-93'	2 3/8" @ 3898'	Estimated TOC 2157' Conv to WTW 4-22-66 P&A 10-4-76

MGBU #50
660' FNLL, 1980' FEL, Unit B, Sec. 10, T15 - 32E
P+A 10-8-76



Piel 4' & 5 1/2' @ 200'. Pumped 40 ex outside.
6-50' but did not circulate.

Piel 4' & 5 1/2' @ 950' & 2cm w/150' ex
Top of cm 370'
6-50' 32' & 40' @ 1161' w/73' ex

Set 30 ex @ 2400' - 1150'

TOC 4'-5 1/2' 2600' (by memo Dg)

Set 25 ex @ 2200' - 2455'

7.75' hole

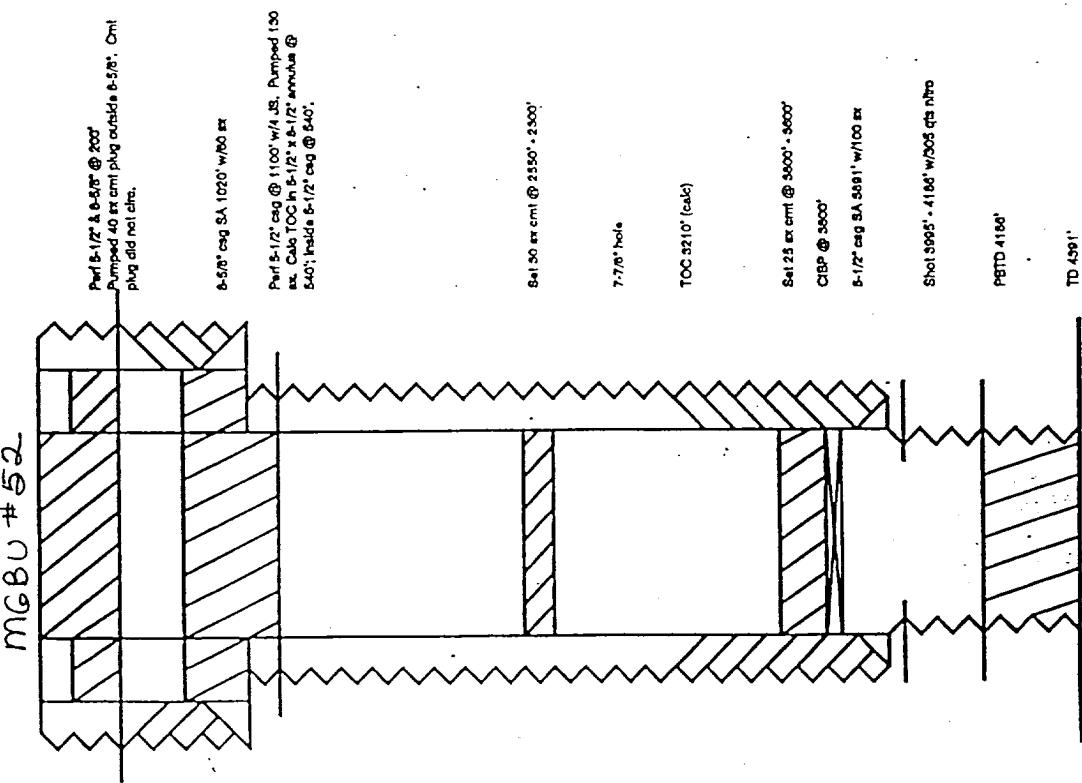
TOC 5 1/2' 7 1/2' 3250' (Dg)

5 1/2' 15' @ 3075' w/100' ex
Piel 305' - 302'
4' csg set @ 302' w/375' ex

Shot 4002' - 4124' w/310' Gains 4000

TD 4124'

MGBU #52



Piel 5 1/2' & 6-50' @ 200'
Pumped 40 ex arm plug outside 6-50'. Cm 1
plug did not circ.

6-50' csg SA 1020' w/100' ex

Piel 5 1/2' csg @ 1100' w/150'. Pumped 130'
ex. Calc TOC in 5 1/2' & 6-1/2' armhole @
6-40'; 1 hole @ 6-1/2' csg @ 640'.

Set 15 ex cm 1 @ 2350' - 2500'

7.75' hole

TOC 3210' (calc)

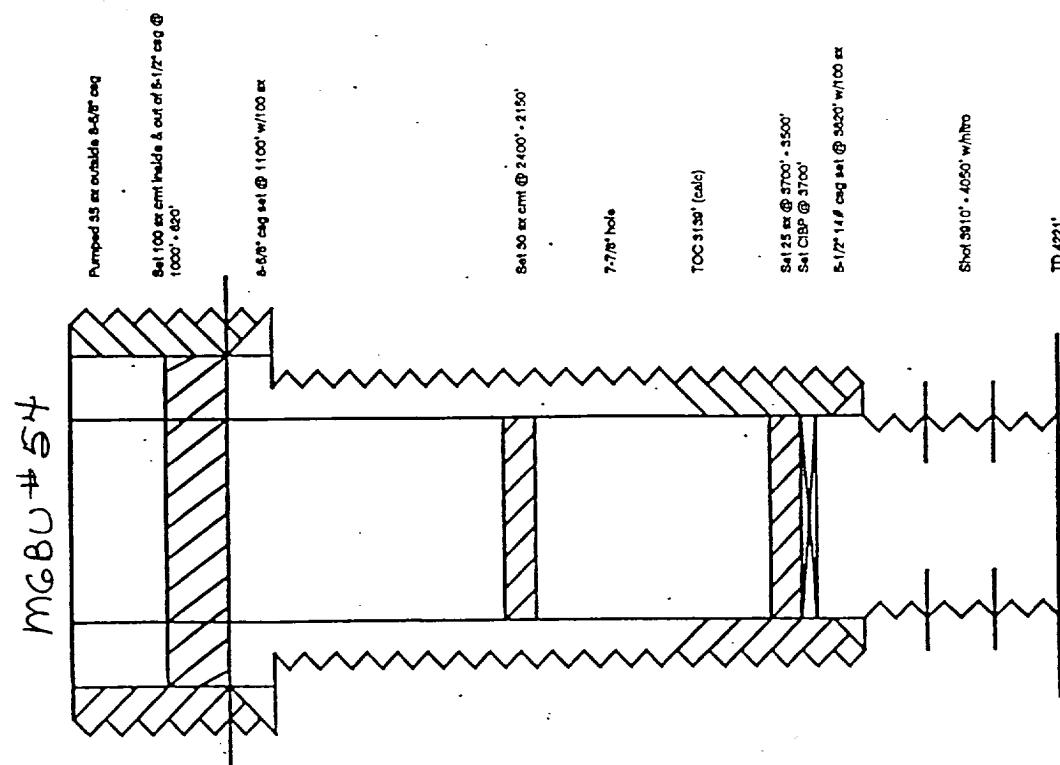
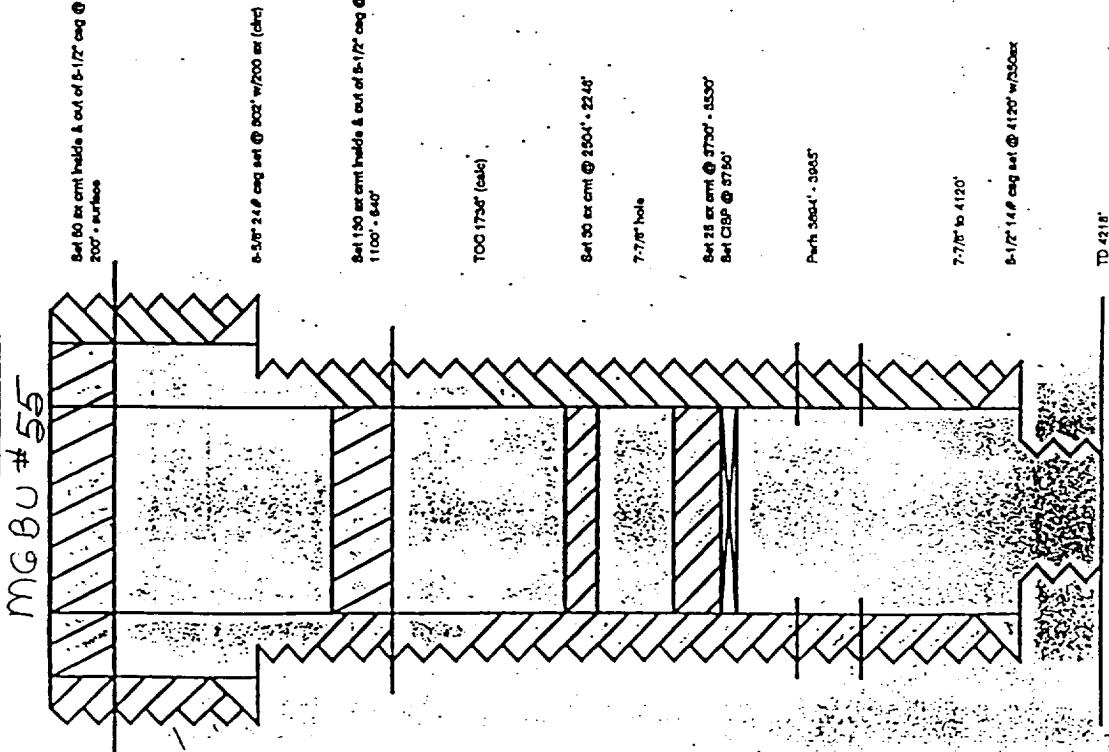
Set 13 ex cm 1 @ 3000' - 3000'
CBP @ 3000'

