WFX 5/30/00

762

J.O. EASLEY, INC.

ESTABLISHED 1979

P.O. Box 2691 88202-2691
Sunwest Center
Roswell, NM 88201

Telephone (505)625-8807
Fax (505) 625-8827

May 10, 2000

2

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

RE: C-108
Skelly Waterflood Unit
Eddy County, New Mexico

Enclosed is an original and one copy of the C-108 for one new injection well within The Wiser Oil Company's Skelly Waterflood Unit. This well, the SU #70, was previously approved for injection but has not yet been converted. Wiser plans to do so this summer; therefore, we now submit this new C-108 covering the SU #70.

If you have nay questions, please call me at 505-624-9799.

Sincerely,

J. O. EASLEY, INC.

Bonita L. L. Jones
Consulting Landman

/bj
Enclosures
cc/enclosure: Mr. Tim W. Gum
New Mexico Oil Conservation Division
811 South 1st Street
Artesia, New Mexico 88210

Mr. Mike Jones
The Wiser Oil Company
P. O. Box 2568
Hobbs, New Mexico 88240

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

STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

Oil Conservation Div.
2040 Pacheco St.
Santa Fe, NM 87505

FORM C-108
Revised 7-1-81

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: X 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 PHONE: (505) 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: __X Yes ___ No
If yes, give the Division order number authorizing the project R-3214 Skelly 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: Bonita L. L. Jones, RLP TITLE: Consulting Landman & Agent for The Wiser Oil Company

SIGNATURE: Bonita L. L. Jones DATE: 5-10-00

* 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. _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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
SKELLY UNIT

III. WELL DATA

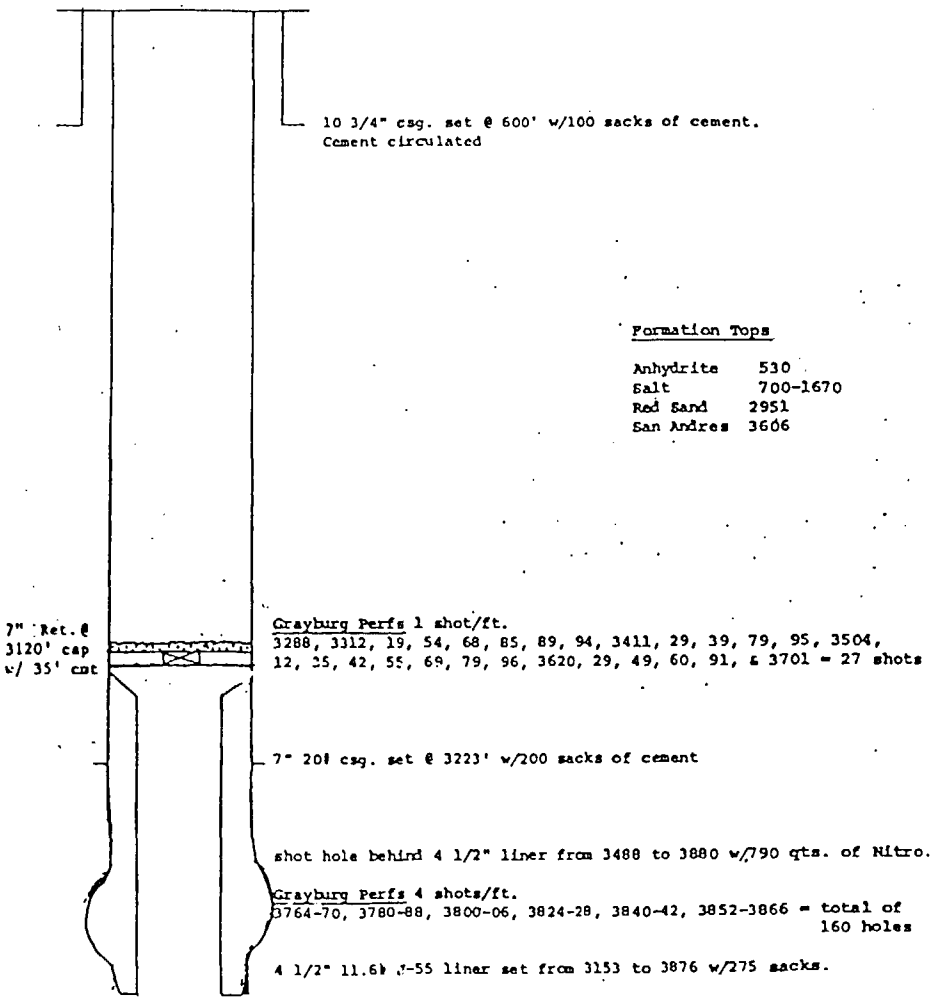
The following data sheet describes the Water Injection Well for which this application is submitted by The Wiser Oil Company.

INJECTION WELL DATA SHEET

OPERATOR The Wiser Oil Company LEASE Skelly Unit

WELL NO. #70 | 1980' FSL, 660' FEL, Unit I (FOOTAGE LOCATION) | 23 (SECTION) | 17S (TOWNSHIP) | 31E (RANGE)

Schematic



Well Construction Data

Surface Casing Set @ 600 '
Size 10 ¾ " Cemented with 100 sx.
TOC Surface feet determined by _____
Hole Size 13 "

Intermediate Casing
Size _____ " Cemented with _____ sx.
TOC _____ feet determined by _____
Hole Size _____ "

Long String Set @ 3223 '
Size 7 " Cemented with 200 sx.
TOC 2133 feet determined by Calculation
Hole Size 8 7/8 "
Total Depth 3890 '

Injection Interval
_____ feet to _____ feet
(perforated or open-hole; Indicate which)

Tubing Size 2 3/8 " lined with _____ set in a
(type of internal coating)
_____ packer at 3690 feet

Other type of tubing / casing seal if applicable _____

Other Data

1. Is this a new well drilled for injection? _____ Yes X No
   If no, for what purpose was the well originally drilled?
   Oil Production 11-24-40 - TA 5-12-92
   The Wiser Oil Company plans to convert this well to WIW
2. Name of the Injection formation Grayburg-San Andres Vacuum
3. Name of Field or Pool (if applicable) Grayburg Jackson 7-Rivers-QN-GB-SA
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 3288-3701'; 3764-3866'
5. Give the names and depths of any over or underlying oil or gas zones (pools) in this area. _____

