

BAILEY, SIPES & WILLIAMSON, INC.

CONSULTING ENGINEERS

SUCCESSOR TO LLC&C ENGINEERING, INC.

ROBERT F. BAILEY, P.E. - PRESIDENT  
L. D. SIPES, JR., P.E.  
ROY C. WILLIAMSON, JR., P.E.  
T. SCOTT HICKMAN, P.E.

June 5, 1969

1100 V & J TOWER  
MIDLAND, TEXAS 79701  
915 683-1841

Mr. Albert Metcalfe  
Tamarack Petroleum Company, Inc.  
910 Building of The Southwest  
Midland, Texas 79701

Dear Mr. Metcalfe:

Subject: Parameter Study for Proposed Northeast  
Pearl Queen Unit, Pearl Queen Field,  
Lea County, New Mexico

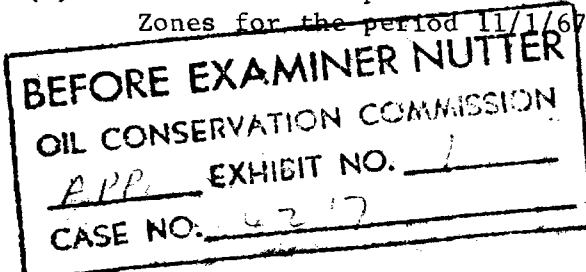
In accordance with your request, we have prepared parameter data for the proposed unit area. Table No. 1 lists the parameters by tract. The attached Figure No. 1 shows the proposed unit outline and the tract numbers. Figures No. 2, 3 and 4 are net effective pay isopach maps for Zones IV, V and VII respectively.

A secondary recovery project is planned for the proposed unit area incorporating Queen Zones IV, V and VII. Zone IV is found only under the western portion of the proposed unit area. Shell is flooding the Queen Zone in their East Pearl Unit to the west in Zones I through IV. A production response has already occurred in the proposed Northeast Pearl Queen Unit tracts No. 2, 5 and 9, presumably as a result of Shell's off-set injection into Zone IV.

The following comments describe each parameter by column, as shown on Table No. 1, and give the bases for determination thereof.

Column

- (2) Lists the number of currently usable wells.
- (4) Lists the total oil cumulative as of 2/1/69 from all producing Queen Zones.
- (6) Lists the oil production from all producing Queen Zones for the period 11/1/67 to 11/1/68.



Mr. Albert Metcalfe  
June 5, 1969  
Page 2

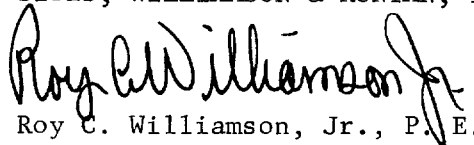
- (8) Lists the oil production from all producing Queen Zones for the period 8/1/68 to 2/1/69.
- (10) Lists the remaining primary reserves determined from extrapolation of decline curves ignoring the production response that has occurred presumably from Zone IV.
- (12) Lists primary ultimate recoveries ignoring the production response that has occurred presumably from Zone IV.
- (14) Lists the remaining reserves under current conditions; i. e., these are the reserves that will be obtained from the tracts including the effect of the production response presumably coming from Zone IV.
- (16) Lists ultimate recoveries under current conditions including the production response presumably coming from Zone IV.
- (18) Lists the net acre-feet for Zones V and VII combined.
- (20) Lists the net acre-feet for Zone IV only.
- (22) Lists the net acre-feet for Zones IV, V and VII combined.

It is felt that these various parameters adequately describe the tracts and that a participation formula using some combination of these parameters should result in equitable ownership in the proposed Northeast Pearl Queen Unit production.

We are happy to have been of service in preparing this study. We are retaining the backup data in our files; these data are available for review if needed. Please call if we can be of further service.

Very truly yours,

BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.

  
Roy C. Williamson, Jr., P. E.

/pw

Attachments

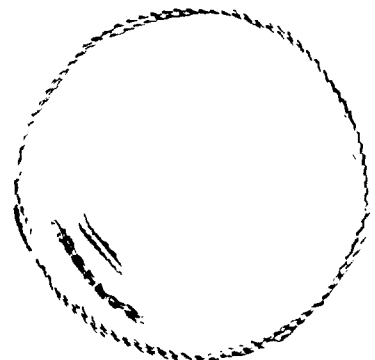
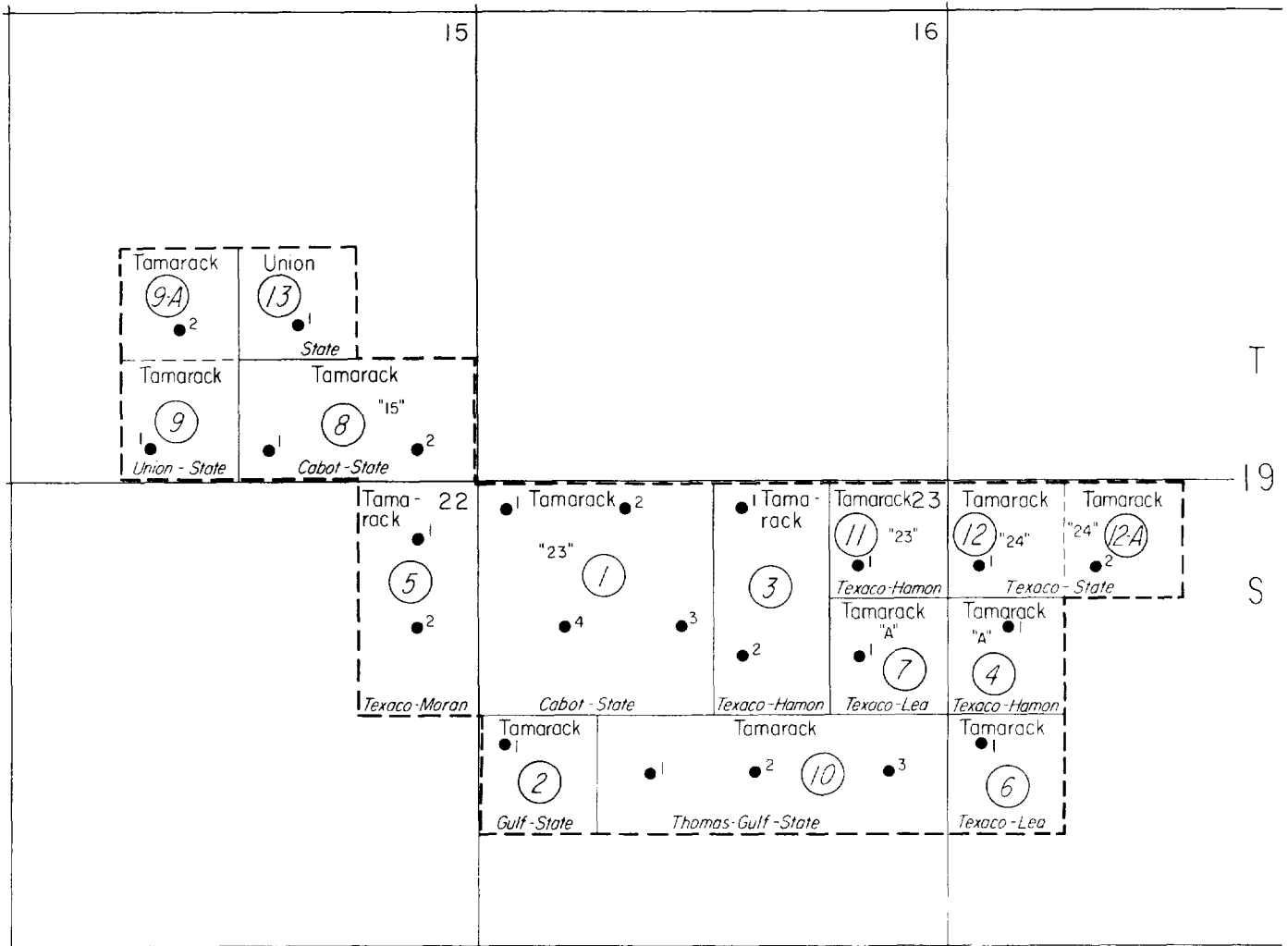