6-1/2' csg SA 380' w/100' ex

Shot 3095' - 4180' w/305' gts nbo

PERD 4180'

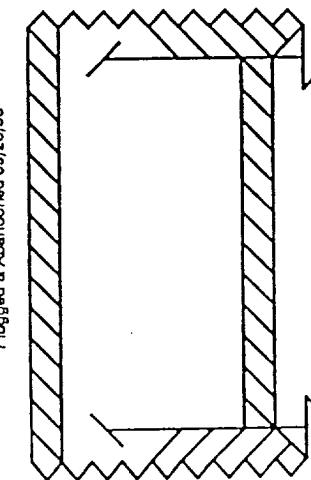
TD 4391'



iles #4

Bollar & Nichols

1980' FNL & 660' FFN, Unit F, sec 10-T17S-R32E
Lea County, New Mexico
Completed 9/47 TD 4241'
Plugged & Abandoned 09/28/58



Set cmt plug @ surface

Pulled 378' of 8-5/8" csg

Set 50' cmt plug @ 1175-1125'

8-5/8" csg set @ 1210' w/50' ss
cmt

7-7/8" Hole

Pulled 3054' 5-1/2" csg

Set 20' cmt plug @ 3200'

TOC 3288' (Calc)
Set 55' cmt plug @ 3800'
Pants 3870' - 4108'

5-1/2" csg set @ 3869' w/100' ss cmt

Shot 4043-4225' w/ 360 qts.

TD 4241'

MGBU # 56

Set 80' ex cmt hole & out of 5-1/2" csg @ 200'
(csg full to surf)

8-5/8 2 1/8 csg set @ 3377 w/200' ex (calc)

Set 150 ex cmt hole & out of 5-1/2" csg @
1100' - 540'

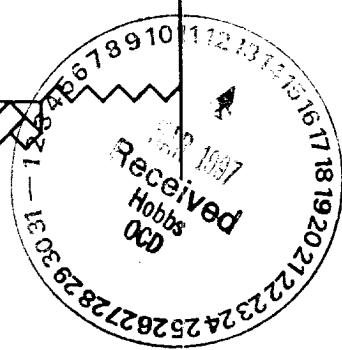
TOC 1000' (calc)

8-1/2 30' ex cmt @ 2402' - 2140'

7-7/8" hole

Set 25 ex cmt @ 3800' - 3800'
Set CBBP @ 3800'
Pants 3870' - 4108'

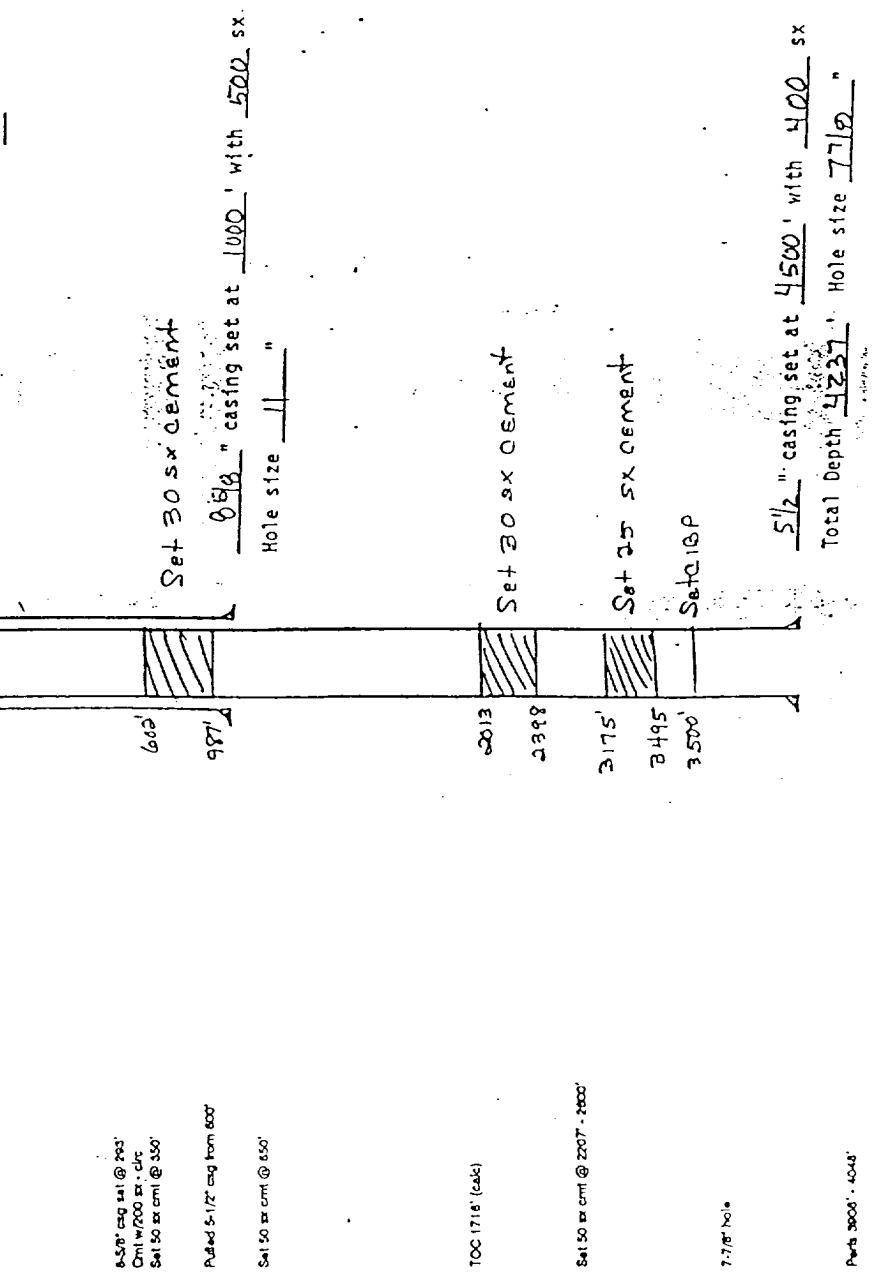
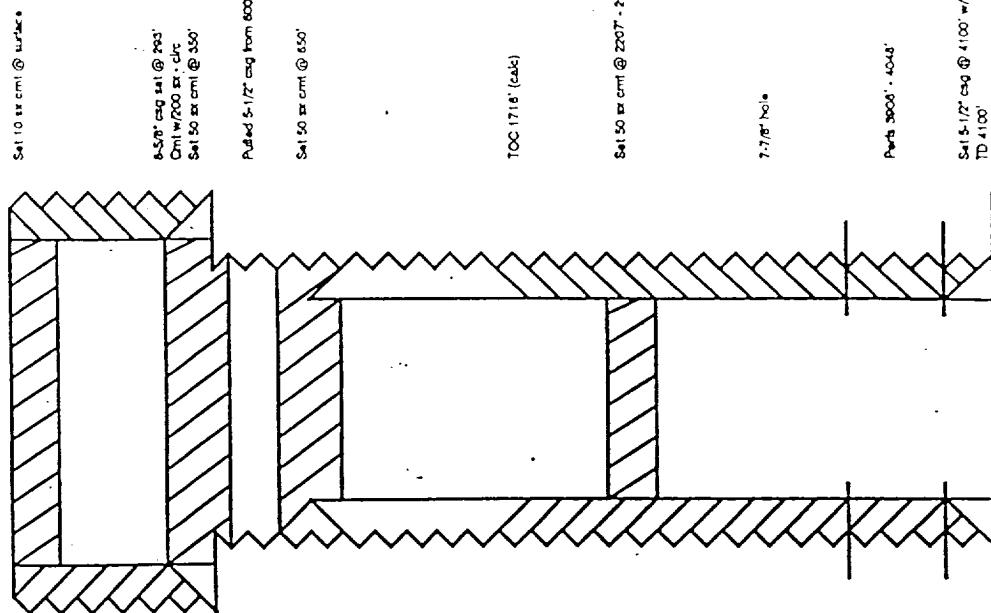
5-1/2 14# csg set @ 4100' w/500' ex
TD 4100'