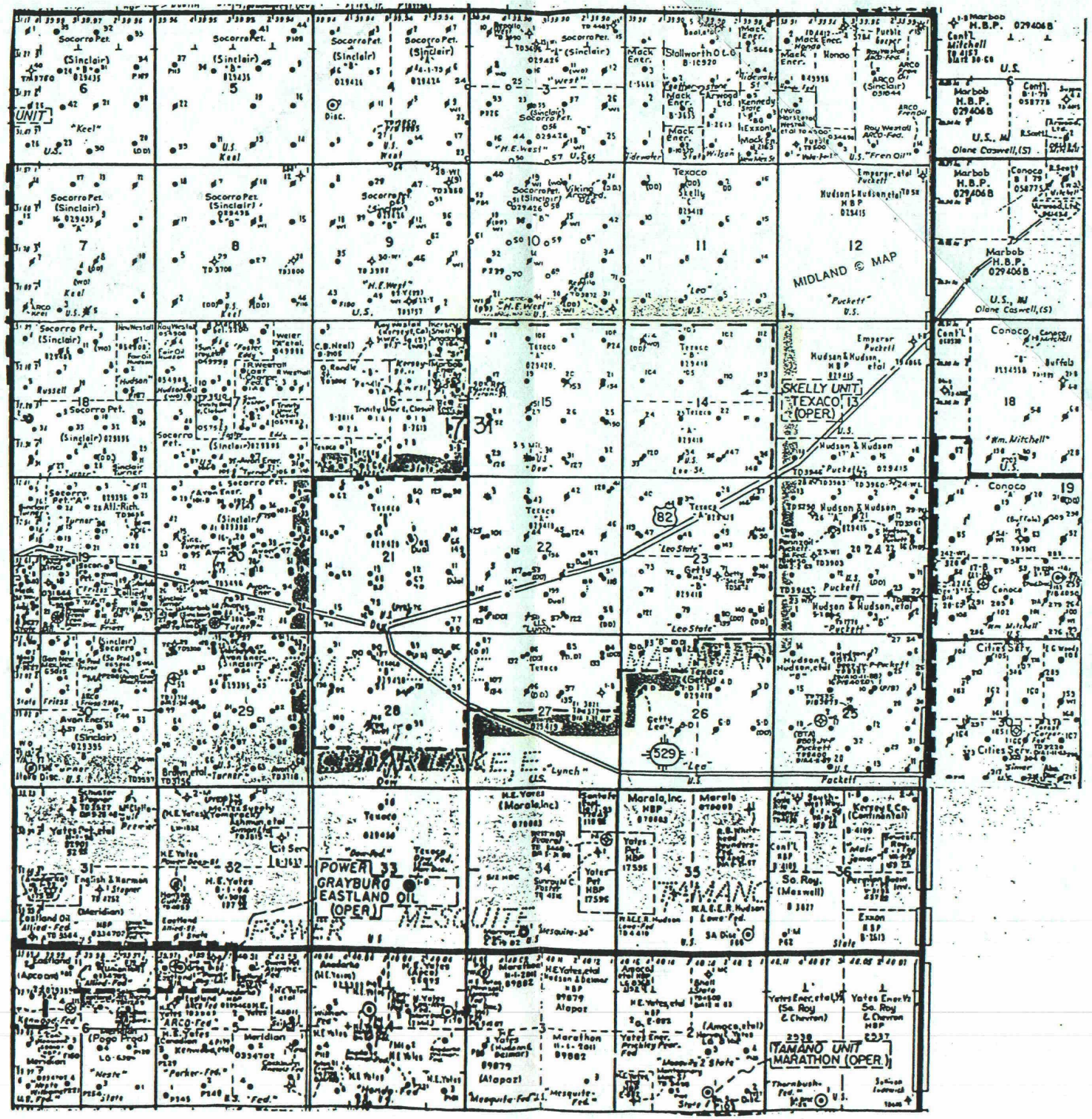
C-108
APPLICATION FOR AUTHORIZATION TO INJECT
SKELLY UNIT

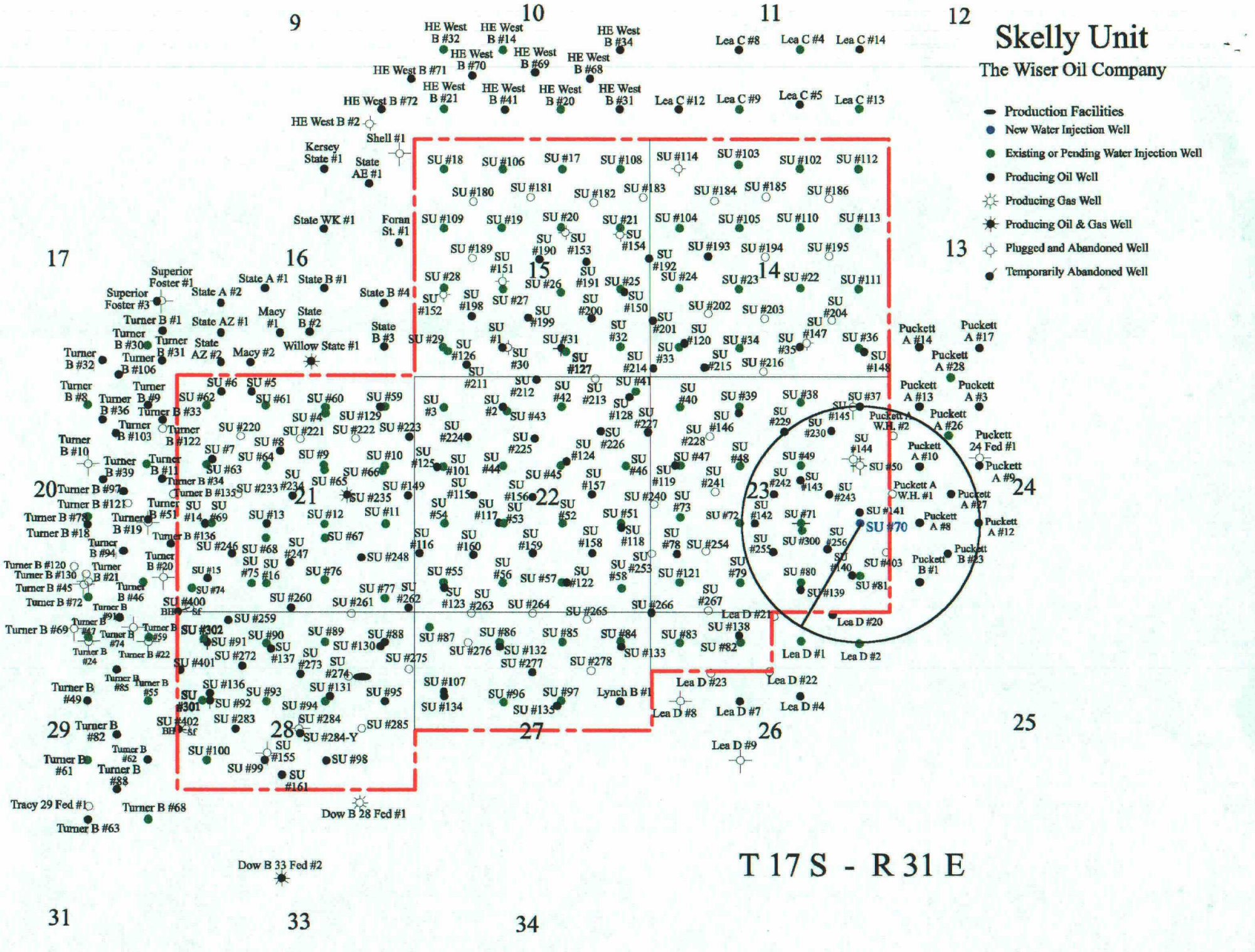
V. AREA OF REVIEW

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

SKELLY UNIT

Eddy County, New Mexico




Skelly Unit
The Wiser Oil Company
Production Facilities
New Water Injection Well
Existing or Pending Water Injection Well
Producing Oil Well
Producing Gas Well
Producing Oil & Gas Well
Plugged and Abandoned Well
Temporarily Abandoned Well
T 17 S - R 31 E
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C-108
APPLICATION FOR AUTHORIZATION TO INJECT
SKELLY 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 4 wells within the area of review which have been plugged and abandoned as noted on the table.

SU C-108 HALF-MILE WELL DATA SHEET

NAME	OPERATOR	LOCATION	SEC	TSHP	RG	COMPL DATE	TP	TD	HOLE SIZE	CSG SIZE	DEPTH SET	SX CMT	PERFS	TBG/ PKR	COMMENTS	LEASE
Township 17 South, Range 31 East																
SU #37	The Wiser Oil Co.	660' FNL, 660' FEL, Unit A	23	17S	31E	Pre 1950	~~O~~ SI	3886'	Un-known	8 5/8" 7" 4 ½"	725' 3290' 3654'	100 150 300	2078-2226' 3240-95' 3304-72' 3408-3579' 3603-10'	2 3/8" @ 3867'	Shut In as of 8-30-95 Wiser plans to convert to WIW	BLM LC-029418-A
SU #145	The Wiser Oil Co.	660' FNL, 810' FEL, Unit A	23	17S	31E	8-12-78	~~O~~ P&A	2650'	11" 7 7/8"	8 5/8" 5 ½"	650' 2650'	275 625	2407-2535'	2 3/8" @ 2556'	P&A 2-19-88 (See Attached)	BLM LC-029418-A
SU #230	The Wiser Oil Co.	1198' FNL, 1296' FEL, Unit A	23	17S	31E	2-14-97	O	4100'	12 ¼" 7 7/8"	8 5/8" 5 ½"	440' 4025'	325 1150	3636-41' 3412-82' 3537-96'	2 7/8" 3665	Request to TA approved no TA report in file 11-1-99, but no TA report	BLM LC-029418-A
SU #229	The Wiser Oil Co.	1219' FNL, 2344' FEL, Unit B	23	17S	31E	2-4-97	O	4025'	12 ¼" 7 7/8"	8 5/8" 5 ½"	447' 4025'	325 1000	3595-97' 3383-84' 3422-89' 3531-94'	2 7/8" @ 3688'		BLM LC-029418-A
SU #49	The Wiser Oil Co.	1980' FNL, 1980' FEL, Unit G	23	17S	31E	~~2-1-45~~ 5-2-97	~~O~~ WIW	3919'	Un-known	8 5/8" 7"	694' 3250'	75 150	WIW: 3320-99' 3400-99' 3510-96'	2 3/8" @ 3242'	Converted to WIW 5-2-97	BLM LC-029418-A
SU #143	The Wiser Oil Co.	2310' FNL, 1980' FEL, Unit G	23	17S	31E	7-4-78	O TA	2638'	11" 7 7/8"	8 5/8" 5 ½"	619' 2637'	275 750	2365-2483'	2 3/8" @ 2507'	TA approved until 7-1-01	BLM LC-029418-A
SU #243	The Wiser Oil Co.	2616' FNL, 1343' FEL, Unit G	23	17S	31E	2-18-97	O	4050'	12 ¼" 7 7/8"	8 5/8" 5 ½"	447' 4050'	325 1150	3833-71' 3651-54' 3739-75' 3591-98' 3600-10' 3385-93' 3455-75' 3553-76'	2 7/8" @ 3923'		BLM LC-029418-A
SU #50	Texaco Producing Co.	1980' FNL, 660' FEL, Unit H	23	17S	31E	5-1-45 P&A 8-9-88	~~O~~ P&A	3855'	Un-known	8 5/8" 7"	711' 3265'	75 150	3793-3855'		P&A 8-9-88 (See Attached)	BLM LC-029418-A
SU #144	Texaco Producing Co.	1830' FNL, 810' FEL, Unit H	23	17S	31E	9-7-78	~~O~~ P&A	2700'	11" 7 7/8"	8 5/8" 5 ½"	667' 2699'	325 660	2384-2518'	2 3/8" @ 2559'	P&A 2-19-88 (See Attached)	BLM LC-029418-A
SU #141	The Wiser Oil Co.	2210' FSL, 660' FEL, Unit I	23	17S	31E	7-6-78	O TA	2700'	11" 7 7/8"	8 5/8" 5 ½"	668' 2700'	350 625	2392-2512'	2 3/8" @ 2546'	TA/CIPB @ 2350'/35' (4sx) cement on top	BLM LC-029418-B
SU #71	The Wiser Oil Co.	1980' FSL, 1980' FEL, Unit J	23	17S	31E	10-1-67	~~O~~ ~~WIW~~ P&A	3872'	11 ¼" 8 ¼"	8 5/8" 7" 4 ½"	751' 3202' 3855'	95 150 700	3243-3830'	2 3/8" @ 3161'	Coverted to WIW 3-13-68 P&A 4-27-82 (See Attached)	LC-029418-B
SU #242	The Wiser Oil Co.	2630' FSL, 2581' FEL, Unit J	23	17S	31E	2-11-97	O TA	4025'	12 ¼" 7 7/8"	8 5/8" 5 ½"	449' 4025'	325 950	3566-80' 3369-71' 3407-87' 3511-29'	2 7/8" @ 3689'	TA approved until 7-1-01 CIBP @ 3319'	BLM LC-029418-B