TABLE NO. 1  
PARAMETER STUDY  
PROPOSED NORTHEAST PEARL QUEEN UNIT - PEARL QUEEN FIELD  
LEA COUNTY, NEW MEXICO

TR. NO.	WELLS % OF TOTAL	CUMULATIVE PRODUCTION AS OF 2/1/69			CURRENT PRODUCTION 11/1/67 TO 11/1/68			CURRENT PRODUCTION 8/1/68 TO 2/1/69			REMAINING PRIMARY RESERVES* 2/1/69			PRIMARY ULTIMATE* 2/1/69			REMAINING RESERVES CURRENT CONDITIONS 2/1/69			ULTIMATE RECOVERIES UNDER CURRENT CONDITIONS			NET ACRE-FEET ZONES V AND VII			NET ACRE-FEET ZONE IV			TOTAL NET ACRE-FEET ZONES IV, V & VII		
		BBL OIL	% OF TOTAL	(1)	BBL OIL	% OF TOTAL	(2)	BBL OIL	% OF TOTAL	(3)	BBL OIL	% OF TOTAL	(4)	BBL OIL	% OF TOTAL	(5)	BBL OIL	% OF TOTAL	(6)	BBL OIL	% OF TOTAL	(7)	AC-FT	% OF TOTAL	(8)	AC-FT	% OF TOTAL	(9)	AC-FT	% OF TOTAL	(10)
1	4	18,181	81,945	12,535	1,278	2,663	844	4,157	0	0	81,945	13,456	0	0	81,945	11,129	2,464	27,517	17.4	3,610	2,481	26,293									
** 2	1	4,545	45,675	6,986	1,948	4,060	2,370	11,675	0	0	41,216	6,767	29,925	36,232	75,600	10,267	290.9	3,247	18.5	3,838	309.4	3,279									
3	2	9,090	69,193	10,584	3,148	6,561	1,428	7,034	2,857	8,394	72,050	11,830	2,857	3,459	72,050	9,785	858.1	9,580	0	0	858.1	9,090									
4	1	4,545	34,380	5,259	1,108	2,309	594	2,923	0	0	34,380	5,643	0	0	34,380	4,662	305.2	3,407	0	0	305.2	3,234									
** 5	2	9,090	47,140	7,211	1,117	2,328	704	3,468	0	0	34,282	5,629	0	0	47,140	6,402	925.3	10,305	127.7	26,493	1,053	11,159									
6	1	4,545	27,534	4,219	2,688	5,602	1,185	5,837	696	2,044	28,230	4,635	696	0,842	28,230	3,834	60.7	0,677	0	0	60.7	0,643									
7	1	4,545	28,696	4,389	1,593	3,320	690	3,392	376	1,104	29,072	4,773	376	0,453	29,072	3,948	525.8	5,870	0	0	525.8	5,570									
8	2	9,090	91,287	13,964	5,169	10,773	400	1,970	11,813	34,707	103,100	16,929	11,813	14,303	103,100	14,002	848.1	9,468	12.4	2,576	860.5	9,116									
** 9	1	4,545	63,026	9,641	14,584	30,396	6,227	30,676	0	0	15,939	2,617	17,190	20,813	80,216	10,894	143.0	1,595	194.3	40,312	337.3	3,573									
** 9-A	1	4,545	26,501	4,038	1,257	2,619	300	1,479	0	0	12,147	1,994	1,440	1,743	27,941	3,794	110.6	1,234	102.0	21,161	212.6	2,254									
10	3	13,636	76,315	11,673	5,916	12,330	1,807	8,901	0	0	76,315	12,531	0	0	76,315	10,364	1,126	12,579	0	0	1,126	11,935									
11	1	4,545	25,716	3,938	2,979	6,209	1,342	6,612	6,731	19,776	32,447	5,327	6,731	8,149	32,447	4,407	256.6	2,864	0	0	256.6	2,718									
12	1	4,545	16,799	2,569	1,785	3,720	935	4,601	3,793	11,144	20,573	3,378	3,793	4,592	20,573	2,794	480.4	5,364	0	0	480.4	5,089									
12-A	1	4,545	19,516	2,984	3,409	7,105	1,473	7,256	7,770	22,828	27,305	4,483	7,770	9,407	27,305	3,708	491.0	5,481	0	0	491.0	5,201									
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70.3	0,784	9.7	2,014	80.0	0,847									
TOTALS	22	100,000	653,723	100,000	47,979	100,000	20,299	100,000	34,036	100,000	609,001	100,000	82,591	100,000	736,314	100,000	8,957	0	100,000	482	0	9,439	100,000								

\* Ignores Flood Response in Zone IV  
\*\* Received Response from Zone IV Waterflood.

R 35 E

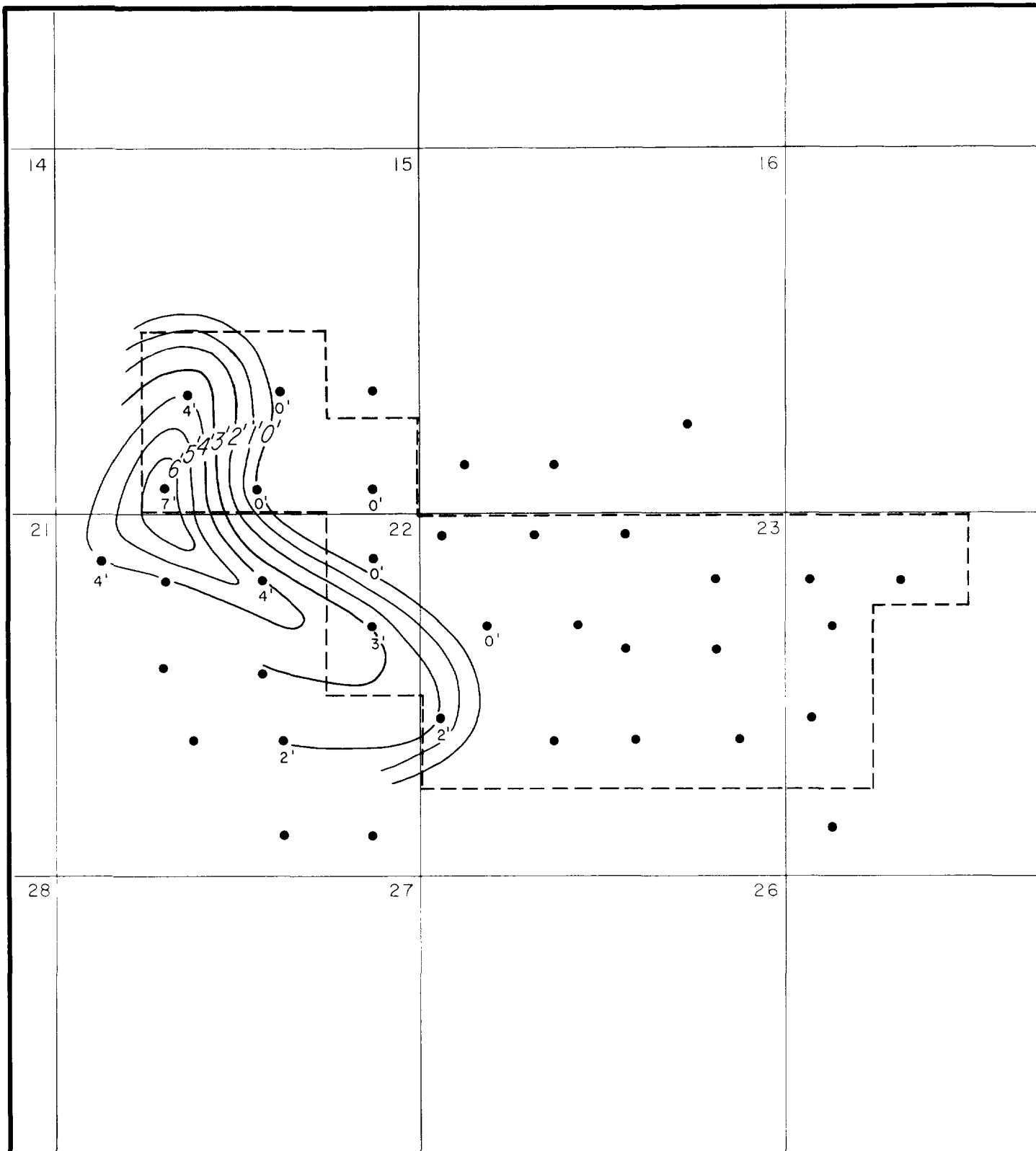


LEGEND

- (2) Tract Number  
 --- Unit Boundary

OUTLINE OF  
 PROPOSED N. E. PEARL QUEEN UNIT

FIELD PEARL QUEEN		COUNTY LEA		STATE NEW MEXICO
Engineer R. C. W.	Date 6-5-69	Drwn. By Del	File PEARL QUEEN	
BAILEY, SIPES, WILLIAMSON & RUNYAN INC. CONSULTING ENGINEERS				FIGURE NO. 1
1100 V&J TOWER MIDLAND, TEXAS				