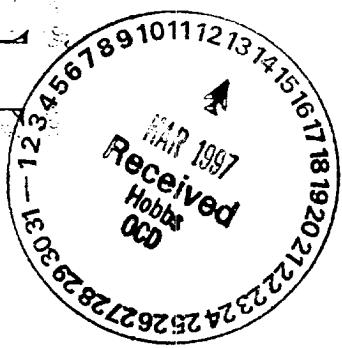
Maljamar Grayburg Unit #58
 Chevron Oil Co.
 FSL 5 1980, FEL Sec 10-17S-32E
 Unit J 1980' FSL 5 1980, FEL Sec 10-17S-32E
 Completed 11/20/93 TD 4100',
 Plugged & Abandoned 09/28/74

MGBU #60

Circ. cement to surface



MCBU #62
 Pumped 70 sx cement
 Perf 4½" / 3 holes
 Set 130 sx cement
 Hole size 11"
 8 ½" casing set at 315' with sx
 Perf 4½" casing / 4 holes
 Set 30 sx cement
 Set 25 sx cement
 Set CIP
 Total Depth 3718' Hole size 7 7/8" sx
 12345678



MGBU #75

Casing cut 2-3' below ground level + set at marker

8 1/2" casing set at 300' with sx of
Hole size 11 "

Pumped 115 sx cement
Pumped 50 sx cement down 4 1/2" x 8 1/2" annulus.
Perf 4 1/2" Casing

Set 30 sx cement
2624

2409

Set 25 sx cement

3394

Set C1GP
3714

3735

4 1/2" casing set at 4500' with 400 sx of
Total Depth 4200', Hole size 7 7/8 "

C-108
APPLICATION FOR AUTHORIZATION TO INJECT
MALJAMAR GRAYBURG UNIT

VII. PROPOSED OPERATION

1. Average Daily Rate of Fluids to be Injected: 250 BWPD
Maximum Daily Rate of Fluids to be Injected: 500 BWPD
2. This is to be a closed injection system.
3. Average Injection Pressure: 1850 psi
Maximum Injection Pressure: 2500 psi
4. Injection fluid will be obtained from the following sources:
 - a. Produced Water
 - b. Fresh Water from The Wiser Oil Company's three water wells in 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 Ogalala 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.



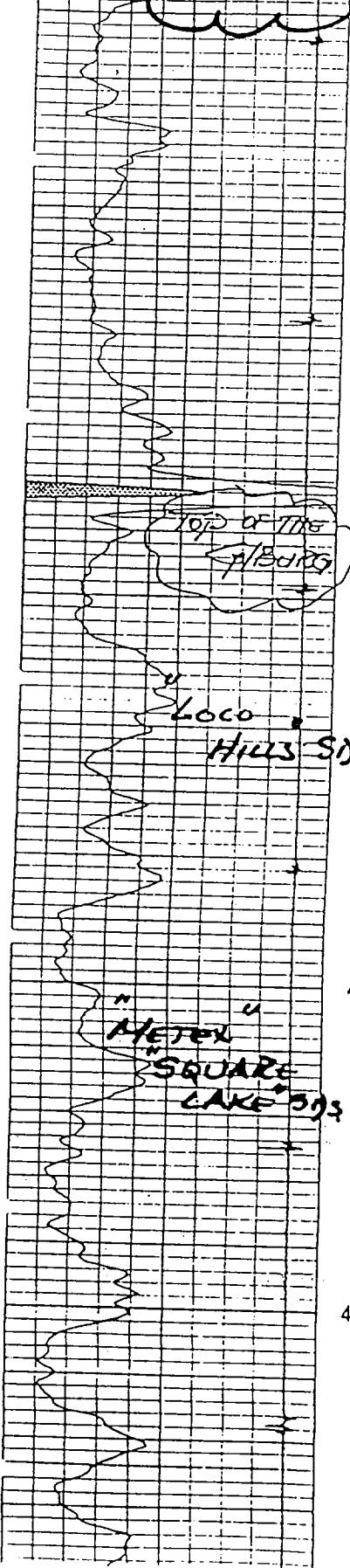
VIII. GEOLOGIC DATA OF INJECTION ZONE:

The proposed injection interval is in the Grayburg-San Andres from 3314' to 4400'. The Grayburg formation 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.

The surface formation is Cretaceous and has no known sources of drinking water. The Ogallala aquifer and the Caprock overlies the northeastern portion of the Unit Area; there are no known sources of drinking water underlying the injection interval.

Attached, as Exhibits VIII-A and VIII-B, are two Type Logs illustrating geology, lithology, thickness, and depths.

TYPE LOG FOR
GROUT PRODUCING
INTERVALS



CML 1101

1) SN LOG
(BY WES)
(4/13/64)