SU C-108 HALF-MILE WELL DATA SHEET

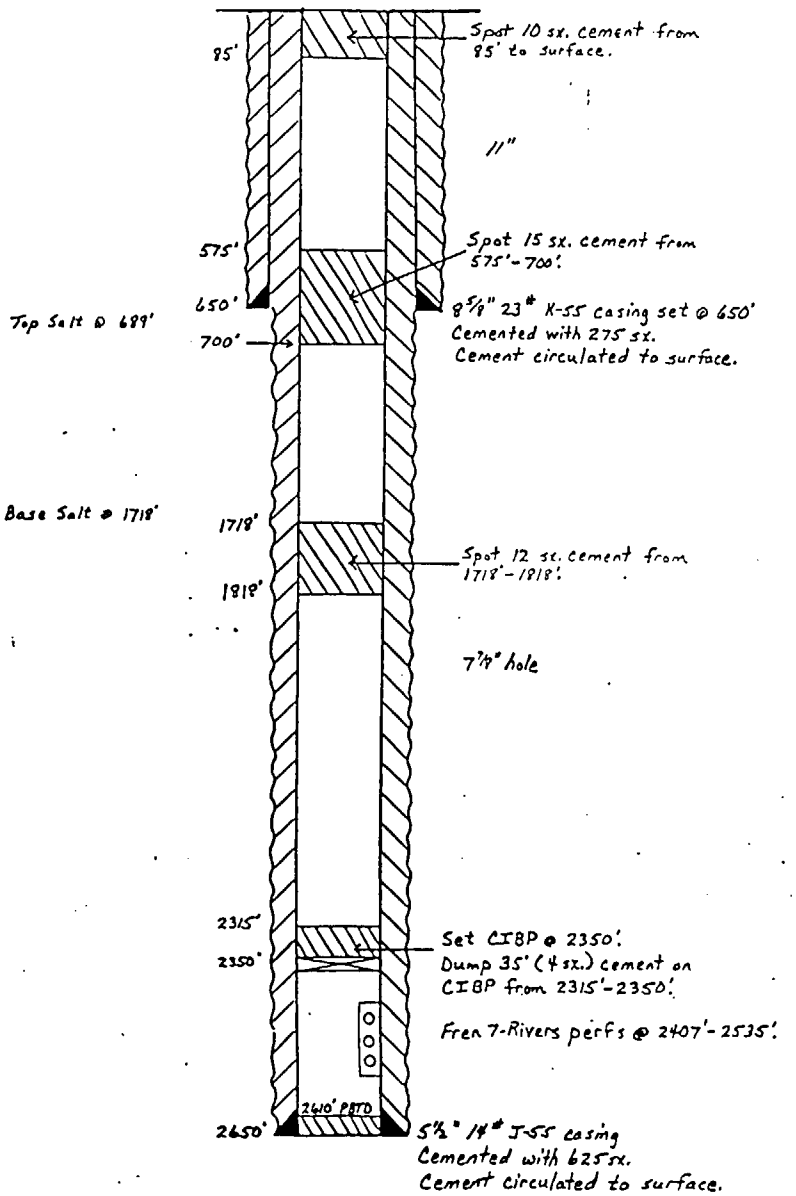
NAME	OPERATOR	LOCATION	SEC	TSHP	RG	COMPL DATE	TP	TD	HOLE SIZE	CSG SIZE	DEPTH SET	SX CMT	PERFS	TBG/ PKR	COMMENTS	LEASE
SU #255	The Wiser Oil Co.	1333' FSL, 2596' FEL, Unit J	23	17S	31E	1-28-97	O	4100'	12 ¼" 7 7/8"	8 5/8" 5 ½"	443' 4100'	325 1100	3836-97' 3900-27' 3692-96' 3765-96' 3801-19' 3619-21' 3420-73' 3550-78' 3611-16'	2 7/8" @ 3947'		BLM LC-029418-B
SU #256	The Wiser Oil Co.	1403' FSL, 1387' FEL, Unit J	23	17S	31E	11-27-96	O	4050'	12 ¼" 7 7/8"	8 5/8" 5 ½"	442' 4050'	325 1250	3877-98' 3901-18' 3778-97' 3801-45' 3717-22' 3378-88' 3422-72' 3502-88'	2 7/8" @ 3981'		BLM LC-029418-B
SU #300	The Wiser Oil Co.	1880' FSL, 1980' FEL, Unit J	23	17S	31E	5/1/97	WIW	4050'	12 ¼" 7 7/8"	8 5/8" 5 ½"	364' 4050'	325 1000	3365' 3400-86' 3517-97'	2 3/8" @ 3312'		NM-98120
SU #72	The Wiser Oil Co.	1980' FSL, 1980' FWL, Unit K	23	17S	31E	~~11-29-61~~ 3-19-97	~~O~~ WIW	3854'	11" 7 7/8"	8 5/8" 4 ½"	816' 3854'	325 400	3808-3830' 3747-95' 3258-3683'	2 3/8" @ 3150'	Converted to WIW 3-19-97	NM-98120
SU #403	The Wiser Oil Co.	1330' FSL, 20' FEL, Unit I	23	17S	31E		O								Permit to Drill approved 4-5-00 Drilling is pending	NM-98120
SU #142	The Wiser Oil Co.	1980' FSL, 2310' FWL, Unit K	23	17S	31E	7-17-78	O	2650'	11" 7 7/8"	8 5/8" 5 ½"	650' 2649'	275 600	2354-2479'	2 3/8" @ 2508'		BLM LC-029418-B
SU #80	The Wiser Oil Co.	660' FSL, 1980' FEL, Unit O	23	17S	31E	~~5-23-66~~ 3-18-97	~~O~~ WIW	3878'	10" 8"	8 5/8" 5 ½"	785' 3758'	100 375	3597-3760' 3269-3581'	2 3/8" @ 3184'	Converted to WIW 3-18-97	BLM LC-029418-B
SU #139	The Wiser Oil Co.	510' FSL, 1980' FEL, Unit O	23	17S	31E	6-20-78	O	2679'	11" 7 7/8"	8 5/8" 5 ½"	699' 2679'	275 800	2378-2469'	2 3/8" @ 2489'		BLM LC-029418-B
SU #81	The Wiser Oil Co.	810' FSL, 660' FEL, Unit P	23	17S	31E	~~7-2-60~~ 8-14-70	~~O~~ WIW	~~3840'~~ 3910'	10" 8"	8 5/8" 5 ½"	799' 3784'	100' 375'	3784-3940' Open Hole 3300-3618' 3625-3745'	2 3/8" @ 3804'	Converted to WIW 8-14-70	BLM LC-029418-B
SU #140	The Wiser Oil Co.	810' FSL, 810' FEL, Unit P	23	17S	31E	9-11-78	O	2700'	11" 7 7/8"	8 5/8" 5 ½"	690' 2700'	275 600	2414-2542'	2 3/8" @ 2584'		BLM LC-029418-B
Puckett "A" #10	Wm. A. & Ed. R. Hudson	1980' FNL, 660' FWL, Unit E	24	17S	31E	Pre 1941	O	3974'					3464-3974' open hole	3605'	Incomplete OCD File Deepened 1-3-73	BLM LC-029415-A
Puckett "A" W. H. #2	W. A. & E. R. Hudson, Inc.	1330' FNL, 10' FWL, Unit E	24	17S	31E		O								APD Approved 4-12-00	BLM LC-029415-A

SU C-108 HALF-MILE WELL DATA SHEET

NAME	OPERATOR	LOCATION	SEC	TSHP	RG	COMPL DATE	TP	TD	HOLE SIZE	CSG SIZE	DEPTH SET	SX CMT	PERFS	TBG/ PKR	COMMENTS	LEASE
Puckett "A" #27	William A. and Edward R. Hudson	2615' FSL, 1345' FWL, Unit K	24	17S	31E	~~8-30-64~~ 6-17-98	~~O~~ ~~WIW~~ O	3903' PBTD 3625'	11" 8"	8 5/8" 5 ½"	604' 3902'	100 300	3277-8' 3300-95' 3407-52' 3500-9'	2 3/8" @ 3580'	Converted to WIW 12-2-64 Returned to Oil Production on 6-17-98	BLM LC-029415-A
Puckett "A" #12	William A. and Edward R. Hudson	1980' FSL, 1980' FWL, Unit K	24	17S	31E	Pre 1952	O	3907'		8 5/8" 7"	590' 3283'				Incomplete OCD File	BLM LC-029415-A
Puckett "A" #8	William A. & Edward R. Hudson	1980' FSL, 660' FWL, Unit L	24	17S	31E	2-27-41	O	3956'		10" 7"	605' 3300'	80 150		2 3/8" @ 3965'	TOC 1060' by Tmp Svy Deepened 5-1-73	BLM LC-029415-A
Puckett "A" W. H. #1	W. A. & E. R. Hudson, Inc.	2630' FSL, 10' FWL, Unit L	24	17S	31E		O								APD Approved 4-12-00	BLM LC-029415-B
Puckett "B" #1	William A. & R. Hudson	660' FSL, 660' FWL, Unit M	24	17S	31E	4-22-41	O	3965'		10 ¾" 7"	695' 3302'	75 150	3425-3650' 3500-3700'	2 3/8" @ 3829'		BLM LC-029415-A
Puckett "B" #23	William A. & Edward R. Hudson	1295' FSL, 1295' FWL, Unit M	24	17S	31E	4-16-65	~~WIW~~ O	3943'		8 5/8" 5 ½"	587' 3938'	150 300	3519-33' 3658-72' 3833-58'	2" @ 3580'	Converted to Producer 11-22-76	BLM LC-029415-B
Lea D #2	Apache Corp.	710' FNL, 660' FEL, Unit A	26	17S	31E	~~8-22-60~~ 1-23-98	~~O~~ WIW	3930'	10" 8"	8 5/8" 5 ½"	843' 3863'	100 385	3300-3805' & San Andres Open hole	2 3/8" @ 3240'	Estimated TOC 2012' Converted to Water Injection 11-23-98	BLM LC-029418-B
Lea D #20	The Wiser Oil Co.	10' FNL, 1267' FEL, Unit A	26	17S	31E	11-21-97	O	4100'	12 ¼" 7 7/8"	8 5/8" 5 ½"	459' 4100'	300 1250	3910-51' 3825-88' 3406-60' 3504-55' 3616-17'	2 7/8" @ 3890'		NM-98120