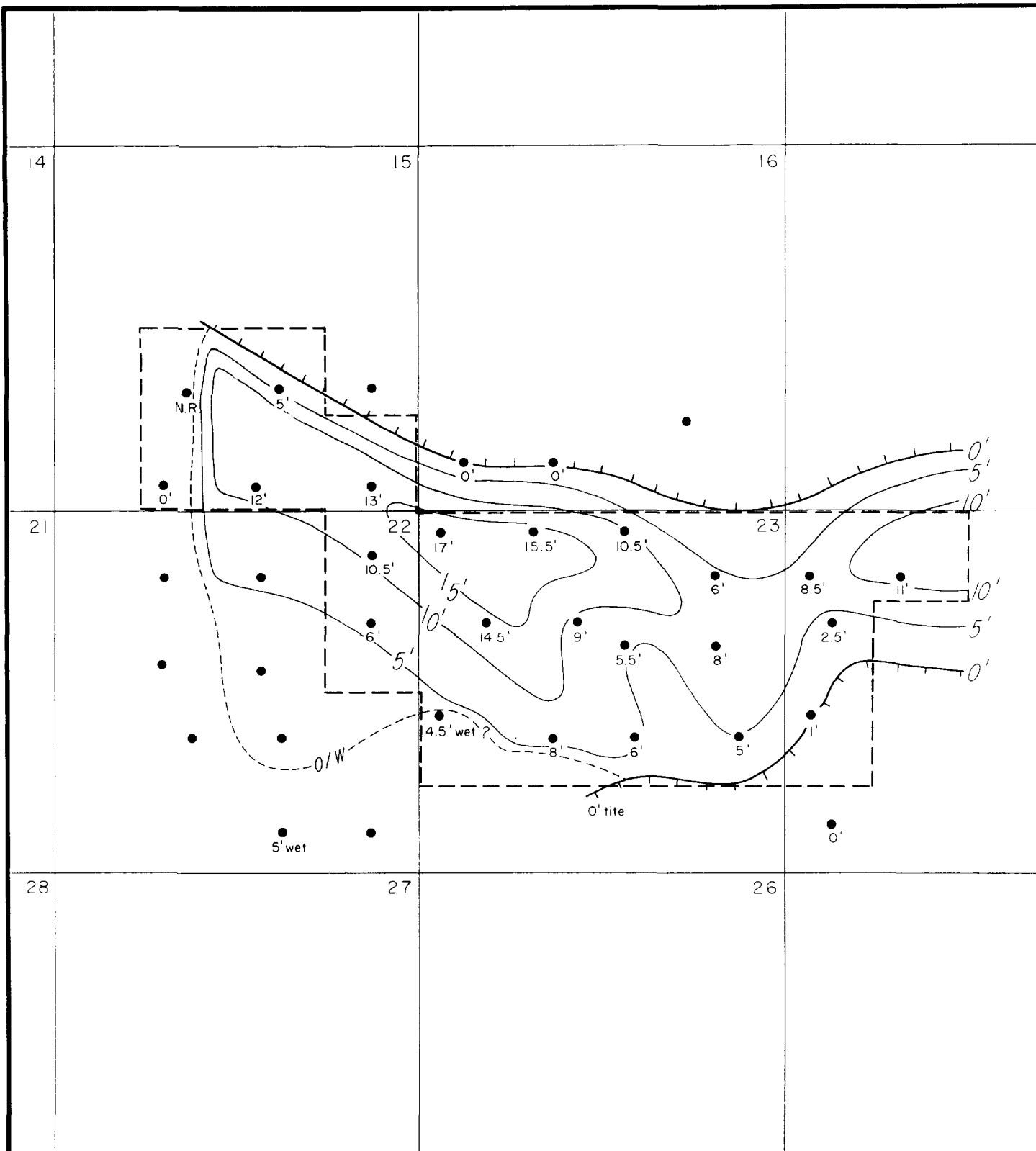


# NET EFFECTIVE PAY ISOPACH MAP

## ZONE IV

PROPOSED N. E. PEARL QUEEN UNIT

FIELD N. E. PEARL QUEEN		COUNTY LEA	STATE NEW MEXICO
Engineer R. C. W.	Date 6 - 5 - 69	Drwn. By Del	File PEARL QUEEN, N. E.
BAILEY, SIPES & WILLIAMSON, INC.			FIGURE NO. 2
CONSULTING ENGINEERS		1100 V & J Tower Midland, Texas	



# NET EFFECTIVE PAY ISOPACH MAP

## ZONE V

PROPOSED N. E. PEARL QUEEN UNIT

FIELD N. E. PEARL QUEEN

COUNTY LEA

STATE NEW MEXICO

Engineer R. C. W.

Date 6-5-69

Drwn. By Del

File PEARL QUEEN, N. E.

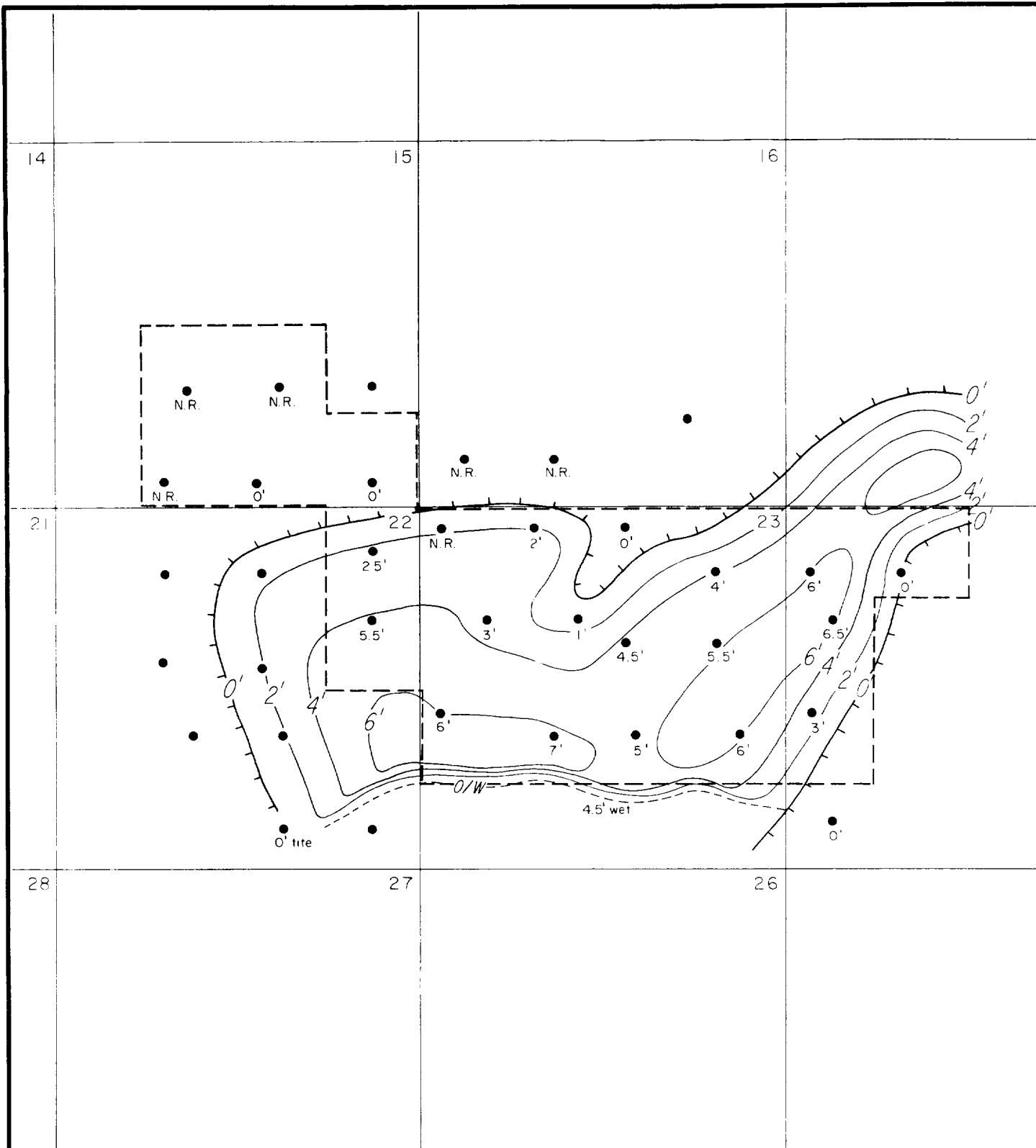
BAILEY, SIPES & WILLIAMSON, INC.

CONSULTING ENGINEERS

1100 V & J Tower

Midland, Texas

FIGURE NO. 3



# NET EFFECTIVE PAY ISOPACH MAP

## ZONE VII

PROPOSED N. E. PEARL QUEEN UNIT

FIELD	N. E. PEARL QUEEN	COUNTY	LEA	STATE	NEW MEXICO
Engineer	R. C. W.	Date	6-5-69	Drwn. By	Del
BAILEY, SIPES & WILLIAMSON, INC.				File	PEARL QUEEN, N. E.
CONSULTING ENGINEERS				FIGURE NO 4	

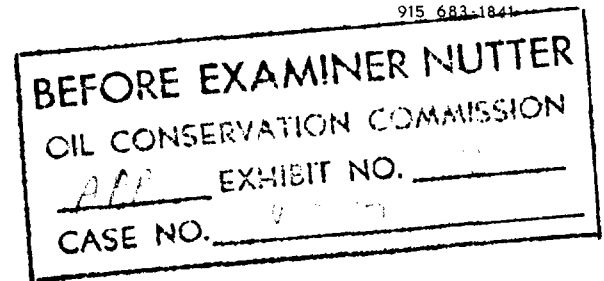
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.  
CONSULTING ENGINEERS

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L. D. SIPES, JR., P. E.  
ROY C. WILLIAMSON, JR., P. E.  
E. E. RUNYAN, P. E.  
T. SCOTT HICKMAN, P. E.

September 3, 1969

1100 V & J TOWER  
MIDLAND, TEXAS 79701  
915 683-1841



Mr. Albert Metcalfe  
Tamarack Petroleum Co., Inc.  
910 Building of The Southwest  
Midland, Texas 79701

Dear Mr. Metcalfe:

Subject: Proposed Northeast Pearl Queen Unit  
Pearl Queen Field, Lea County, New Mexico

The attached Figure No. 1 shows the outline of the proposed Northeast Pearl Queen Unit. Figures 2, 3 and 4 are net effective pay isopach maps of pay zones designated as IV, V and VII respectively. All figures show current injection wells in blue and proposed injection wells in red within the unit area. Also attached are down hole diagrammatic sketches and logs of proposed injection wells. The logs show pay designations and perforations.

The following described land constitutes the proposed unit area.