Exhibit

VIII-A

→ ARROWS INDICATE
POROSITY POINTS

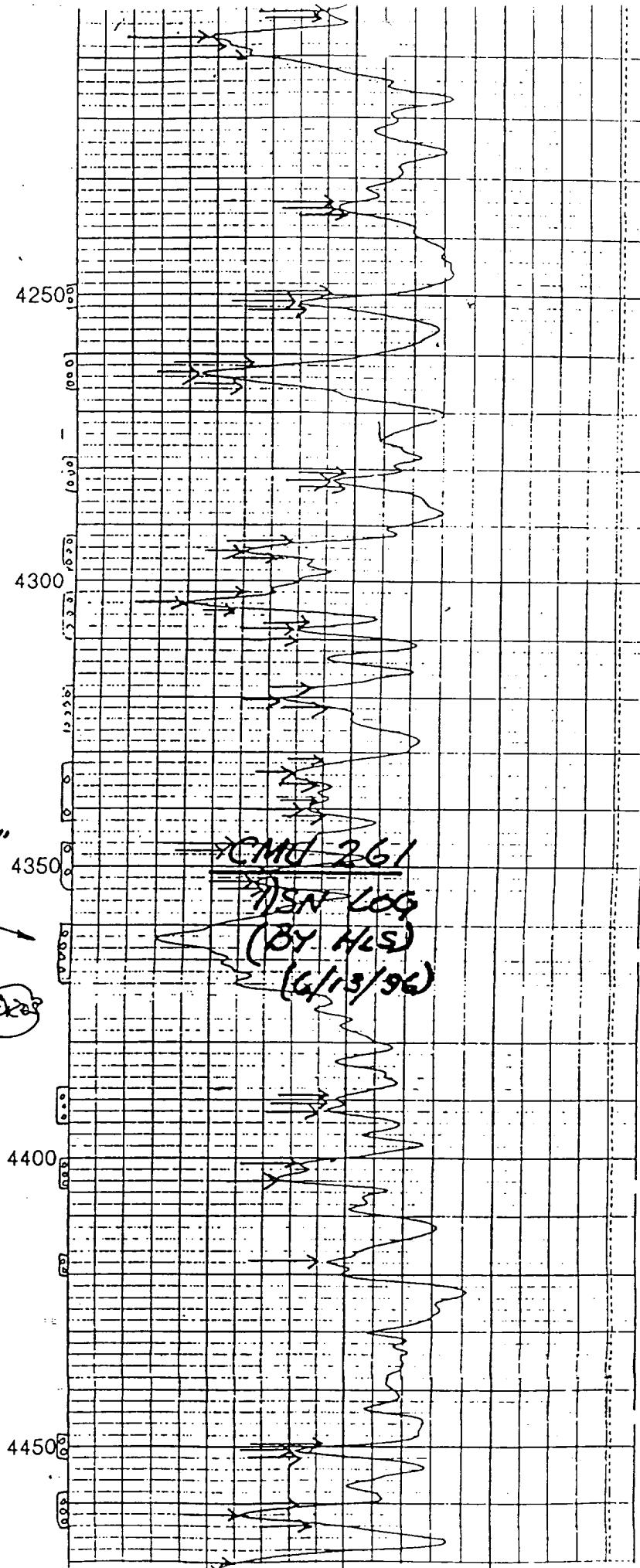
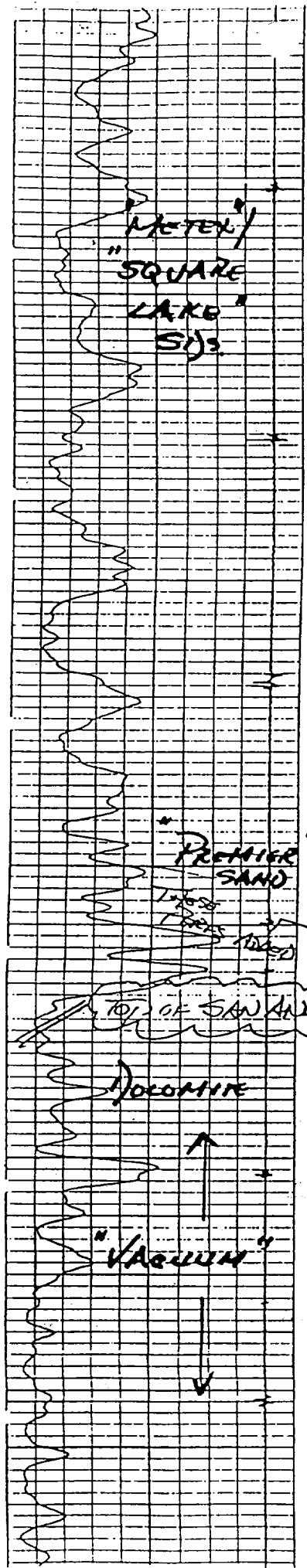
BOXES INDICATE
PERFORATING INTERVALS

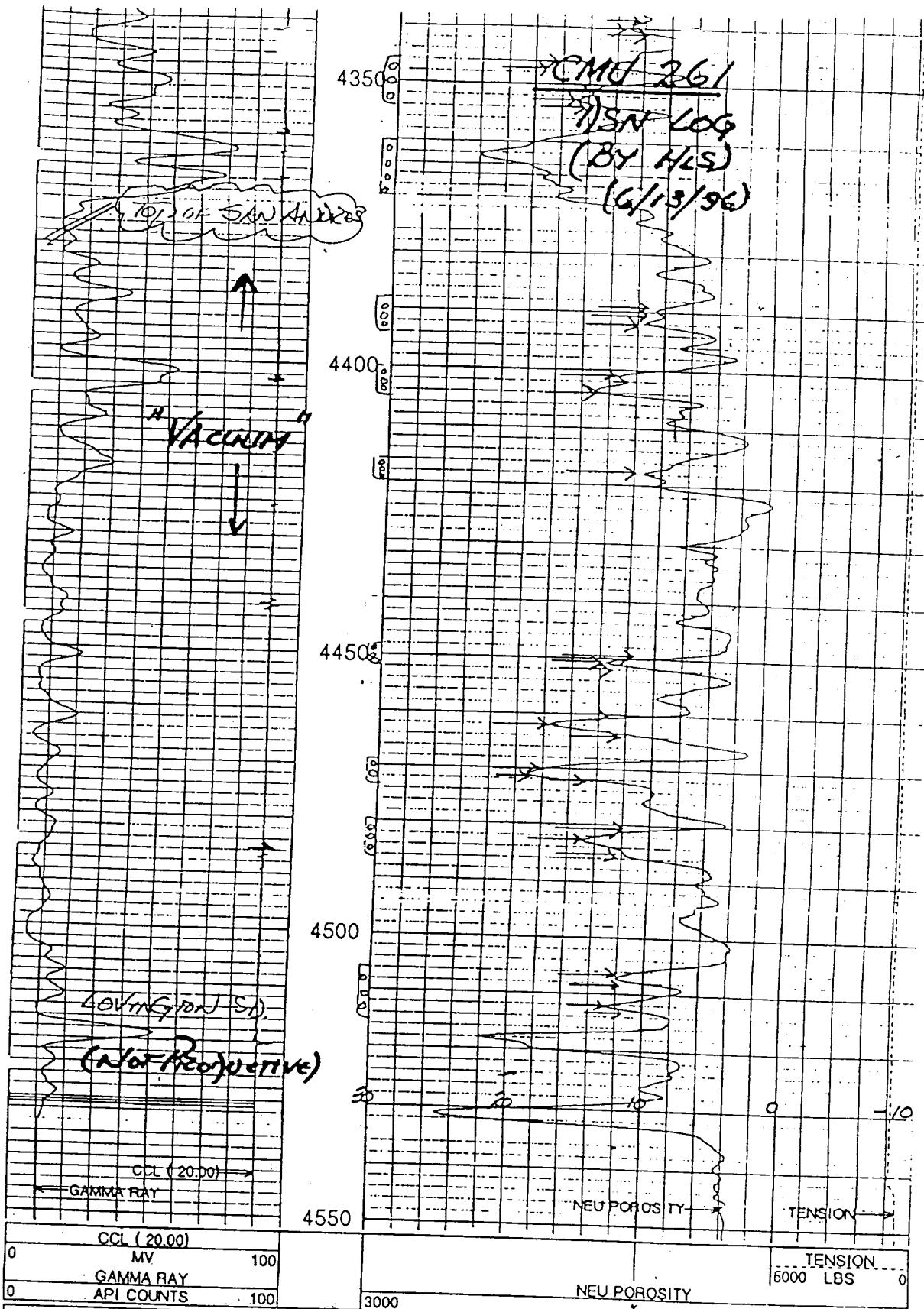
4150

4200

4250

4300





 HALLIBURTON

Version No: 2.001 rev.0
 Data File: 0613_1554_04111.sds
 Control File: plot_01_1.apc
 Raster File: 0613_1554_04111.plot_01_1