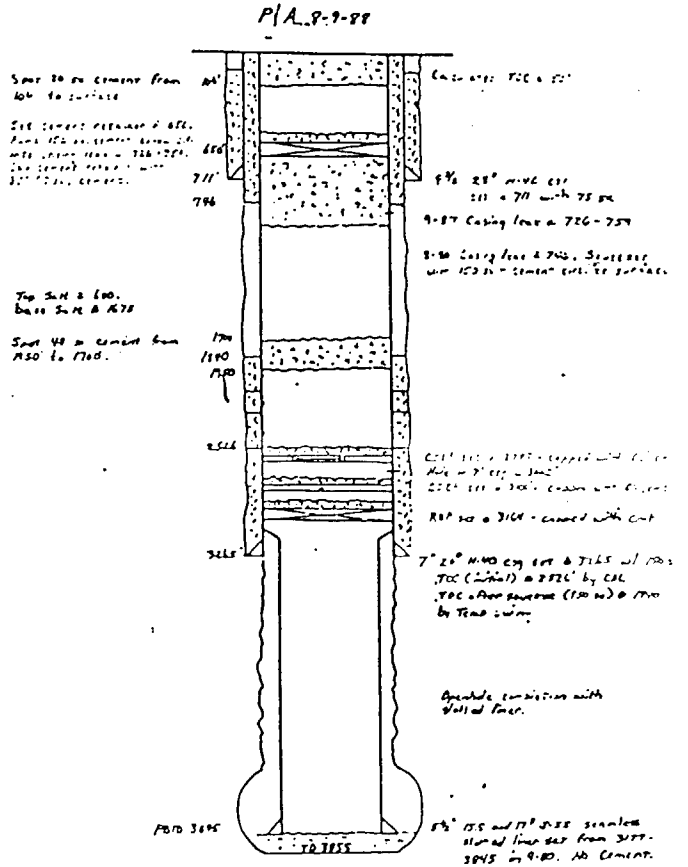
SU # 145

P+A 2-19-88



WELL NO. #50

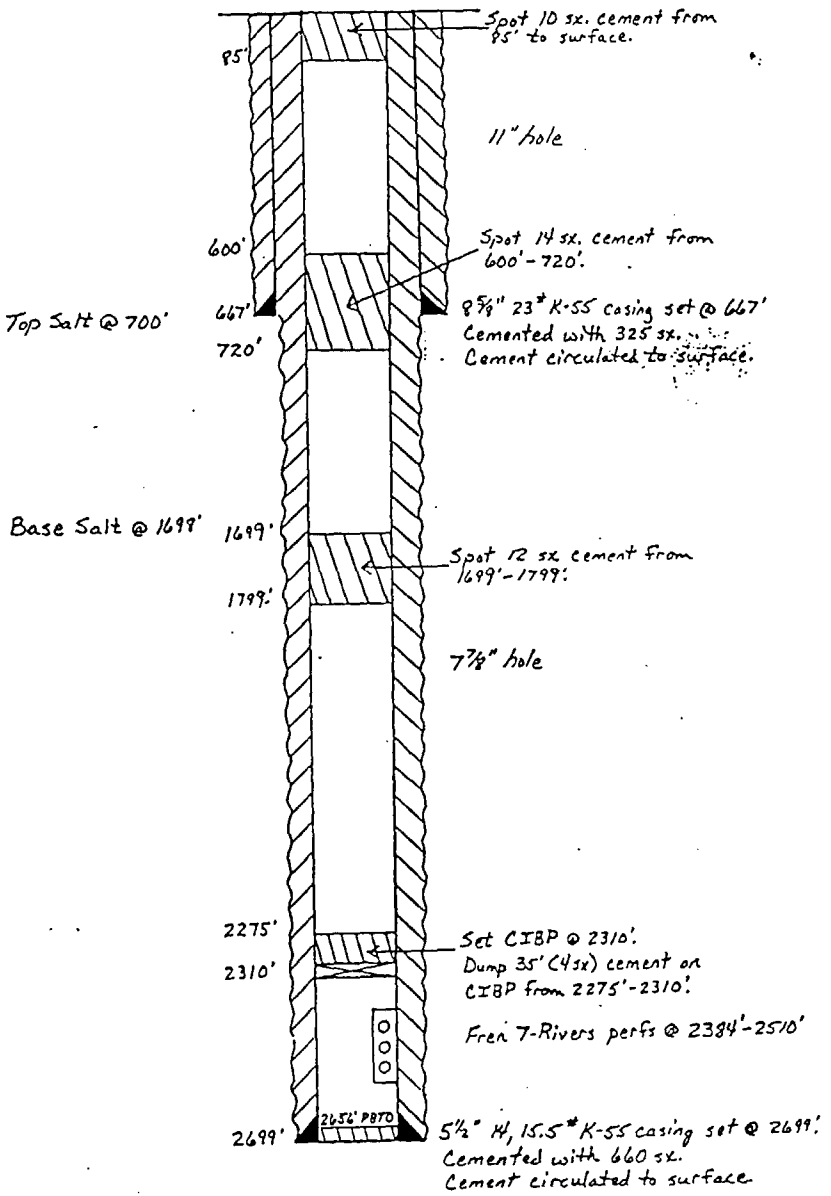
Schematic



L. Lehman
8/4/88

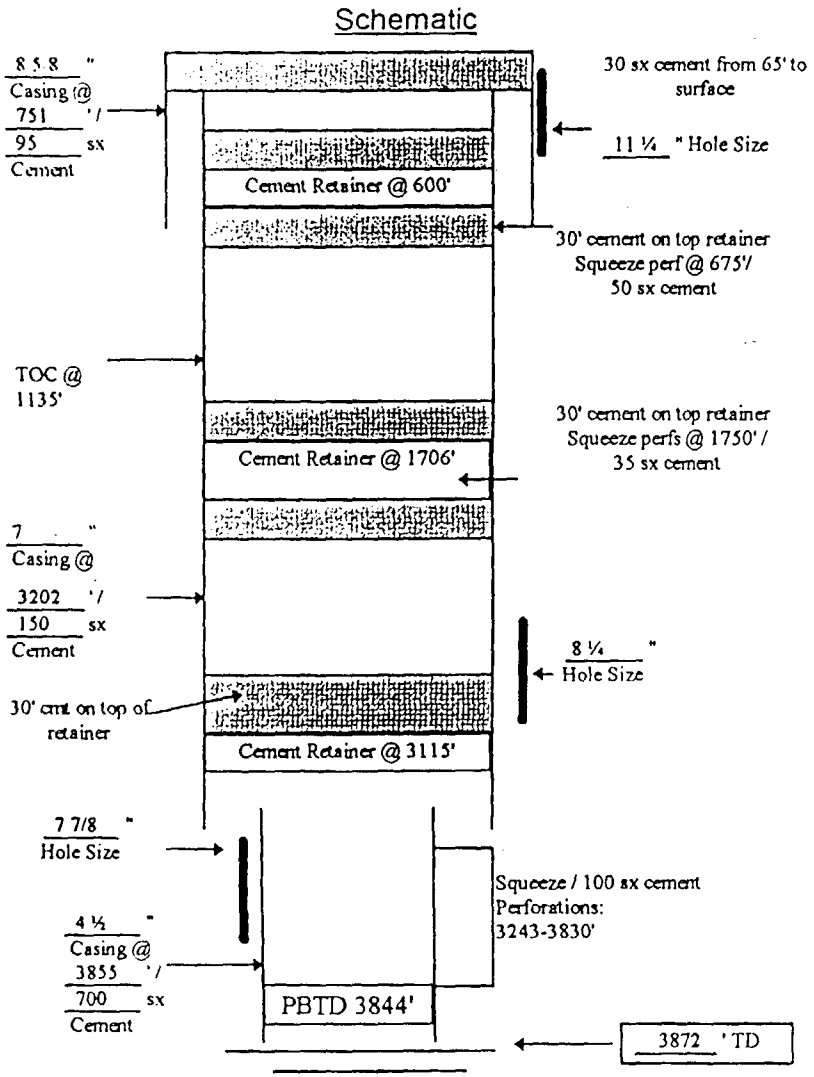
SU #144

P+A 2-19-88



WELL NO. #71

Schematic



C-108
APPLICATION FOR AUTHORIZATION TO INJECT
SKELLY UNIT

VII. PROPOSED OPERATION

1. Average Daily Rate of Fluids to be Injected: 150 BWPD
   Maximum Daily Rate of Fluids to be Injected: 250 BWPD

2. This is to be a closed injection system.

3. Average Injection Pressure: 2000 psi
   Maximum Injection Pressure; 2600 psi

4. Injection fluid will be obtained from the following sources:

   Produced water: Water Analysis Reports on water produced from the Caprock Maljamar Unit are attached as Exhibit VII-A. The data contained therein is representative of water produced across the entire Skelly Unit.

   Extraneous Water: A Water Analysis Report on extraneous water to be obtained from Double Eagle (City of Carlsbad), as prepared by Joe Hughes of Permian Treating Chemicals, is attached as Exhibit VII-B.

   The Wiser Oil Company will use water from Double Eagle temporarily until water from Conoco has been secured and tied in. At that time, The Wiser Oil Company will provide a Conoco water analysis.

CMU (Produced) Water

Exhibit VII-A-1

Permian Treating Chemicals

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : Wiser Oil Co.
Lease : CMU Battery 'A'
Well No. : Water Transfer Pump
Salesman:

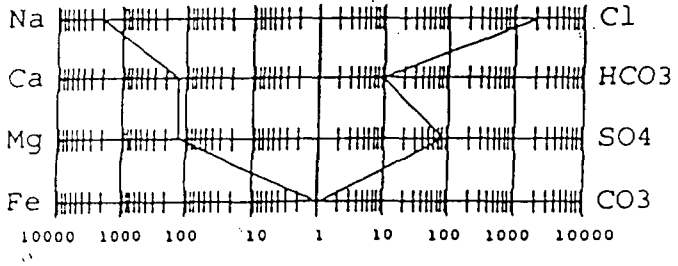
Sample Loc. :
Date Reported: 30-May-1996
Date Sampled : 30-May-1996

ANALYSIS

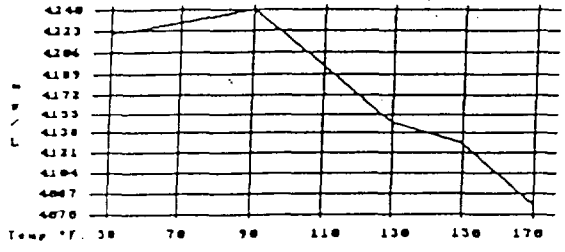
1.	pH		6.900		
2.	Specific Gravity 60/60 F.		1.092		
3.	$CaCO_3$ Saturation Index	@ 80 F.	+0.459		
		@ 140 F.	+1.339		

	Dissolved Gasses		MG/L	EQ. WT.	*MEQ/L
4.	Hydrogen Sulfide		60		
5.	Carbon Dioxide		130		
6.	Dissolved Oxygen		0.4		
	Cations				
7.	Calcium	(Ca^{++})	2,505	/ 20.1 =	124.63
8.	Magnesium	(Mg^{++})	1,520	/ 12.2 =	124.59
9.	Sodium	(Na^{+}) (Calculated)	44,953	/ 23.0 =	1,954.48
10.	Barium	(Ba^{++})	Not Determined		
	Anions				
11.	Hydroxyl	(OH^{-})	0	/ 17.0 =	0.00
12.	Carbonate	($CO_3^{=}$)	0	/ 30.0 =	0.00
13.	Bicarbonate	(HCO_3^{-})	561	/ 61.1 =	9.18
14.	Sulfate	($SO_4^{=}$)	3,900	/ 48.8 =	79.92
15.	Chloride	(Cl^{-})	74,983	/ 35.5 =	2,112.20
16.	Total Dissolved Solids		128,422		
17.	Total Iron (Fe)		1	/ 18.2 =	0.05
18.	Total Hardness As $CaCO_3$		12,511		
19.	Resistivity @ 75 F. (Calculated)		0.060 /cm.		

LOGARITHMIC WATER PATTERN
*meq/L.



Calcium Sulfate Solubility Profile



PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X *meq/L =	mg/L.
$Ca(HCO_3)_2$	81.04	9.18	744
$CaSO_4$	68.07	79.92	5,440
$CaCl_2$	55.50	35.53	1,972
$Mg(HCO_3)_2$	73.17	0.00	0
$MgSO_4$	60.19	0.00	0
$MgCL_2$	47.62	124.59	5,933
$NaHCO_3$	84.00	0.00	0
$NaSO_4$	71.03	0.00	0
NaCl	58.46	1,952.08	114,119

*Milli Equivalents per Liter

This water is slightly corrosive due to the pH observed on analysis.
The corrosivity is increased by the content of mineral salts, and the presence of H2S, CO2, Oxygen in solution.

CMU PRODUCED WATER EXHIBIT A-2

Permian Treating Chemicals

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : Wiser Oil Co.
Lease : CMU Battery 'B'
Well No.: Water Transfer Pump
Salesman:

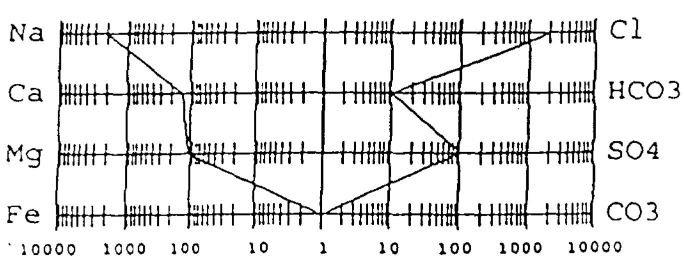
Sample Loc. :
Date Reported: 30-May-1996
Date Sampled : 30-May-1996

ANALYSIS

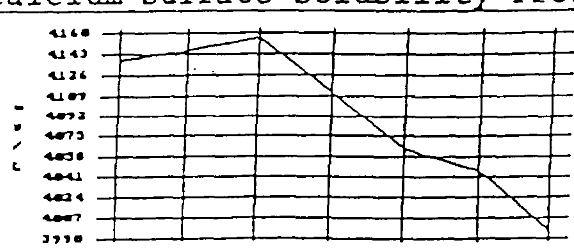
1. pH 6.500
2. Specific Gravity 60/60 F. 1.091
3. $CaCO_3$ Saturation Index @ 80 F. +0.095
   @ 140 F. +0.975

			MG/L	EQ. WT.	*MEQ/L
Dissolved Gasses					
4.	Hydrogen Sulfide		60		
5.	Carbon Dioxide		150		
6.	Dissolved Oxygen		0.6		
Cations					
7.	Calcium	(Ca^{++})	2,605	/ 20.1 =	129.60
8.	Magnesium	(Mg^{++})	1,276	/ 12.2 =	104.59
9.	Sodium	(Na^{+}) (Calculated)	45,740	/ 23.0 =	1,988.70
10.	Barium	(Ba^{++})	Not Determined		
Anions					
11.	Hydroxyl	(OH^{-})	0	/ 17.0 =	0.00
12.	Carbonate	($CO_3^{=}$)	0	/ 30.0 =	0.00
13.	Bicarbonate	(HCO_3^{-})	586	/ 61.1 =	9.59
14.	Sulfate	($SO_4^{=}$)	4,800	/ 48.8 =	98.36
15.	Chloride	(Cl^{-})	74,983	/ 35.5 =	2,112.20
16.	Total Dissolved Solids		129,990		
17.	Total Iron (Fe)		2	/ 18.2 =	0.08
18.	Total Hardness As $CaCO_3$		11,760		
19.	Resistivity @ 75 F. (Calculated)		0.059 /cm.		

LOGARITHMIC WATER PATTERN
*meq/L.