<u>T-19-S, R-35-E</u>	Sec. 15	E/2 of SW/4, W/2 of SE/4 and SE/4 of SE/4
	Sec. 22	E/2 of NE/4
	Sec. 23	N/2 and N/2 of S/2
	Sec. 24	W/2 of NW/4, NE/4 of NW/4 and NW/4 of SW/4

The following tables show the injection wells, the injection zones and the anticipated injection rates.

Proposed Injection Wells

<u>Well</u>	<u>Zones</u>	<u>Injection Rates</u> <u>Bbls of Water/Day</u>	
Gulf "BF" No. 2	V & VII	150	J 23 ✓
Texaco Hamon No. 1	V	75	B 23 ✓

Expect max press of 2500 psi  
will set wlr from wlr P.L.



Mr. Albert Metcalfe  
Tamarack Petroleum Co., Inc.  
September 3, 1969  
Page 2

Texaco Hamon No. 2	V & VII	150	G 23 ✓
Texaco Hamon "A" No. 1	V & VII	125	E 24
Texaco Moran No. 1	V & VII	125	A 22 ✓
Union State No. 2	IV & V	150	K 15 ✓

Current Injection Wells

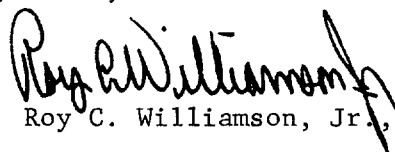
<u>Well</u>	<u>Zones</u>	<u>Injection Rates</u> <u>Bbls of Water/Day</u>	
Cabot Carbon No. 2	V	350	P 15 ✓
Texaco Moran No. 2	IV, V & VII	350	H 22 ✓

No cooperative injection program is anticipated with leases lying outside the unit area. There is no development to the north, east or south of the unit and the East Pearl Unit to the west of this proposed unit is already under injection.

If further information is required, please give us a call.

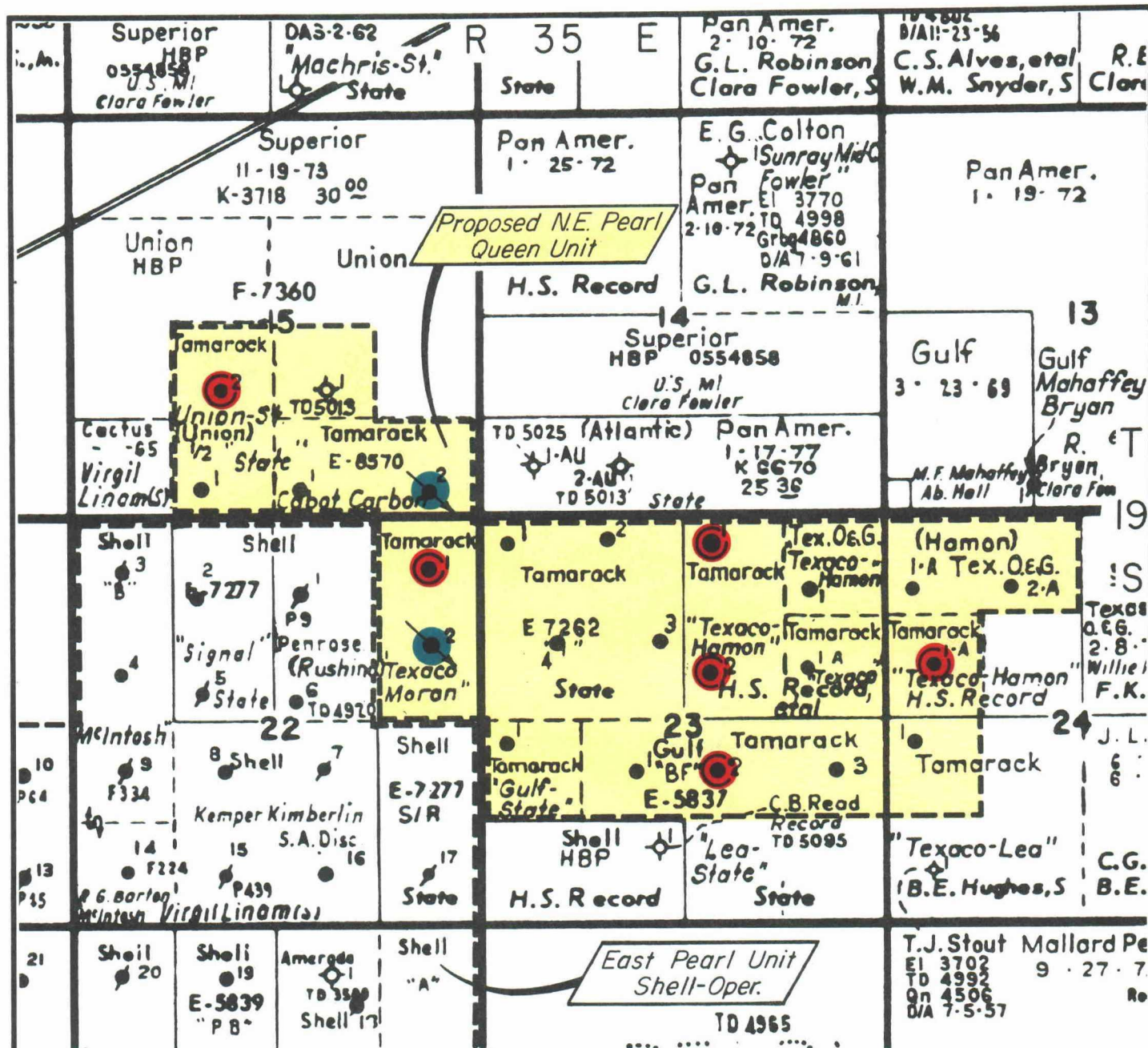
Very truly yours,

BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.

  
Roy C. Williamson, Jr., P. E.

/pw

Attachments



### LEGEND



Current Injection Well



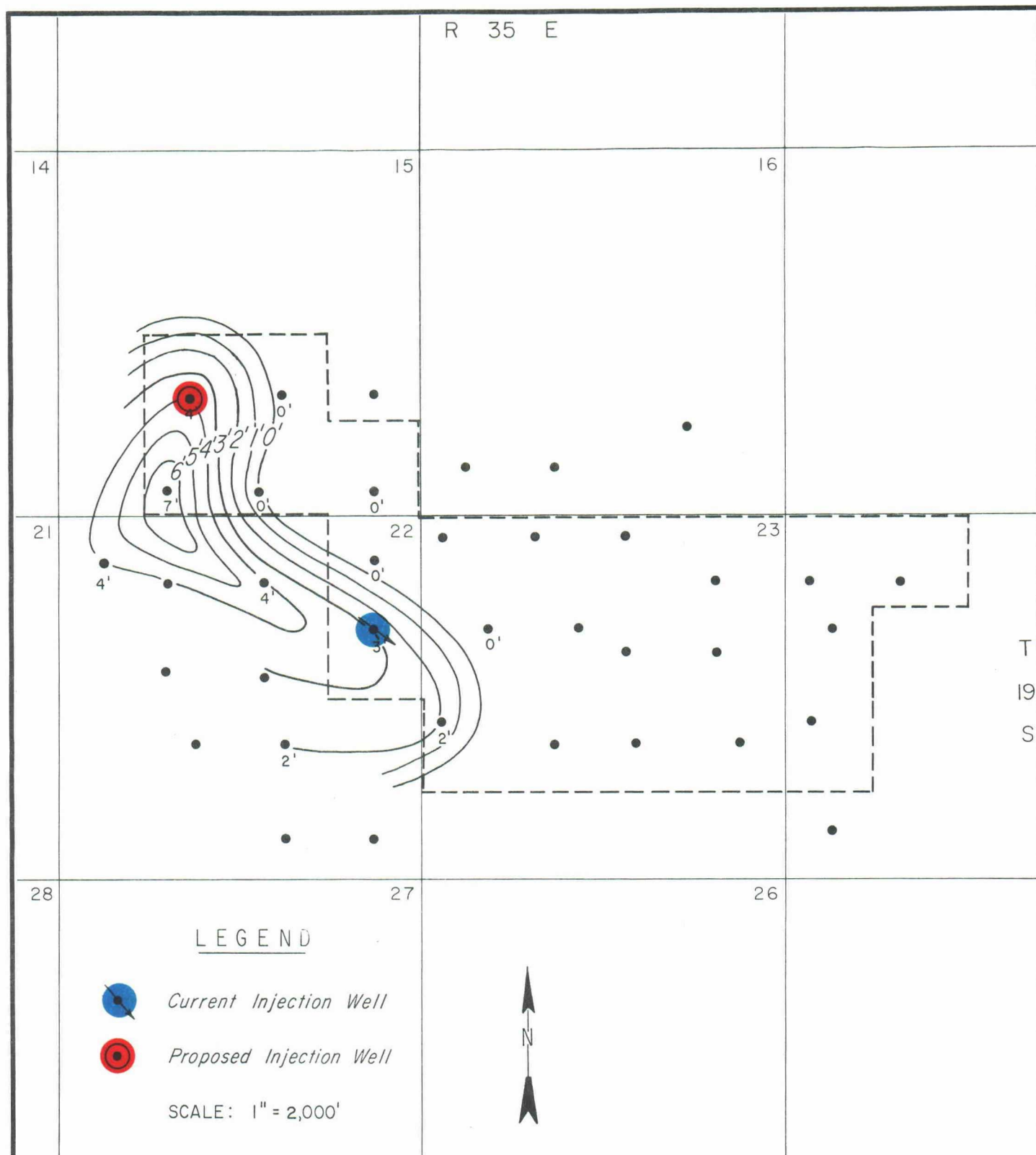
Proposed Injection Well



SCALE: 1" = 2,000'

## PROPOSED N. E. PEARL QUEEN UNIT

FIELD	PEARL QUEEN	COUNTY	LEA	STATE	NEW MEX.
Engineer	R. C. W.	Date	9-10-69	Drwn. By	Del
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.					FIGURE NO. 1
CONSULTING ENGINEERS					1100 V&J TOWER MIDLAND, TEXAS



# NET EFFECTIVE PAY ISOPACH MAP

## ZONE IV

PROPOSED N. E. PEARL QUEEN UNIT

FIELD N. E. PEARL QUEEN

COUNTY LEA

STATE NEW MEXICO

Engineer R. C. W.