Top Depth _____
 Bottom Depth 4551.75

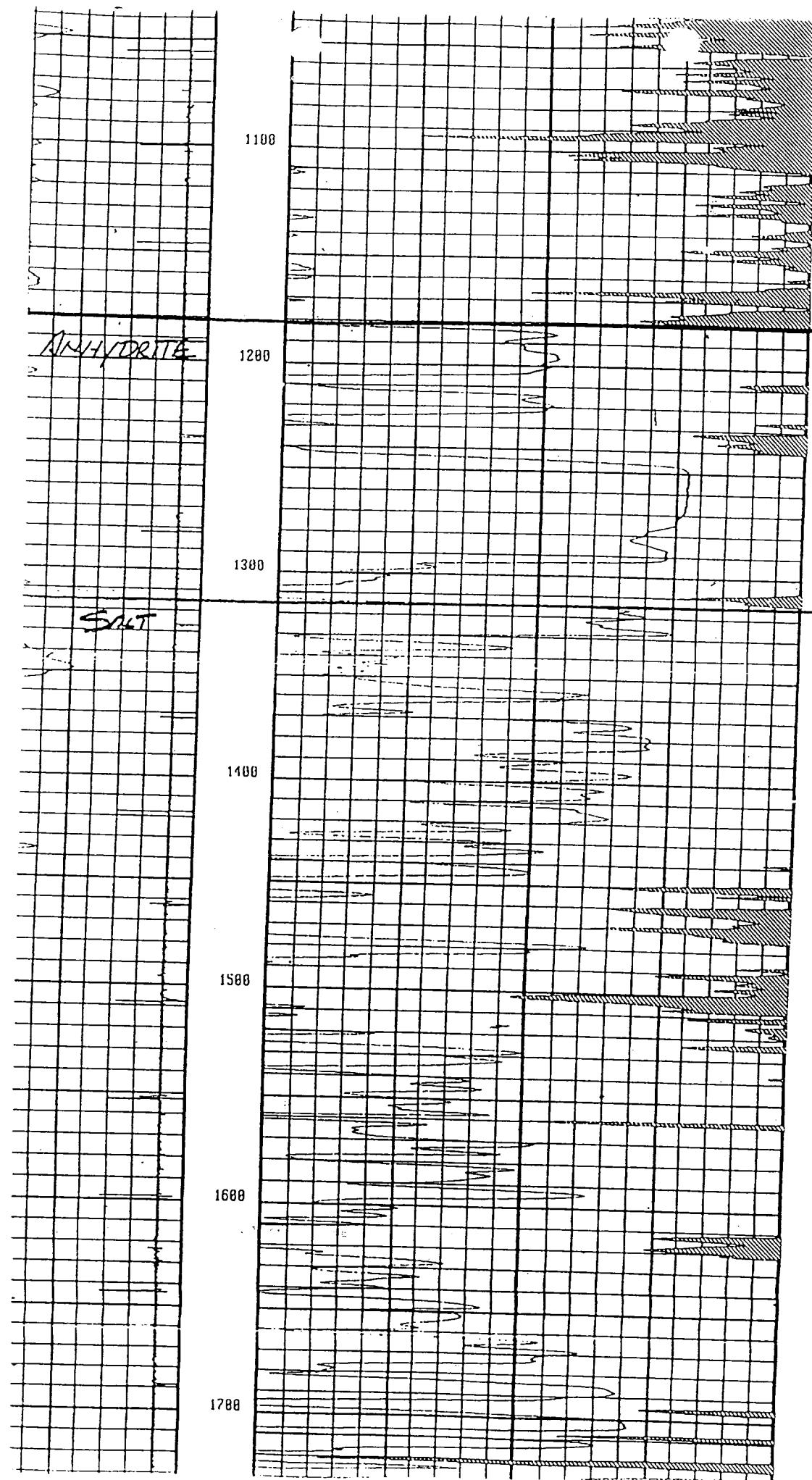
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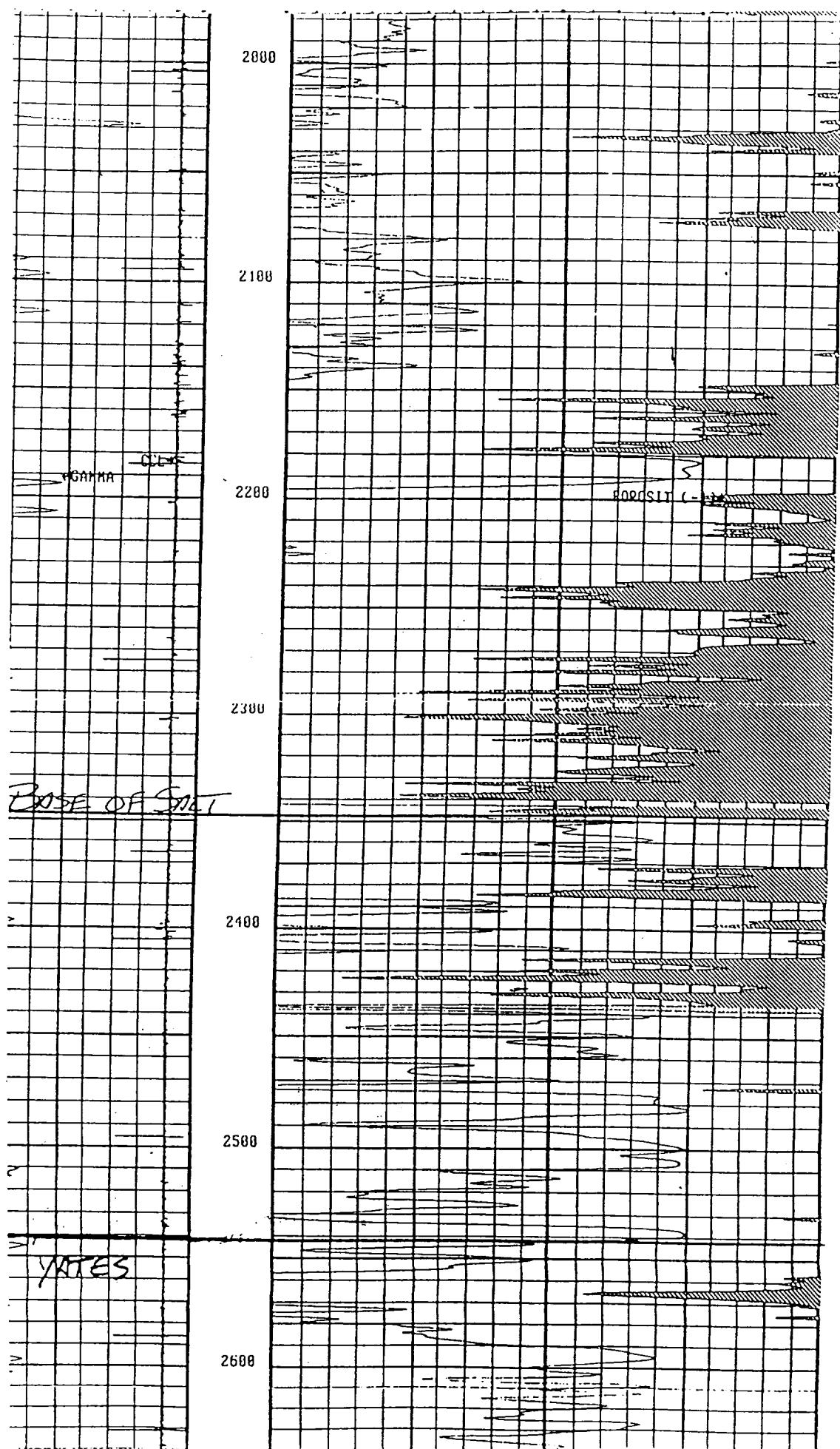
TYPE CC FOR CMU SITOWIN FORMATION TOPS