Calcium Sulfate Solubility Profile



PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT. X	*meq/L =	mg/L
$Ca(HCO_3)_2$	81.04	9.59	77
$CaSO_4$	68.07	98.36	6,69
$CaCl_2$	55.50	21.65	1,20
$Mg(HCO_3)_2$	73.17	0.00	
$MgSO_4$	60.19	0.00	
$MgCL_2$	47.62	104.59	4,98
$NaHCO_3$	84.00	0.00	
$NaSO_4$	71.03	0.00	(
NaCl	58.46	1,985.96	116,09'

*Milli Equivalents per Liter

This water is slightly corrosive due to the pH observed on analysis. The corrosivity is increased by the content of mineral salts, and the presence of H2S, CO2, Oxygen in solution.

Double Eagle Fresh ([illegible]) Water

Exhibit VII-B

Permian Treating Chemicals

WATER ANALYSIS REPORT

SAMPLE

Oil Co. : Wiser Oil Co.
Lease : North Plant
Well No.: Fresh Water
Salesman:

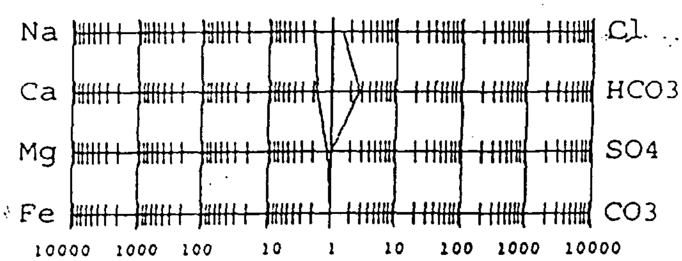
Sample Loc. :
Formation : 06-June-1996
Date Analyzed: 06-June-1996

ANALYSIS

1. pH 7.760
2. Specific Gravity 60/60 F. 1.008
3. $CaCO_3$ Saturation Index @ 80 F. +0.429
   @ 140 F. +1.029

Dissolved Gasses		MG/L	EQ. WT.	*MEQ/L
4. Hydrogen Sulfide		Not Present		
5. Carbon Dioxide		Not Determined		
6. Dissolved Oxygen		Not Determined		
Cations				
7. Calcium	(Ca^{++})	33	/ 20.1 =	1.64
8. Magnesium	(Mg^{++})	13	/ 12.2 =	1.07
9. Sodium	(Na^{+}) (Calculated)	42	/ 23.0 =	1.83
10. Barium	(Ba^{++})	Below 10 (1)		
Anions				
11. Hydroxyl	(OH^{-})	0	/ 17.0 =	0.00
12. Carbonate	$(CO_3^{=})$	0	/ 30.0 =	0.00
13. Bicarbonate	(HCO_3^{-})	161	/ 61.1 =	2.64
14. Sulfate	$(SO_4^{=})$	23	/ 48.8 =	0.47
15. Chloride	(Cl^{-})	50	/ 35.5 =	1.41
16. Total Dissolved Solids		322		
17. Total Iron	(Fe)	1	/ 18.2 =	0.05
18. Total Hardness As $CaCO_3$		138		
19. Resistivity @ 75 F. (Calculated)		2.310 /cm.		

LOGARITHMIC WATER PATTERN
*meq/L.

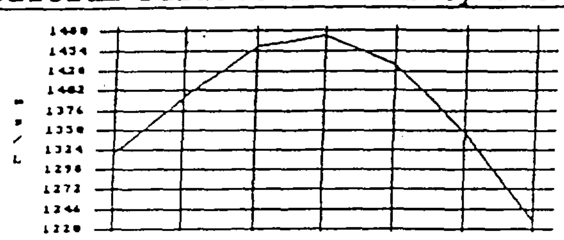


PROBABLE MINERAL COMPOSITION

COMPOUND	EQ. WT.	X *meq/L	= mg/L.
$Ca(HCO_3)_2$	81.04	1.64	133
$CaSO_4$	68.07	0.00	0
$CaCl_2$	55.50	0.00	0
$Mg(HCO_3)_2$	73.17	0.99	73
$MgSO_4$	60.19	0.07	4
$MgCL_2$	47.62	0.00	0
$NaHCO_3$	84.00	0.00	0
$NaSO_4$	71.03	0.40	28
NaCl	58.46	1.41	82

*Milli Equivalents per Liter

Calcium Sulfate Solubility Profile



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

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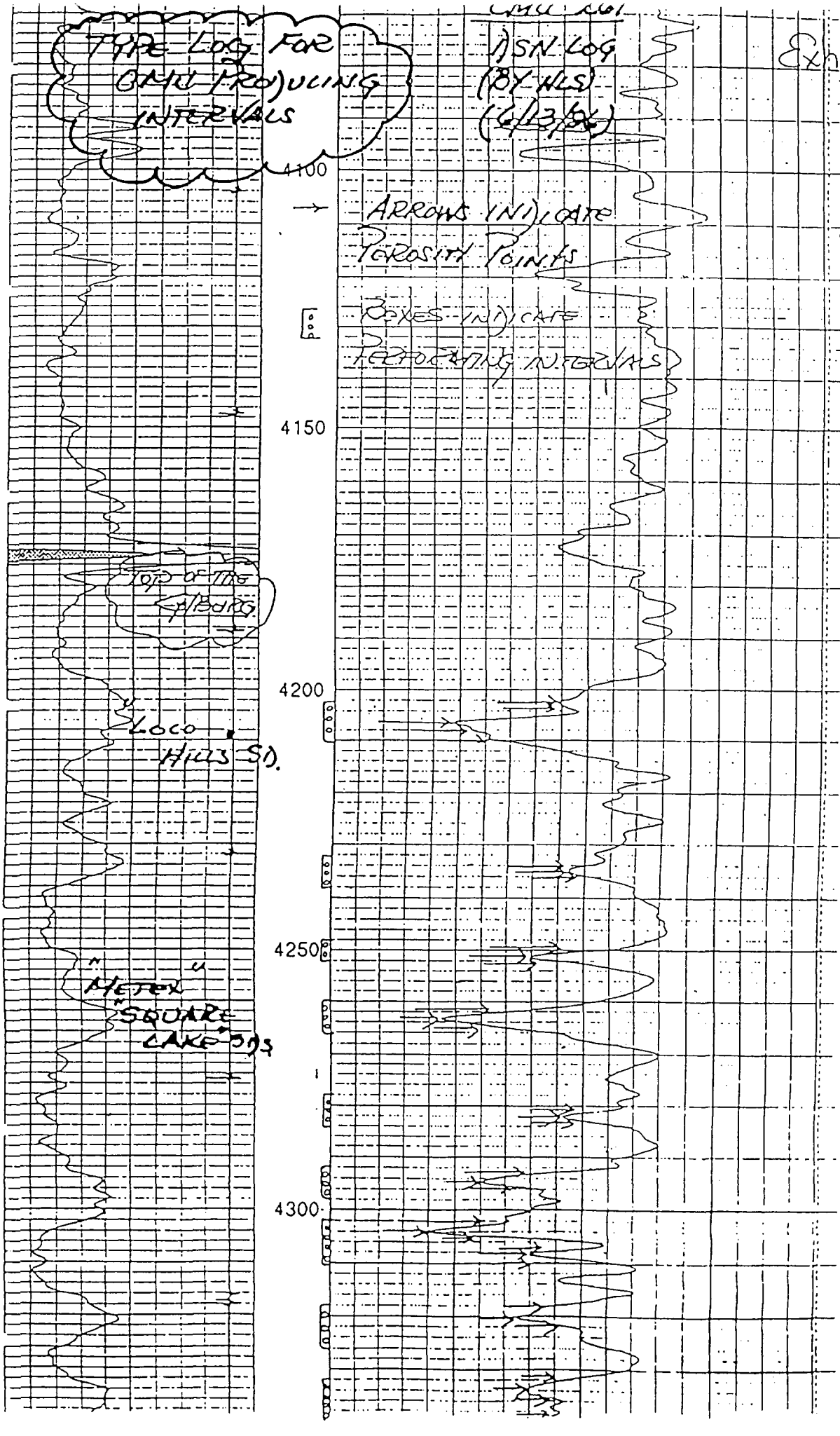
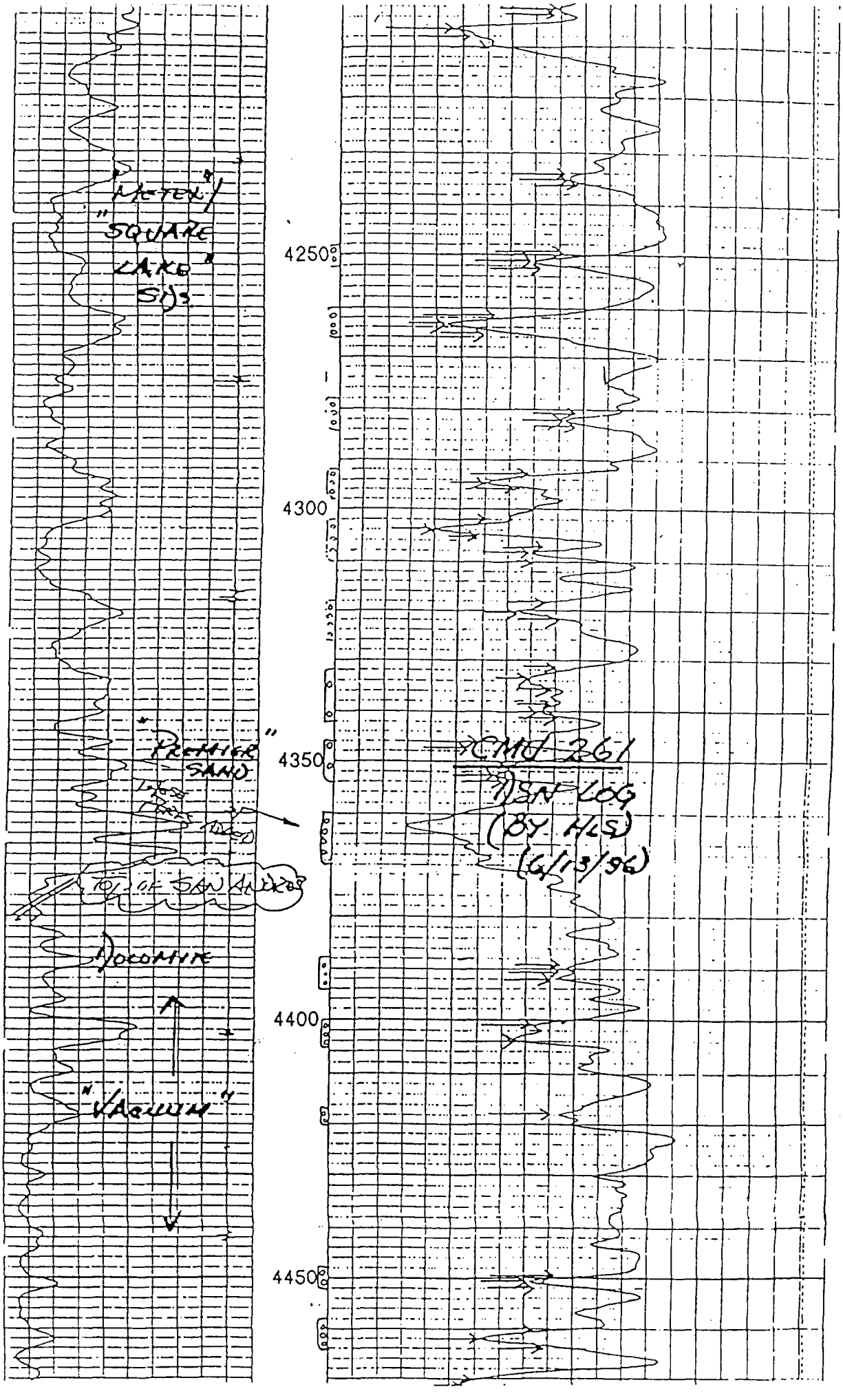
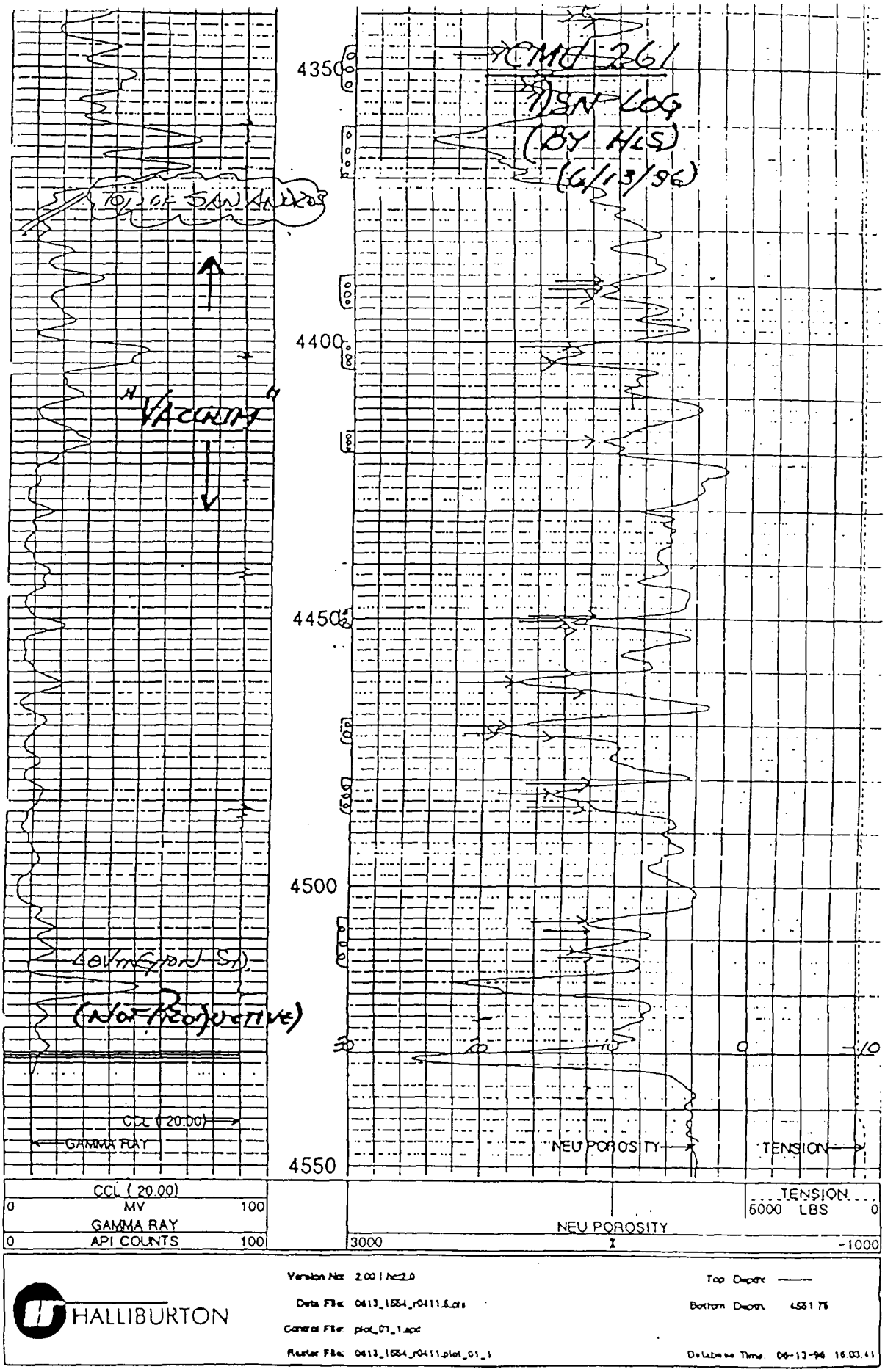
VIII. GEOLOGICAL DATA