Date 9-10-69

Drwn. By Del

File PEARL QUEEN, N. E.

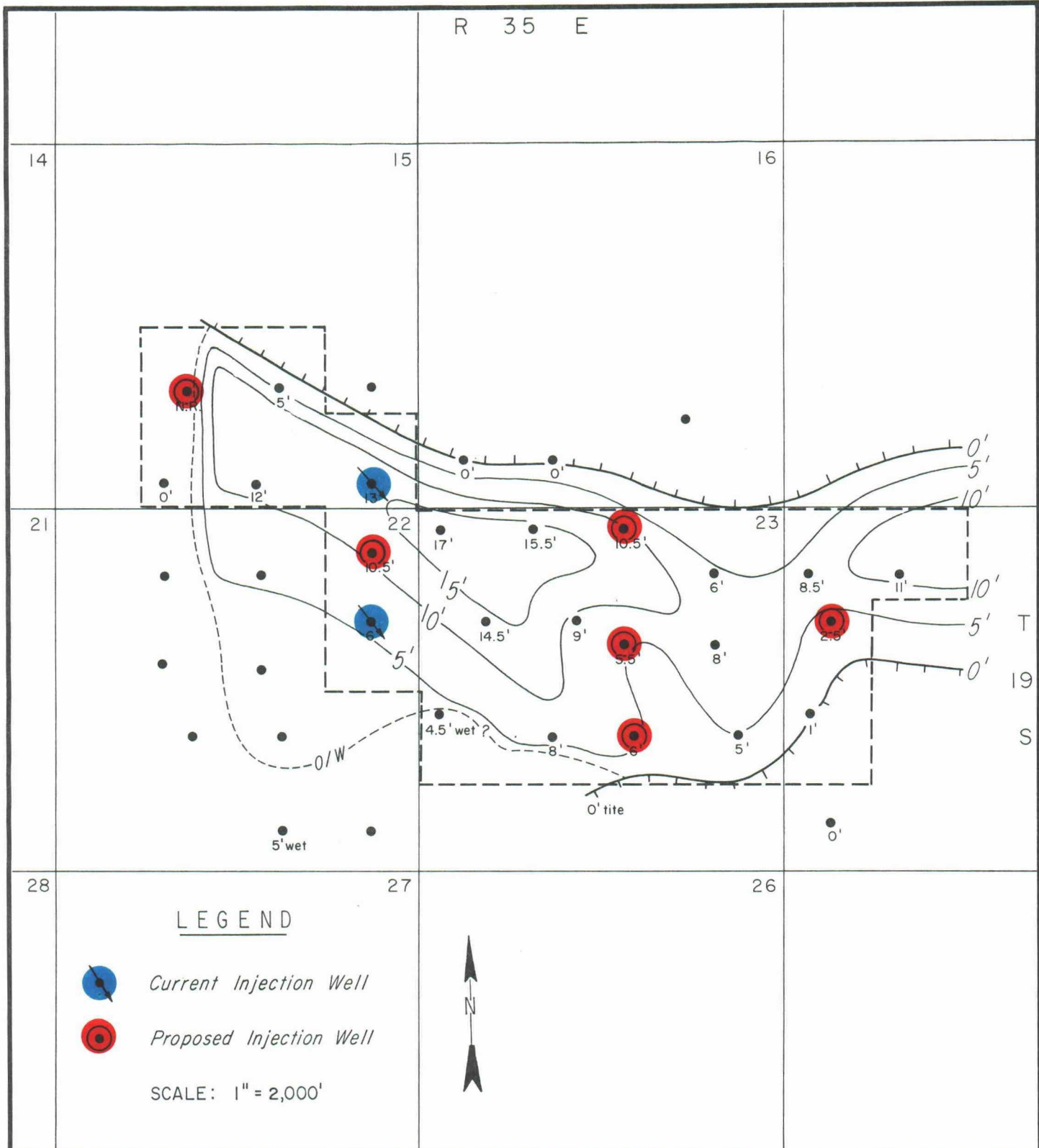
BAILEY, SIPES & WILLIAMSON, INC.

CONSULTING ENGINEERS

1100 V & J Tower Midland, Texas

FIGURE NO. 2

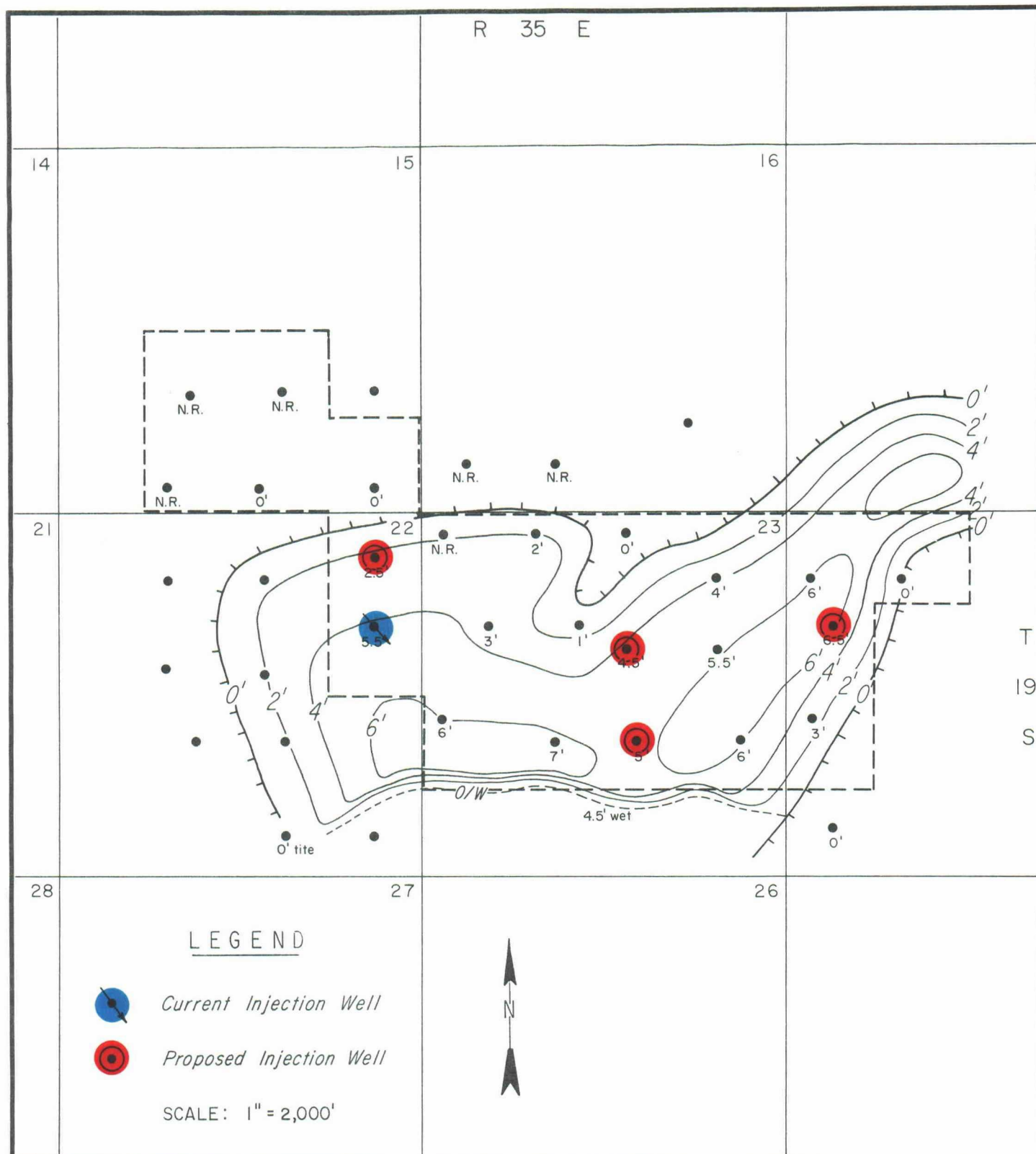




# NET EFFECTIVE PAY ISOPACH MAP ZONE V

PROPOSED N. E. PEARL QUEEN UNIT

FIELD N. E. PEARL QUEEN			COUNTY LEA		STATE NEW MEXICO
Engineer R. C. W.	Date 9-10-69	Drwn. By Del	File PEARL QUEEN, N. E.		
BAILEY, SIPES & WILLIAMSON, INC.					FIGURE NO. 3
CONSULTING ENGINEERS		1100 V & J Tower Midland, Texas			