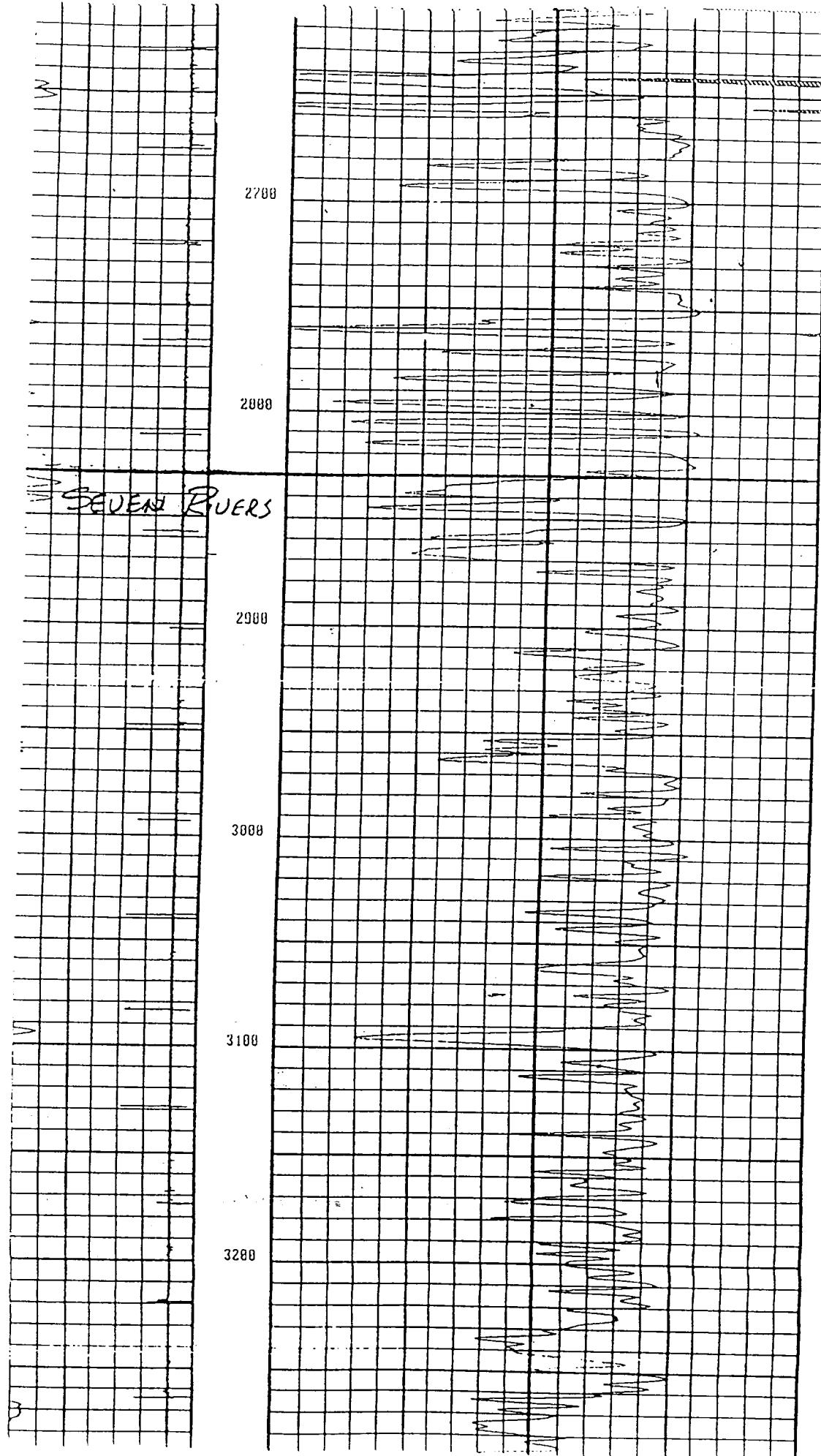
Exh.b.tVIII-B

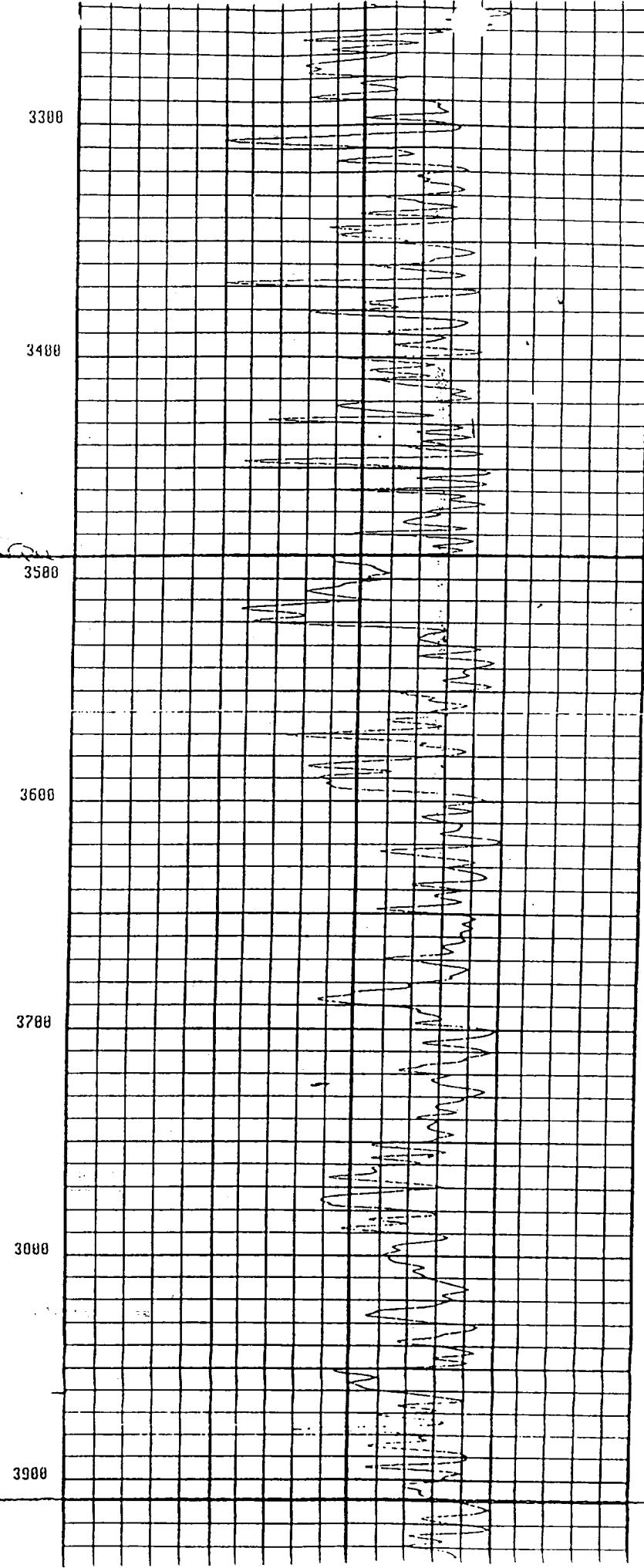
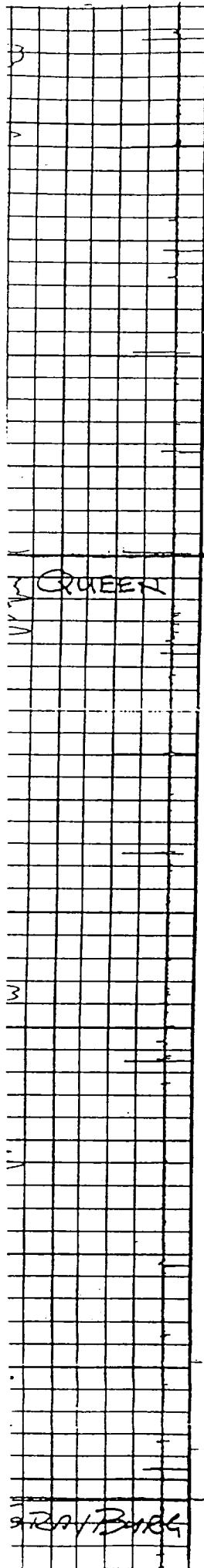
TYPE LOG