The proposed injection interval is in the Grayburg-San Andres Vacuum formations at an average TD of 3900 feet. The Grayburg formation primarily consists of quartz sands with dolomitic cementation; while the San Andres Vacuum formation primarily consists of dolomite with intermingled stringers of quartz sand with dolomitic 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; while 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 typical geology, lithology, thickness, and depths. Although this is generally representative of the Skelly Unit, and wells have been drilled which have come in right on target as illustrated here, there is a tendency for Skelly Unit wells to come in anywhere from 200' shallower to an extreme of 1000' shallower than illustrated on these logs.


TYPE LOG FOR OIL PRODUCING INTERVALS
DSN LOG (BY HLS) (4/13/84)
Exhibit VIII-A
4100
ARROWS INDICATE POROSITY POINTS
BOXES INDICATE PERFORATING INTERVALS
4150
TOP OF THE GALBRAITH
4200
LOCO HILLS SD.
METEX SQUARE LAKE SD.
4250
4300


"METEL"
"SQUARE LAKE" SDS.
4250
4300
4350
4400
4450
"PREMIER" SAND
TOP OF SAN ANDRES
DOLOMITE
"VACUUM"
CMD 261
DSN LOG
(BY HLS)
(6/13/96)


CMU 261
TDT LOG
(BY HLS)
(6/13/96)
TOP OF SAN ANDRES
"VACUUM"
4350
4400
4450
4500
4550
(NOT PRODUCTIVE)
CCL (20.00)
GAMMA RAY
NEU POROSITY
TENSION
CCL (20.00)
0 MV 100
GAMMA RAY
0 API COUNTS 100
NEU POROSITY
3000 -1000
TENSION
6000 LBS 0
HALLIBURTON
Version No: 2.00 / hc2.0
Data File: 0613_1554_r0411.&.dls
Control File: plot_01_1.spc
Raster File: 0613_1554_r0411.plot_01_1
Top Depth
Bottom Depth 4551.75
Database Time: 06-13-96 16:03:41

TYPE LOG FOR CMU SHOWING FORMATION TOPS

Exhibit VIII-B

ILLEGIBLE

TYPE LOG

HALLIBURTON

GAMMA COLLAR

DSN

1

COMP. : WISER OIL COMPANY INC.
WELL : CMU #160
FIELD : MALJAMAR GRAYBURG
COUNTY: LEA ST. N.M.

COMPANY WISER OIL COMPANY INC.

WELL CMU #160

FIELD MALJAMAR GRAYBURG SAN ANDRES

COUNTY LEA STATE N.M.

API NO. 30-025-32927 OTHER SERVICES

LOCATION :

48' FSL & 157' FWL CBL/PERF.