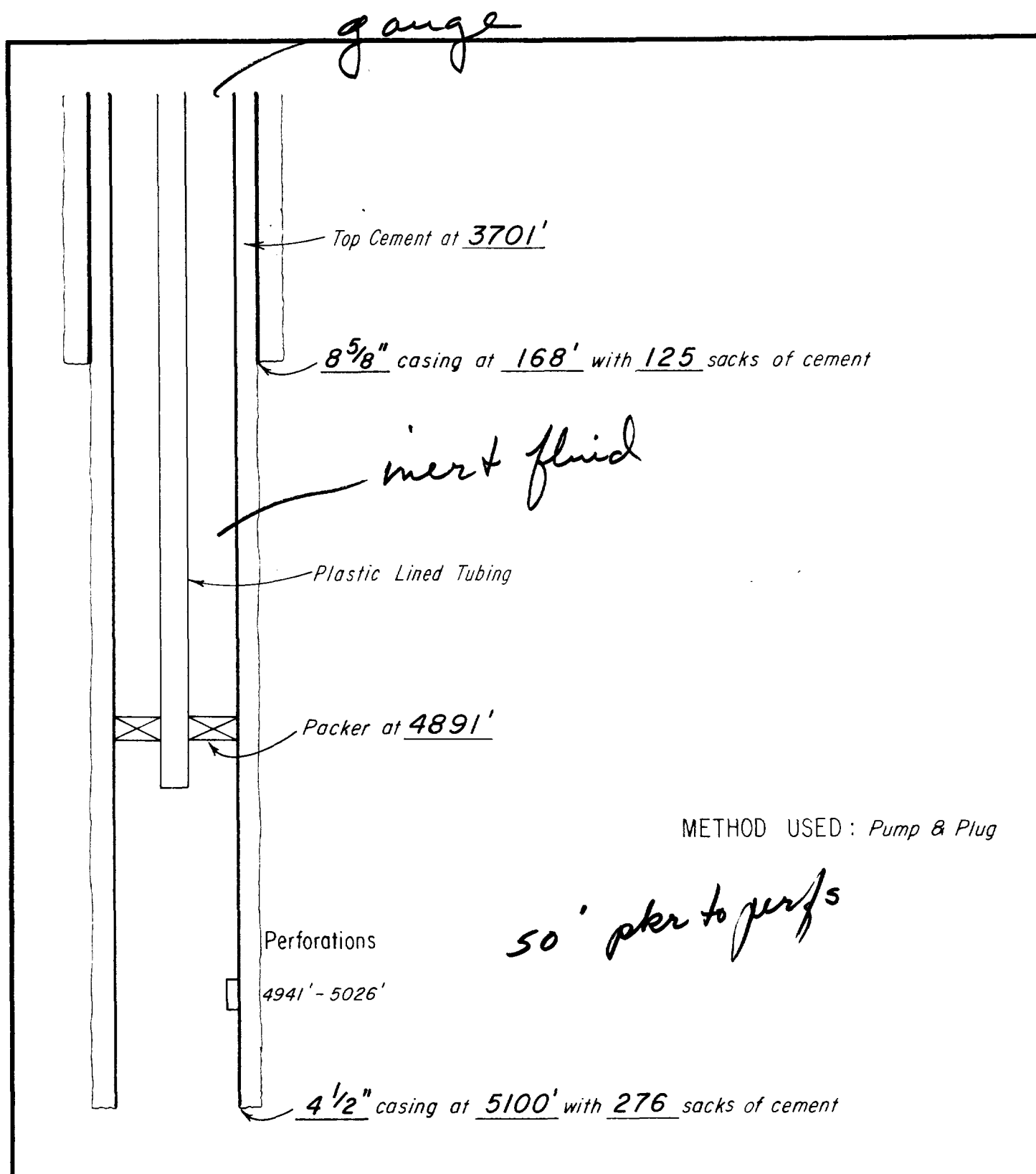


## NET EFFECTIVE PAY ISOPACH MAP

### ZONE VII

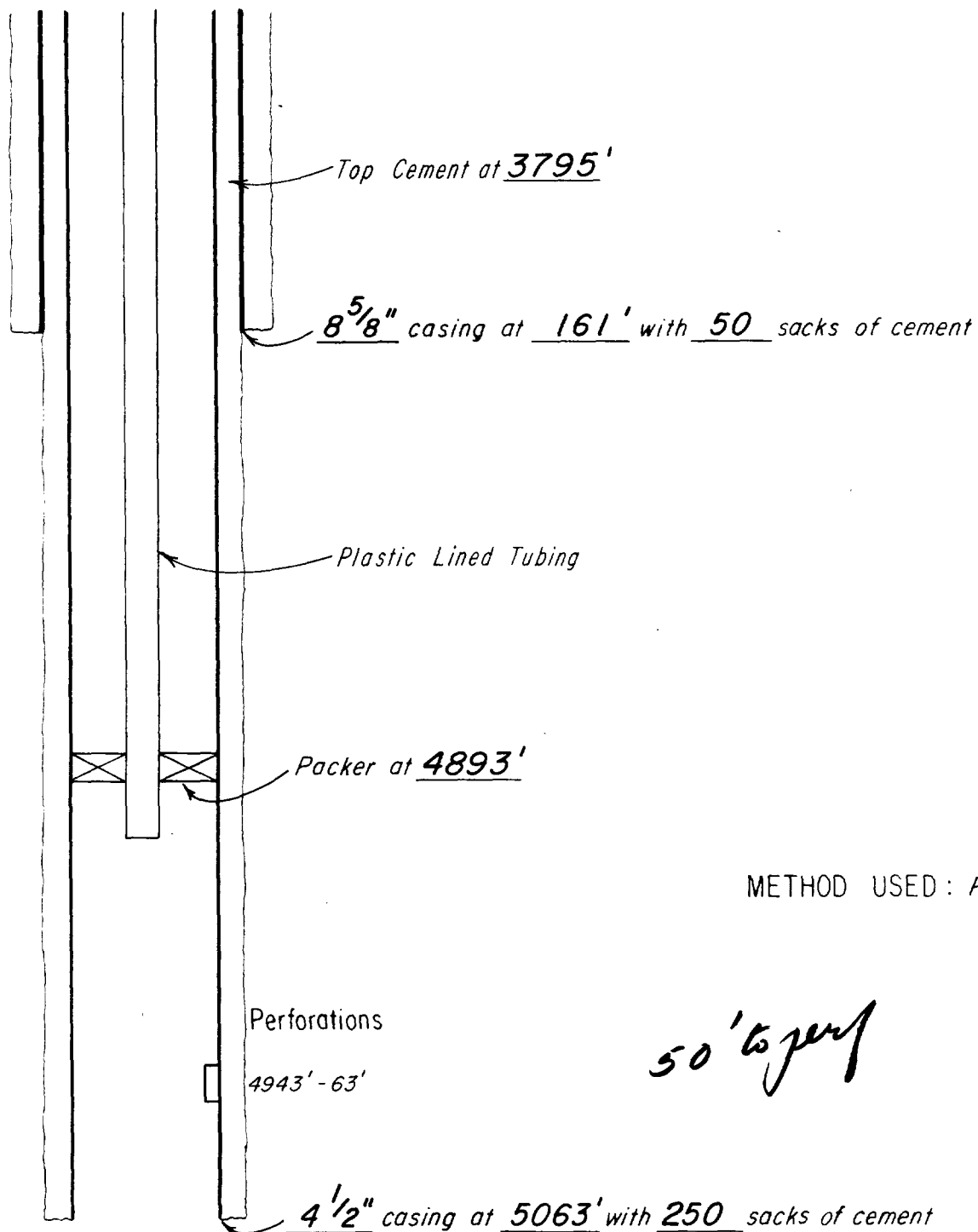
PROPOSED N. E. PEARL QUEEN UNIT

FIELD N. E. PEARL QUEEN			COUNTY LEA		STATE NEW MEXICO
Engineer R. C. W.	Date 9-10-69	Drwn. By Del	File PEARL QUEEN, N. E.		
BAILEY, SIPES & WILLIAMSON, INC. CONSULTING ENGINEERS					FIGURE NO. 4