HALLIBURTON				GAMMA COLLAR			
				DSN			
COMP. : HISLR OIL COMPANY INC.	FIELD : MALJAMAR GRAYBURG	ST. N.M. : CMU #168	WELL : CMU #168	COMPANY WISER OIL COMPANY INC.			
				WELL CMU #168			
				FIELD : MALJAMAR GRAYBURG	SAN ANDRES		
				COUNTY : LEA	STATE : N.M.		
				API NO. 32-025-32927	OTHER SERVICES		
				LOCATION :			
				48°FSL & 157°FWL	CEL. PERC.		
				UNIT LETTER M			
				SEC. 18	TWP. 17-S	RGE. 33-E	
PERMANENT DATUM : GL				ELEV. 4137'	ELEV. : K.B. 4145'		
LOG MEASURED FROM : KB				12.0 FT. ABOVE PERM. DATUM	D.P. : G.L. 4137'		
DRILLING MEAS FROM : KB							
DATE & TIME LOGGED : 12/08/95 2:30:00				TYPE OF FLUID IN HOLE : WATER			
RUN No. : 04E				DENSITY OF FLUID : NA			
DEPTH - DRILLER : 4850				FLUID LEVEL : FUL			
DEPTH - LOGGER : 4788				CEMENT TOP EST/LOGGED : NA			
BTM LOGGED INTERVAL : 4787				EQUIPMENT : LOCATION : 7634 : 0555			
TOP LOGGED INTERVAL : SURF				RECORDED BY : HILL			
MAX RECORDED TEMP. : NA				WITNESSED BY : MR. G. NEWTON			
CEMENTING DATA : SURF. STRING	INT. STRING			PROD. STRING	Liner		
DATE/TIME CEMENTED : / . / .							
PRIMARY/SQUEEZE : / .							
COMPRESSIVE STR. : / .							
EXPECTED E : Hrs				: Hrs	: Hrs		
CEMENT VOLUME : / .							
CEMENT TYPE/WEIGHT : / .							
MUD TYPE/MUD WGT. : / .							
FORMULATION : / .							
RUN	BOREHOLE RECORD			CASING AND TUBING RECORD			
	BIT SZ.	FROM	TO	SIZE	WT.	FROM	TO
ONE			8.625	NA	8	1200	
TWO	7.675	1200	4850	5.5	17.0	8	4850

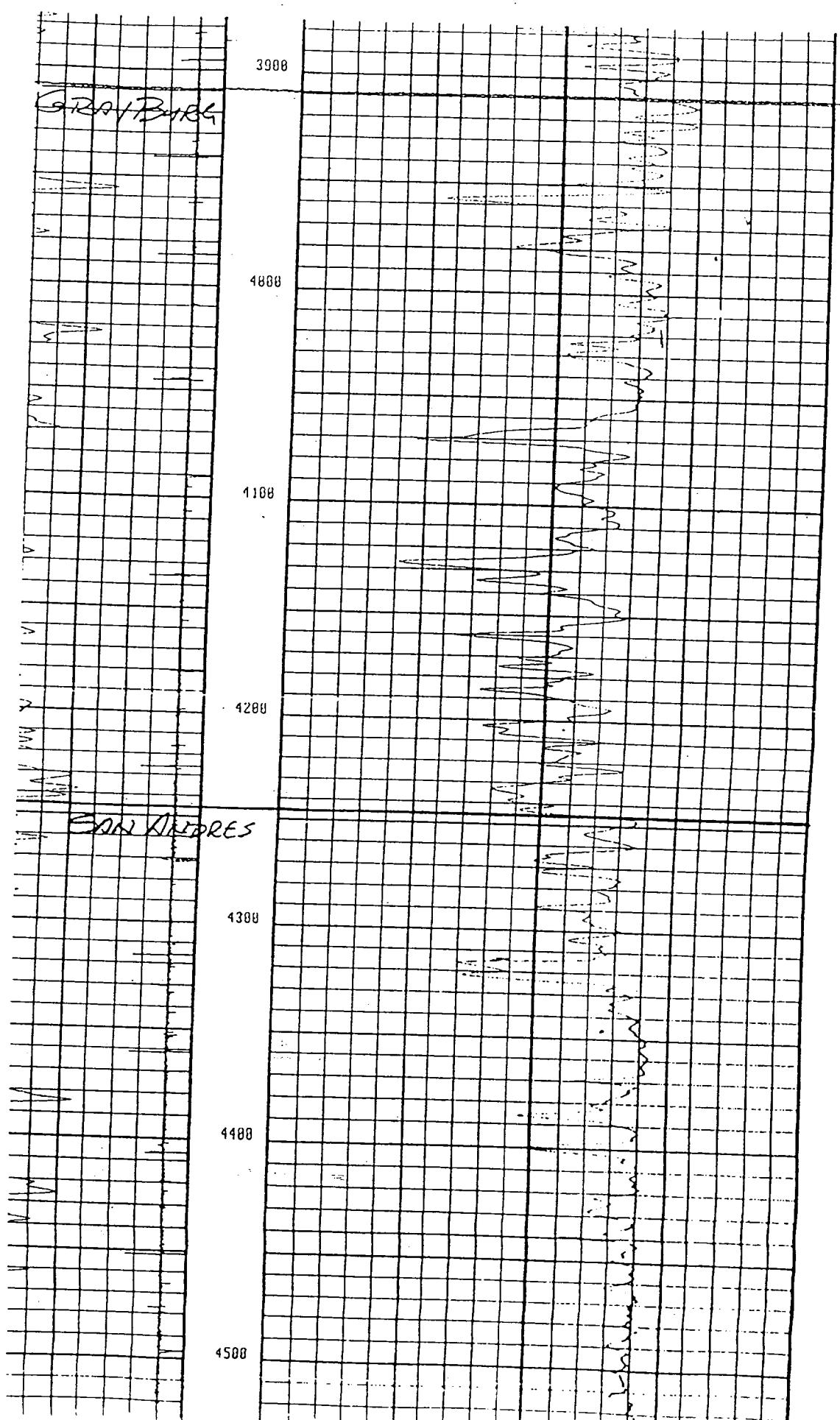








gray bars



IX. PROPOSED STIMULATION PROGRAM

Small acid clean-out jobs of approximately 2500 gallons/well are anticipated.

X. LOGGING DATA

The available logs are those on file with the Oil Conservation Division. Logs for the pending well will be filed upon completion.

XI. FRESH WATER WELLS WITHIN ONE MILE OF INJECTION WELLS

There is one water well in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 3, and four water wells in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 10, T17S-R32E. Attached as Exhibit XI-A is a copy of the water analysis done on one of these wells. Several attempts were made to obtain samples from the other wells, but the wells were not running and the owners were unavailable to assist the representative from Capitan Chemicals.