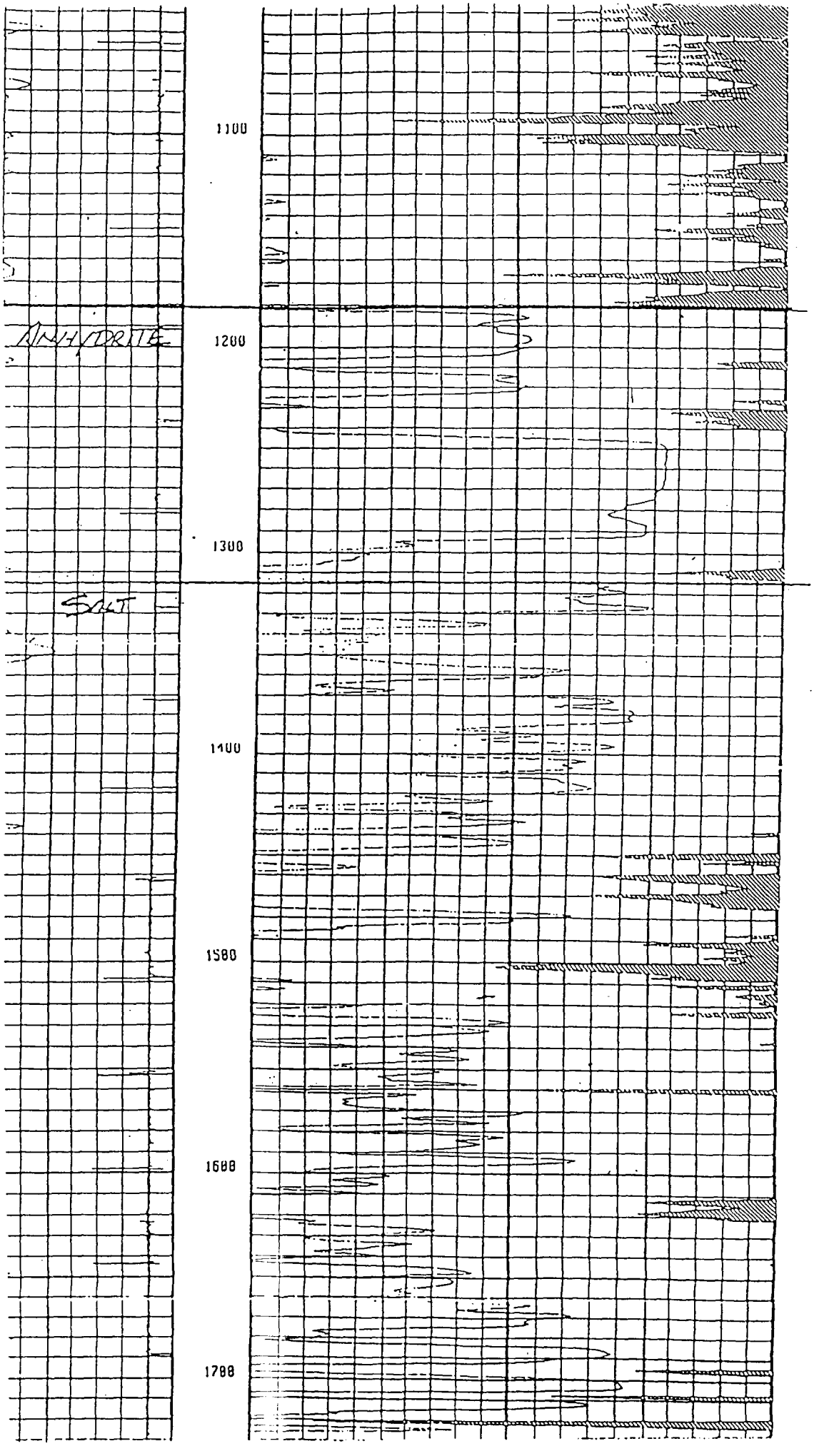
UNIT LETTER M

SEC. 18 TWP. 17-S RGE. 33-E

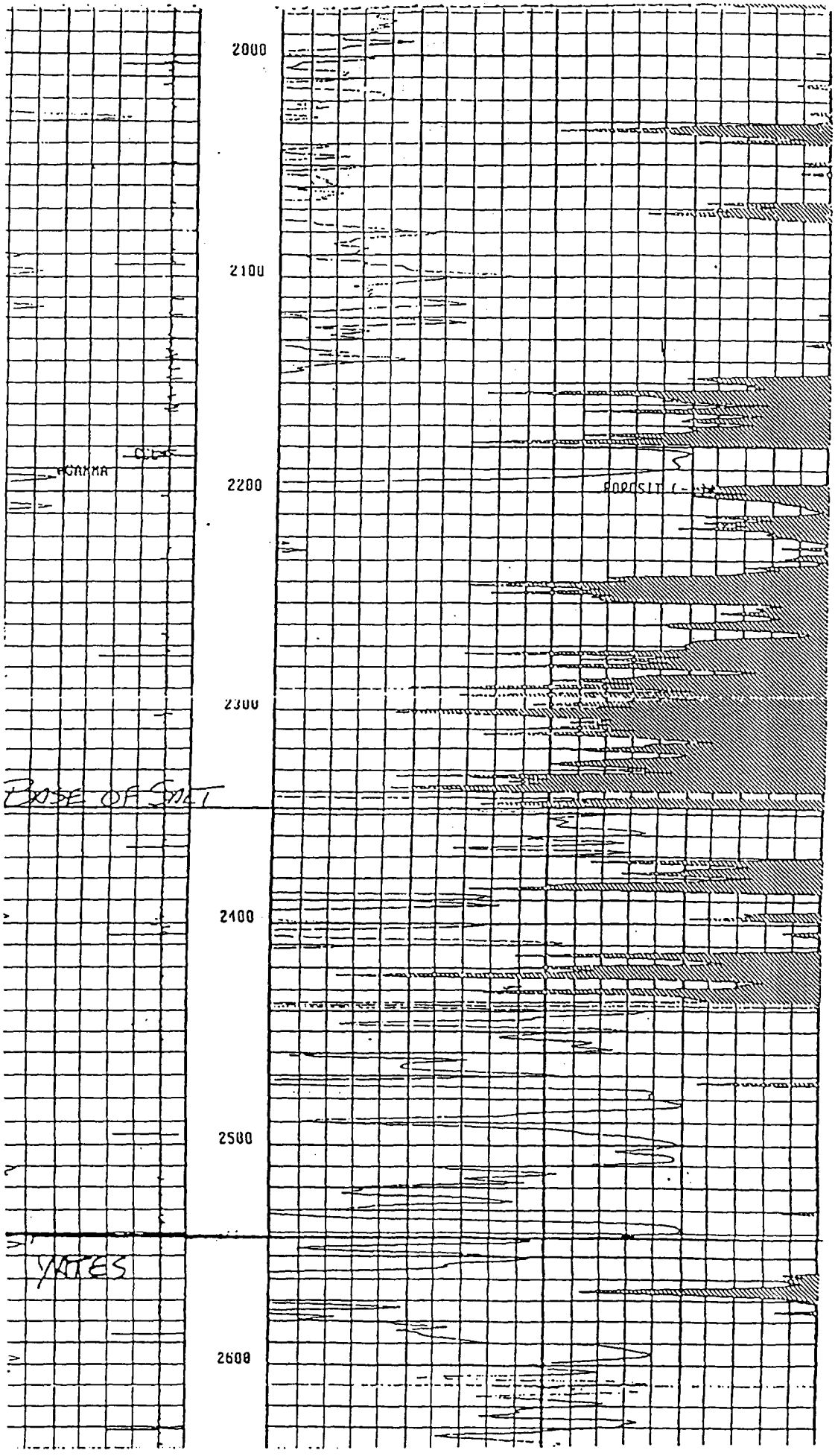
PERMANENT DATUM	GL	ELEV. 4137'		ELEV.: K.B. 4145'	
LOG MEASURED FROM	KB	12.0 FT. ABOVE PERM. DATUM		D.F.	
DRILLING MEAS FROM	KB			G.L. 4137'	
DATE & TIME LOGGED	12/08/98 @ 08:00		TYPE OF FLUID IN HOLE	WATER	
RUN No.	ONE		DENSITY OF FLUID	NA	
DEPTH - DRILLER	4850		FLUID LEVEL	FULL	
DEPTH - LOGGER	4788		CEMENT TOP EST/LOGGED	NA	
BTM LOGGED INTERVAL	4787		EQUIPMENT : LOCATION	7634 : HOBBS	
TOP LOGGED INTERVAL	SURF		RECORDED BY	WILL	
MAX RECORDED TEMP.	NA		WITNESSED BY	MR. G. KEATON	

CEMENTING DATA	SURF. STRING	INT.STRING	PROD.STRING	LINER
DATE/TIME CEMENTED	/ .	/ .	/ .	/ .
PRIMARY/SQUEEZE				
COMPRESSIVE STR. EXPECTED @	: Hrs	: Hrs	: Hrs	: Hrs
CEMENT VOLUME				
CEMENT TYPE/WEIGHT				
MUD TYPE/MUD WGT.				
FORMULATION				

RUN	BOREHOLE RECORD			CASING AND TUBING RECORD			
No.	BIT SZ.	FROM	TO	SIZE	WGT.	FROM	TO
ONE				8.625	NA	0	1280
TWO	7.875	1280	4850	5.5	17.0	0	4850



ILLEGIBLE



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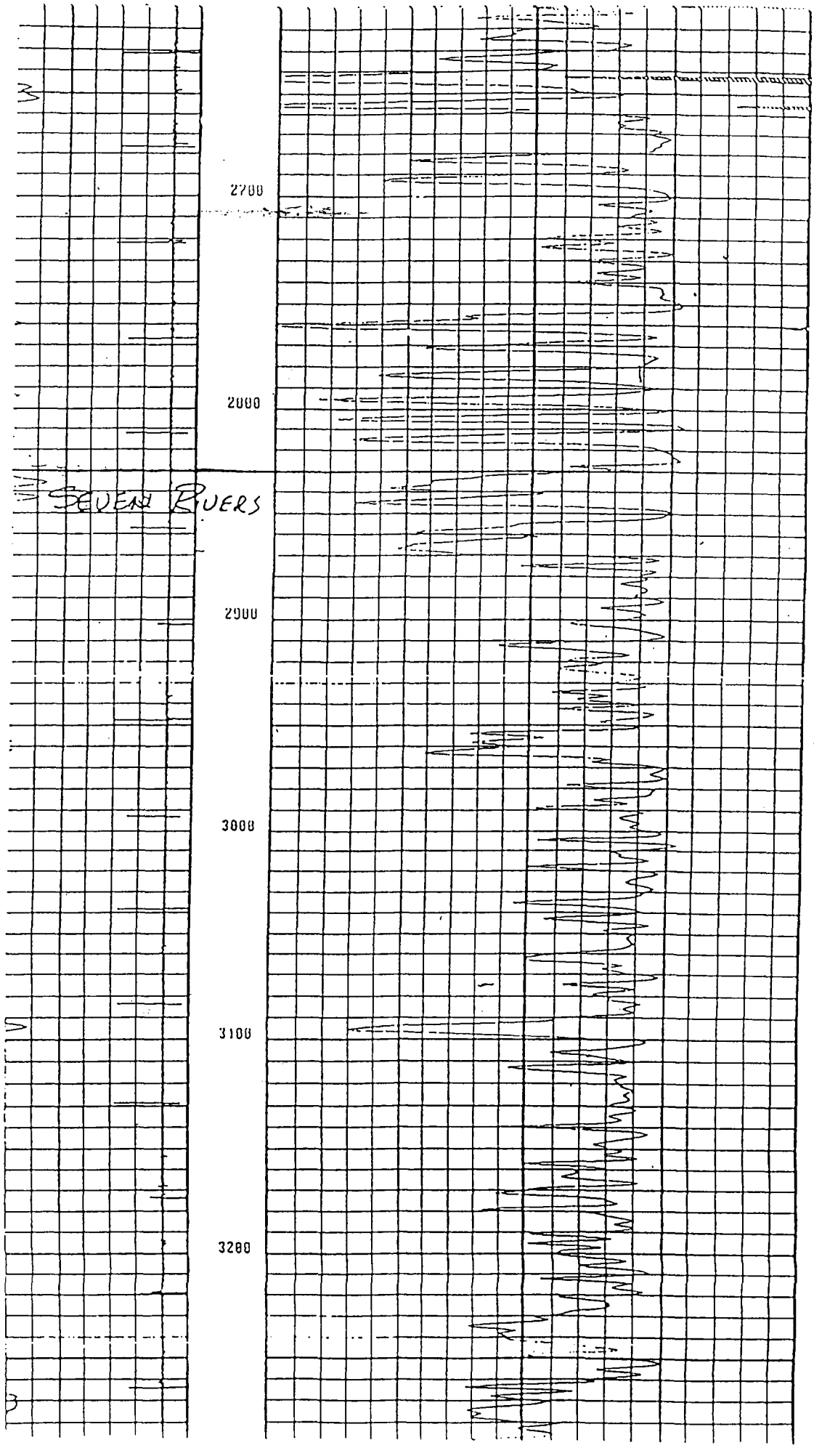
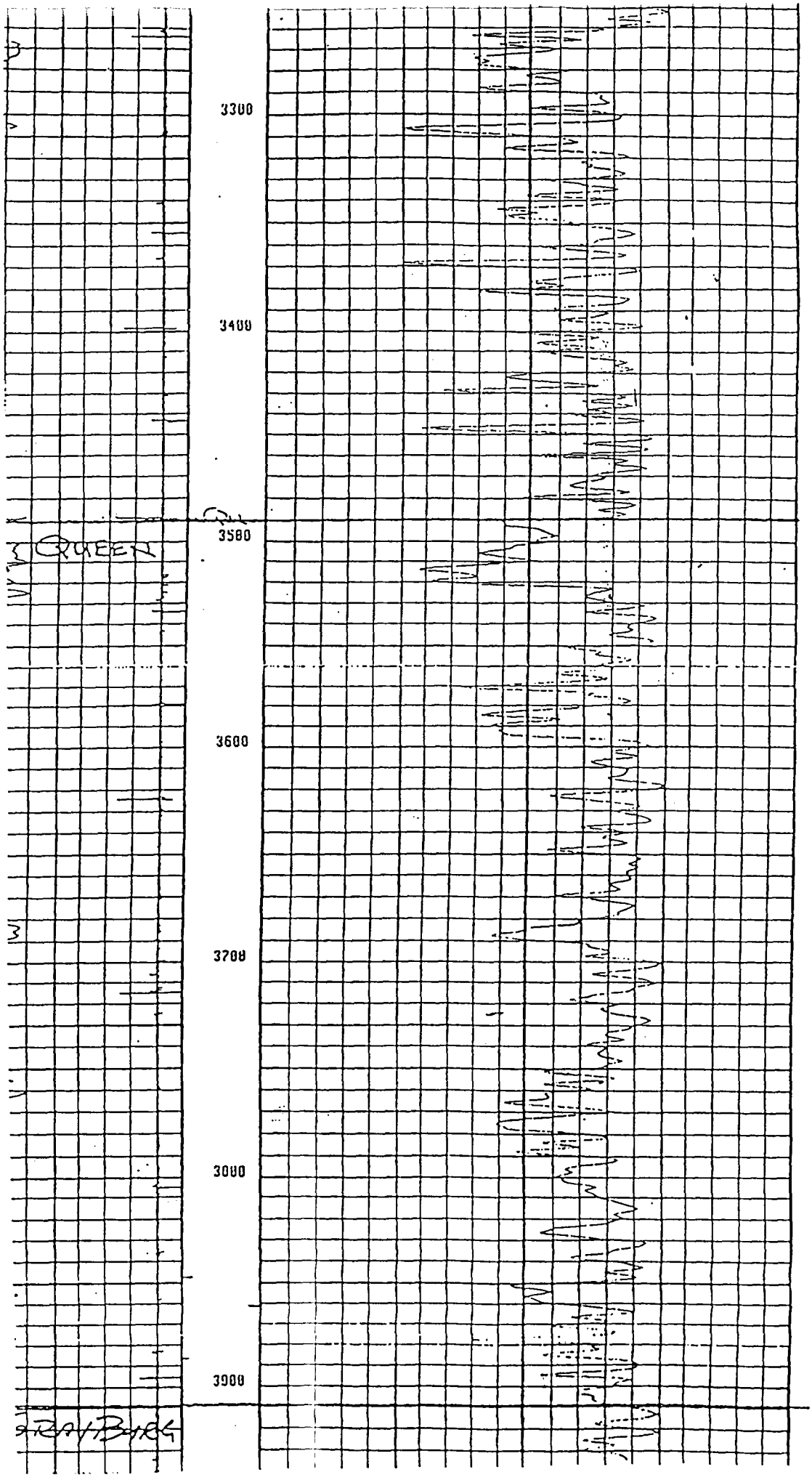
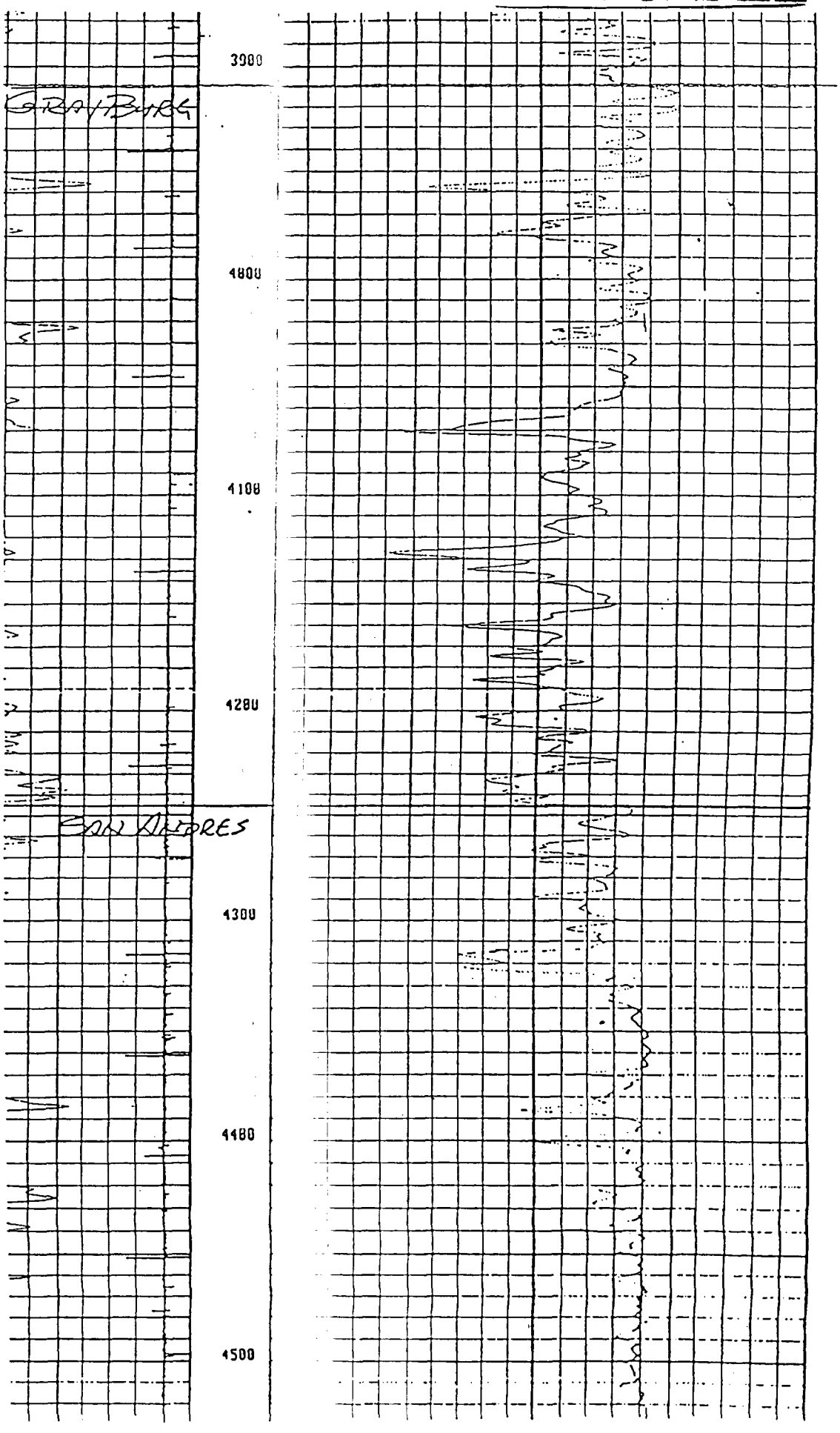