# **DIAGRAMMATIC SKETCH OF PROPOSED INJECTION WELL** **GULF "BF" NO. 2**

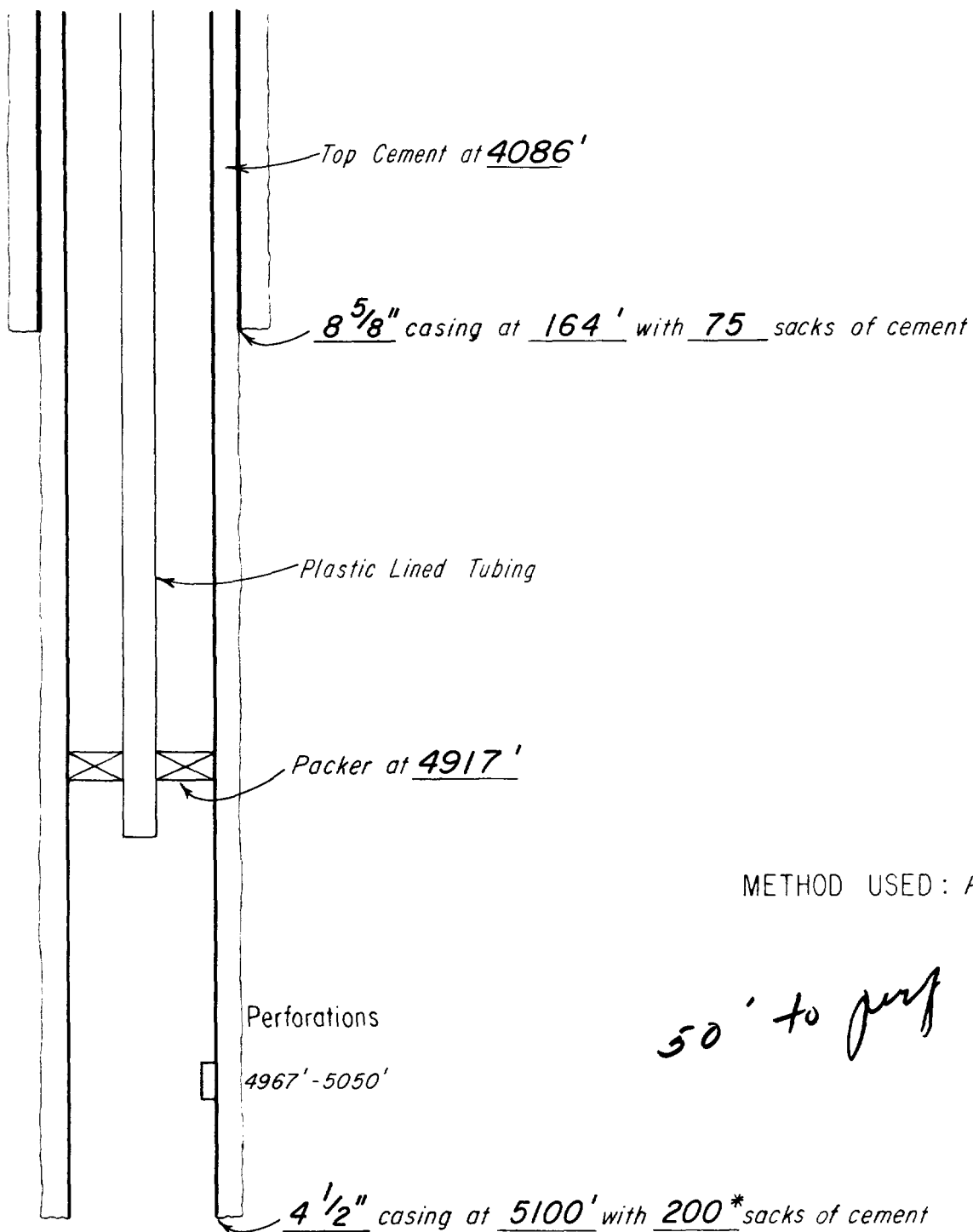
FIELD	N. E. PEARL QUEEN	COUNTY	LEA	STATE	NEW MEX.
Engineer	R. C. W.	Date	8 - 5 - 69	Drwn. By	Del
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.					FIGURE NO.
CONSULTING ENGINEERS					1100 V.B.J. TOWER MIDLAND, TEXAS



METHOD USED: *Pump & Plug*

# DIAGRAMMATIC SKETCH OF PROPOSED INJECTION WELL TEXACO HAMON NO. 1

FIELD	N. E. PEARL QUEEN	COUNTY	LEA	STATE	NEW MEX.
Engineer	R. C. W.	Date	8 - 5 - 69	Drwn. By	Del
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC. CONSULTING ENGINEERS					FIGURE NO.
1100 V.B.U. TOWER MIDLAND, TEXAS					



METHOD USED: Pump & Plug

50' to perf

\* Plus 45 gallons of Latex

# DIAGRAMMATIC SKETCH OF PROPOSED INJECTION WELL TEXACO HAMON NO 2

FIELD N. E. PEARL QUEEN

COUNTY LEA

STATE NEW MEX.

Engineer R. C. W.

Date 8 - 5 - 69

Drwn. By Del

File PEARL QUEEN, N. E.

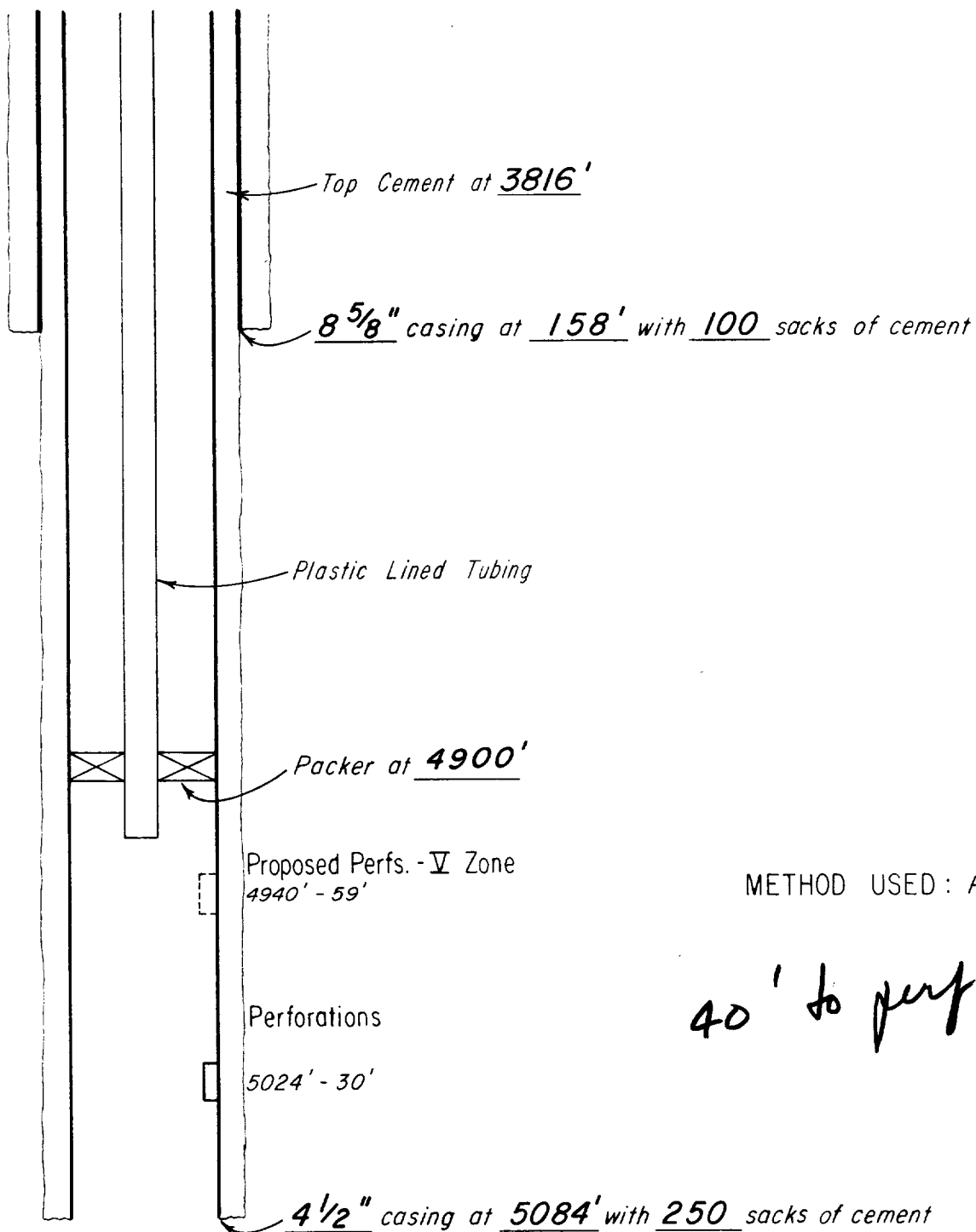
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.