Capitan Chemicals

WATER ANALYSIS REPORT

EXHIBIT "XI-A"

SAMPLE

Oil Co. : The Wiser Oil Co.
 Lease : Ben Lindsey
 Well No.: Fresh Water
 Salesman:

Sample Loc. :
 Date Analyzed: 01-November-1996
 Date Sampled :

ANALYSIS

1. pH
2. Specific Gravity 60/60 F. 8.130
3. CaCO₃ Saturation Index @ 80 F. +1.137
4. @ 140 F. +1.737

Dissolved Gasses

		MG/L	EQ. WT.	*MEQ/L
4.	Hydrogen Sulfide			
5.	Carbon Dioxide	Not Present		
6.	Dissolved Oxygen	Not Determined		

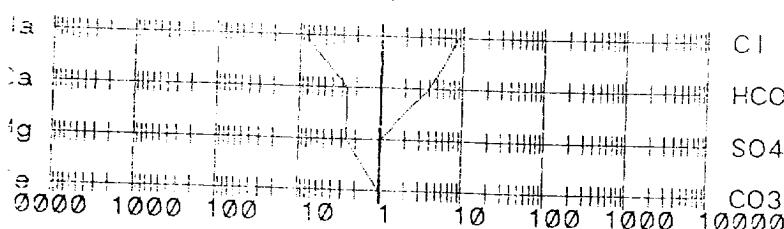
Cations

7.	Calcium	(Ca ⁺⁺)		50	/ 20.1 =	2.49
8.	Magnesium	(Mg ⁺⁺)		30	/ 12.2 =	2.46
9.	Sodium	(Na ⁺)	(Calculated)	190	/ 23.0 =	8.26
10.	Barium	(Ba ⁺⁺)		5	/ 68.7 =	0.07

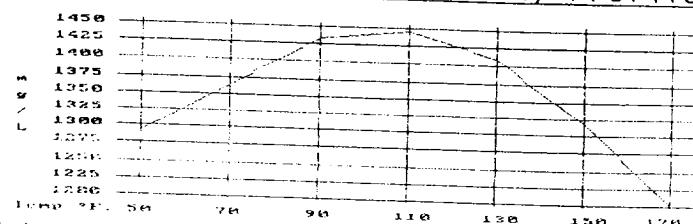
Anions

11.	Hydroxyl	(OH ⁻)		0	/ 17.0 =	0.00
12.	Carbonate	(CO ₃ ⁼)		0	/ 30.0 =	0.00
13.	Bicarbonate	(HCO ₃ ⁻)		229	/ 61.1 =	3.75
14.	Sulfate	(SO ₄ ⁼)		48	/ 48.8 =	0.98
15.	Chloride	(Cl ⁻)		300	/ 35.5 =	8.45
16.	Total Dissolved Solids			852		
17.	Total Iron (Fe)			2	/ 18.2 =	0.08
18.	Total Hardness As CaCO ₃			250		
19.	Resistivity @ 75 F. (Calculated)		2.835 /cm.			

LOGARITHMIC WATER PATTERN *meq/L.



Calcium Sulfate Solubility Profile



This water is slightly corrosive due to the pH observed on analysis. The corrosivity is increased by the content of mineral salts in solution.

COMPOUND	PROBABLE MINERAL COMPOSITION	EQ. WT.	*	meq/L = mg/L
Cl	Ca(HCO ₃) ₂	81.04	2.49	202
HCO ₃	CaSO ₄	68.07	0.00	0
SO ₄	CaCl ₂	55.50	0.00	0
CO ₃	Mg(HCO ₃) ₂	73.17	1.26	92
	MgSO ₄	60.19	0.91	55
	MgCl ₂	47.62	0.29	14
	NaHCO ₃	84.00	0.00	0
	NaSO ₄	71.03	0.00	0
	NaCl	58.46	8.16	477

*Milli Equivalents per Liter

XII. Not applicable

XIII. PROOF OF NOTICE

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 as identified on the mailing list attached as Exhibit XIII-A. An Affidavit of such notice is attached as Exhibit XIII-B. Copies of the certified receipts will be furnished upon request. The notice attached as Exhibit XIII-C is being published in the Hobbs Daily News-Sun, and an Affidavit of Publication will be forwarded as soon as available.

EXHIBIT XIII-A

MAILING LIST

OFFSET LEASEHOLD OPERATORS:

Edward R. Hudson Trust
NationsBank of Texas, N.A.,
Trustee U/W of S. J. Iverson
Messrs. Peter C. & Alvin
Iverson, Independent Executors
of the Estate of Dorothy Iverson
c/o Iverson III Inc.
Marjorie W. Iverson Rev. Trust
Iverson, Inc.
Jewell D. Iverson
Delmar H. Lewis
Lindy's Living Trust
Moore & Shelton Co., Ltd.
C/o Donald B. Moore

616 Texas Street
Acct. #01/0258100
P. O. Box 830308
3454 S. Zunis
27 Oaklawn Park
P. O. Box 664
3131 S. Lewis Street
616 Texas Street
616 Texas Street
1414 Sugar Creek Blvd.

Ft. Worth, TX 76102
Dallas, Texas 75283-0308
Tulsa, OK 74105
Midland, TX 79705-6546
Huntington Beach CA92648
Tulsa, OK 74145
Ft. Worth, TX 76102
Ft. Worth, TX 76102
Sugar Land, TX 77478

OFFSET WELL OPERATORS:

Lynx Petroleum, Inc.
Walsh & Watts, Inc.

P. O. Box 1979
500 W. 7th St., #1007

Hobbs, NM 88241
Fort Worth, TX 76102

SURFACE OWNERS FOR INJECTION WELLS

Bureau of Land Management

2901 W. 2nd St.

Roswell, NM 88201

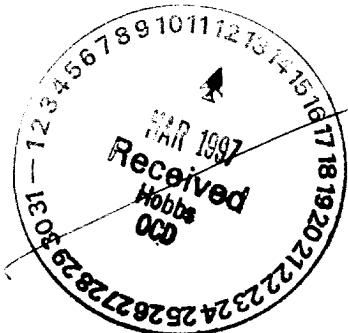
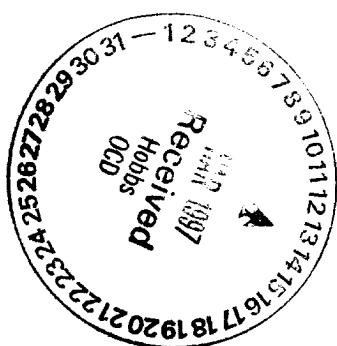
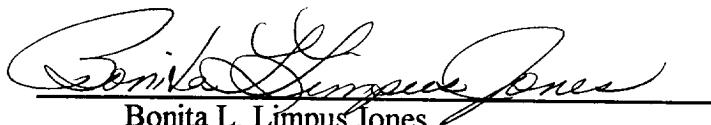


EXHIBIT XIII-B

AFFIDAVIT OF MAILING

STATE OF NEW MEXICO |
COUNTY OF CHAVES | SS.

I, Bonita L. Limpus Jones, do solemnly swear that a copy of this Application has been mailed by certified mail, to each of the interested parties listed on Exhibit XIII-A.

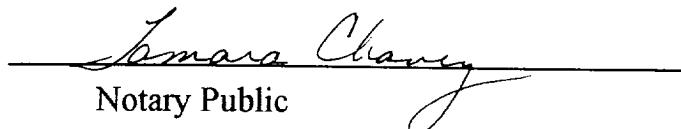


Bonita L. Limpus Jones
Consulting Landman with J. O. Easley, Inc.
on behalf of The Wiser Oil Company

SWORN AND SUBSCRIBED TO before me this 12th day of March, 1997.

My Commibson Expires:

December 18, 1999



Tamara Chavez
Notary Public

EXHIBIT VIII-C

NOTICE TO BE PUBLISHED IN THE HOBBS DAILY NEWS-SUN
ON WEDNESDAY, MARCH 12, 1997

PROPOSED INJECTION WELLS

The Wiser Oil Company proposes to expand its Maljamar Grayburg Unit and inject water into 2 wells in Section 10, T17S-R32E, Lea County, New Mexico, to provide injection service for the existing Maljamar Grayburg Unit Waterflood, Order No. R-1538. The zones to be injected into are the Grayburg and San Andres from 3314' to 4400' with a maximum injection rate of 500 BWPD/well at a maximum pressure of 2500 psi. Any interested parties with objection or request for hearing should notify the Oil Conservation Division at P. O. Box 2088, Santa Fe, New Mexico 87501, within 15 days of this notice. Any questions should be directed to Mike Jones with The Wiser Oil Company, at P. O. Box 2568, Hobbs, New Mexico 88241, 505-392-9797.