ILLEGIBLE

ILLEGIBLE



ILLEGIBLE



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IX. PROPOSED STIMULATION PROGRAM

Acid breakdown jobs will be done if new perforations are added. When treating old perforations, acid "wash" treatment will be done to remove scales and flow-back solids at formation face.

X. LOGGING DATA

The available logs are those on file with the Oil Conservation Division from the original operators of the wells.

XI. FRESH WATER WELLS

There are no fresh water wells in the area as recorded in the office of the State Engineer. There is one dry-hole which was drilled to the south of the Skelly Unit in Section 34 to a depth of 362', but it produced no water.

XII. Not applicable

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APPLICATION FOR AUTHORIZATION TO INJECT
SKELLY UNIT

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 ***Artesia Daily Press***, and an Affidavit of Publication will be forwarded as soon as available.

EXHIBIT XIII-A

Surface & Grazing Lease Owners:

Bureau of Land Management
District Office
2901 W. Second Street
Roswell, New Mexico 88201

Mr. Olane Caswell
Caswell Ranches
1702 Gilham
Brownfield, Texas 79316

Offset Leasehold Owners:

Ms. Deb E. Chase
2306 Sierra Vista Drive
Artesia, New Mexico 88210

Ms. Karla Chase
505 S. Bolton Road
Artesia, New Mexico 88210

Mr. Richard L. Chase
505 S. Bolton Road
Artesia, New Mexico 88210

Mr. Robert C. Chase
2306 Sierra Vista Drive
Artesia, New Mexico 88210

Chase Gerene Crouch
P. O. Box 693
Artesia, New Mexico 88211-0693

Ms. Ann F. Hudson
616 Texas Street
Fort Worth, Texas 76102

Mr. E. Randall Hudson III
616 Texas Street
Fort Worth, Texas 76102

Mr. Edward R. Hudson Jr.
616 Texas Street
Fort Worth, Texas 76102

Mr. William A. Hudson II
616 Texas Street
Fort worth, Texas 76102

Pergande F. Hudson
616 Texas Street
Fort Worth, Texas 76102

Offset Leasehold Owners:

Mr. Wendell W. Iverson Trustee
P. O. Box 10508
Midland, Texas 79702

Mr. Delmar H. Lewis
616 Texas Street
Fort Worth, Texas 76102

Burnett Oil Company
Suite 1500
801 cherry Street
Fort Worth, Texas 76102

Chase Oil Corporation
P. O. Box 1767
Artesia, New Mexico 88211-1767

E. R. Hudson Trust #1
616 Texas Street
Fort Worth, Texas 76102

E. R. Hudson Trust #2
616 Texas Street
Fort Worth, Texas 76102

E. R. Hudson Trust #2
616 Texas Street
Fort Worth, Texas 76102

Javalina Partners
616 Texas Street
Fort Worth, Texas 76102

Lindy's Living Trust
616 Texas Street
Fort Worth, Texas 76102

MacFarlane Company
205 Armstrong Building
El Dorado, Arkansas 71730

Zorro Partners Ltd.
616 Texas Street
Fort Worth, Texas 76102

Apache Corporation
Suite 100
2000 Post Oak
Houston, Texas 77056-4400

Offset Leasehold Owners:

Texaco Exploration & Production Co.
P. O. Box 2100
Denver, Colorado 80201-2100

Offset Well Operators:

Apache Corporation
Suite 100
2000 Post Oak
Houston, Texas 77056-4400

Texaco Exploration & Production Co.
P. O. Box 2100
Denver, Colorado 80201-2100

W. A. & E. R. Hudson, Inc.
616 Texas Street
Fort Worth, Texas 76102

EXHIBIT XIII-B

AFFIDAVIT OF MAILING

STATE OF NEW MEXICO
SS.
COUNTY OF CHAVES

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 10th day of May, 2000.

My Commibsion Expires: 5-2-2001

Notary Public

EXHIBIT XIII-C

NOTICE TO BE PUBLISHED IN THE ***ARTESIA DAILY PRESS***

PROPOSED INJECTION WELLS

The Wiser Oil Company proposes to expand its Skelly Unit and inject water into one additional well in Section 23, T17S-R31E, Eddy County, New Mexico, to provide additional injection service for the existing Skelly Unit Waterflood, Order No. R-3214. The zones to be injected into are the Grayburg and San Andres Vacuum at an average TD of 3900', with a maximum injection rate of 250 BWPD/well, at a maximum pressure of 2600 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.

J.O. EASLEY, INC.
ESTABLISHED 1979
P.O. Box 2691 88202-2691
Sunwest Center
Roswell, NM 88201

Telephone (505)625-8807
Fax (505) 625-8827

May 14, 2000

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

RE: C-108
Skelly Waterflood Unit
Eddy County, New Mexico

Enclosed is the Affidavit of Publication of the legal notice on the proposed Skelly Unit #70 injection well, which was published in the *Artesia Daily Press* on May 11, 2000.

If you have nay questions, please call me at 505-624-9799.

Sincerely,

J. O. EASLEY, INC.

Bonita L. L. Jones
Consulting Landman

/bj
Enclosures
cc/enclosure: Mr. Tim W. Gum
New Mexico Oil Conservation Division
811 South 1st Street
Artesia, New Mexico 88210

Mr. Mike Jones
The Wiser Oil Company
P. O. Box 2568
Hobbs, New Mexico 88240

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

Affidavit of Publication

NO. 16969

STATE OF NEW MEXICO

County of Eddy:

Gary D. Scott being duly

sworn,says: That he is the **Publisher** of The

Artesia Daily Press, a daily newspaper of general

circulation, published in English at Artesia, said county

and county and state, and that the here to attached

Legal Notice

was published in a regular and entire issue of the said

Artesia Daily Press,a daily newspaper duly qualified

for that purpose within the meaning of Chapter 167 of

the 1937 Session Laws of the state of New Mexico for

1 consecutive weeks/days on the same

day as follows:

First Publication May 11 2000

Second Publication

Third Publication

Fourth Publication

Gary D. Scott

Subscribed and sworn to before me this

11th day of May 2000

Barbara Ann Beam

Notary Public, Eddy County, New Mexico

My Commission expires September 23, 2003

Copy of Publication:

LEGAL NOTICE

PROPOSED INJECTION WELLS

The Wiser Oil Company proposes to expand its Skelly Unit and inject water into one additional well in Section 23, T17S-R31E, Eddy County, New Mexico, to ~~provide additional injection ser-~~ vice for the existing Skelly Unit Waterflood, Order No. R-3214. The zones to be injected into are the Grayburg and San Andres Vacuum at an average TD of 3900', with a maximum injection rate of 250 BWPD/well, at a maximum pressure of 2600 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.

Published in the Artesia Daily Press, Artesia, N.M. May 11, 2000.

Legal 16969