CONSULTING ENGINEERS

100 VB W TOWER, MIDLAND, TEXAS

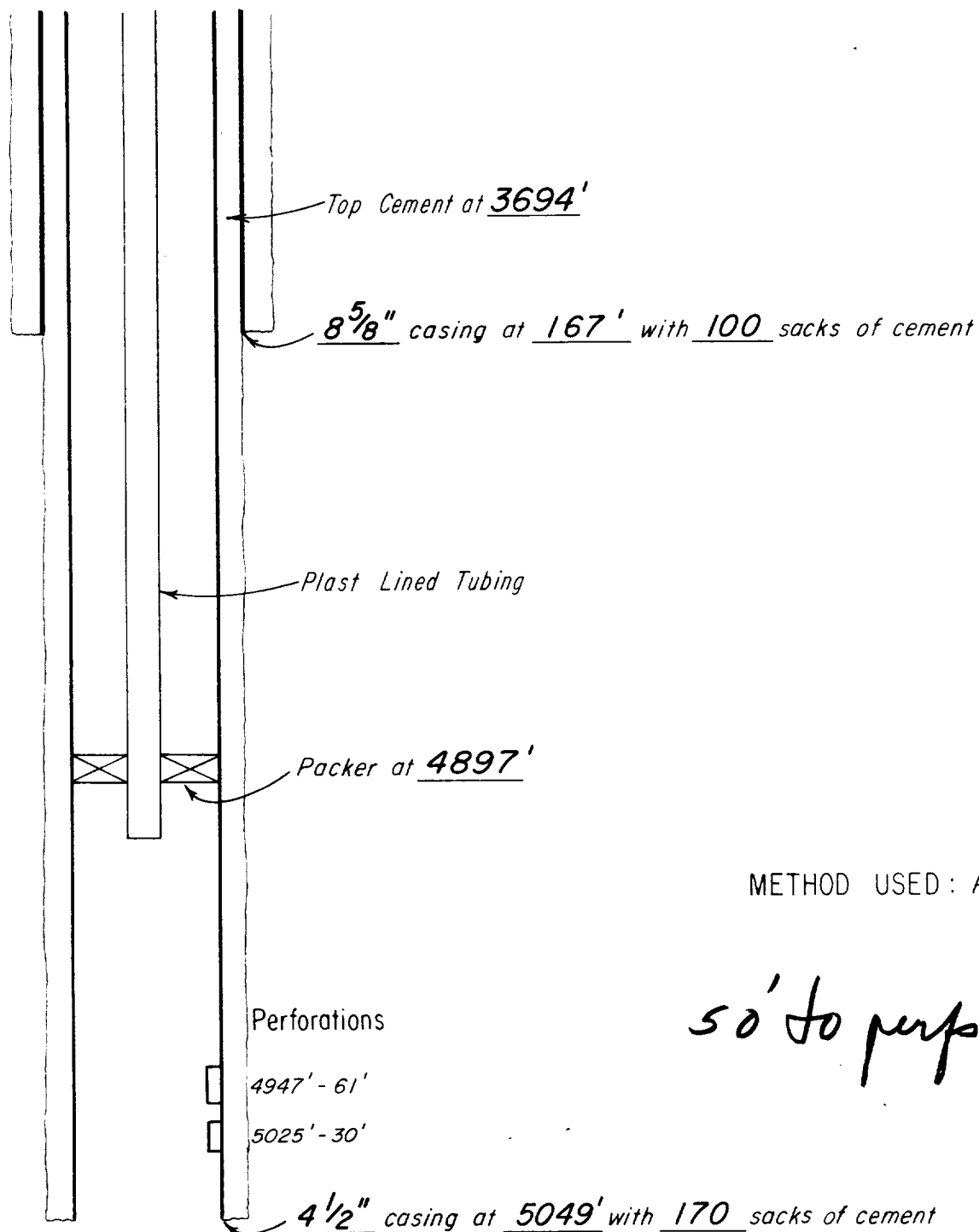
FIGURE NO.





# DIAGRAMMATIC SKETCH OF PROPOSED INJECTION WELL TEXACO HAMON "A" NO. 1

FIELD			N. E. PEARL QUEEN			COUNTY			LEA			STATE			NEW MEX.				
Engineer		R. C. W.				Date		8 - 5 - 69		Drwn. By		Del		File		PEARL QUEEN, N. E.			
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.												FIGURE NO.							
CONSULTING ENGINEERS																			
HOC V&J TOWER MIDLAND, TEXAS																			

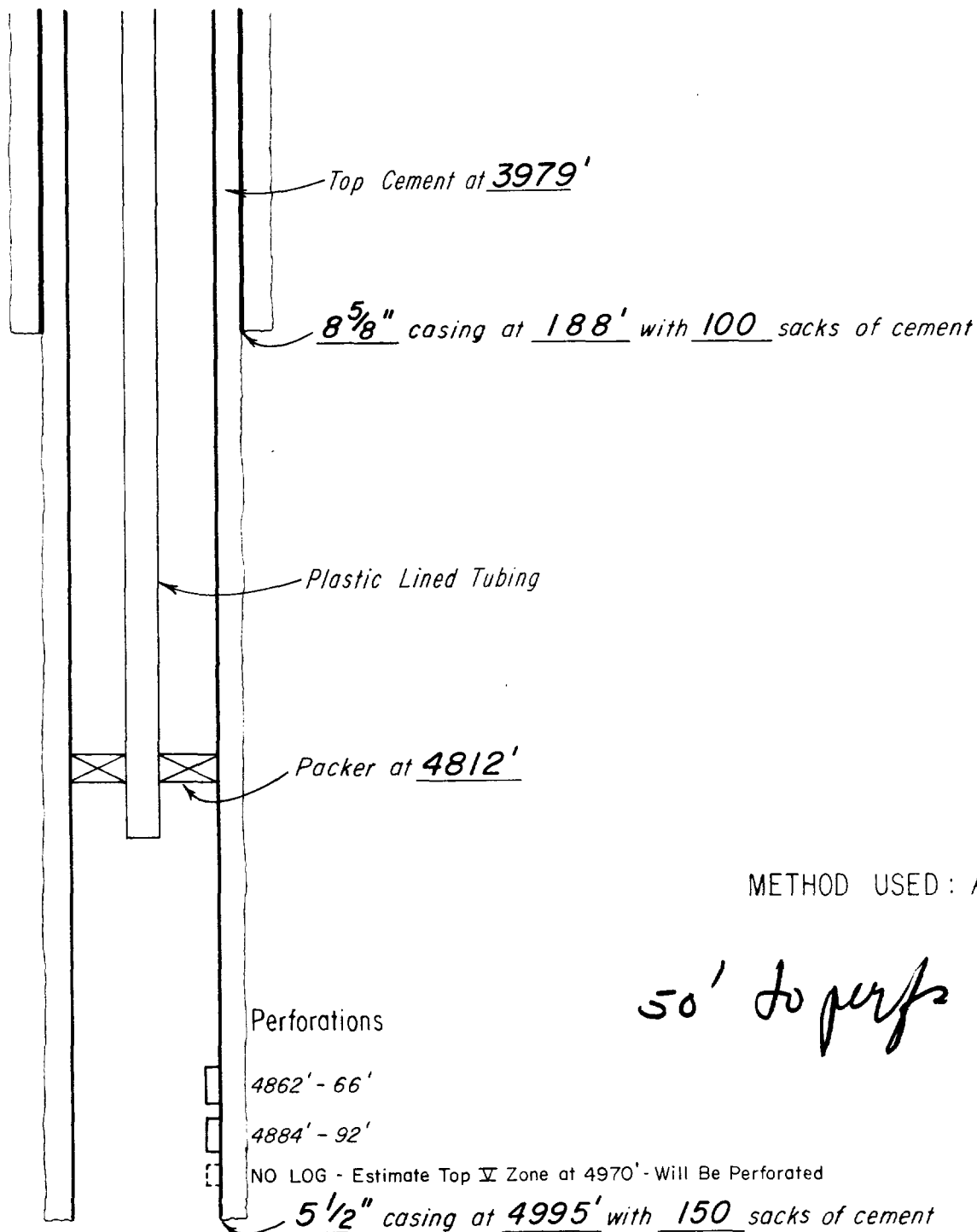


METHOD USED : Pump & Plug

50' to perf

# DIAGRAMMATIC SKETCH OF PROPOSED INJECTION WELL TEXACO MORAN NO. 1

FIELD N. E. PEARL QUEEN			COUNTY LEA		STATE NEW MEX.
Engineer R. C. W.	Date 8 - 5 - 69	Drwn. By Del		File PEARL QUEEN, N.E.	
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.				FIGURE NO.	
CONSULTING ENGINEERS		1100 V & J TOWER MIDLAND, TEXAS			



METHOD USED : Pump & Plug

50' to perf

# DIAGRAMMATIC SKETCH OF PROPOSED INJECTION WELL UNION STATE NO. 2

FIELD	N. E. PEARL QUEEN	COUNTY	LEA	STATE	NEW MEX.
Engineer	R. C. W.	Date	8 - 5 - 69	Drwn. By	Del
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.				File	PEARL QUEEN, N.E.
CONSULTING ENGINEERS				FIGURE NO.	

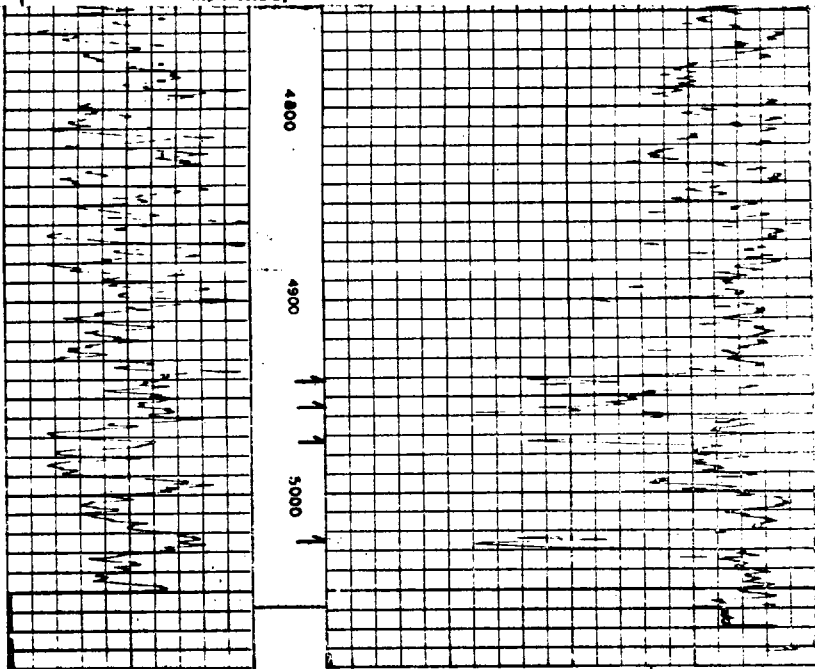
100 - B. J. TOWER, MIDLAND, TEXAS

BSW412

LEA, N W

PAN GEO ATLAS CORP.					
P G A C		Acoustic-Gamma Log			
WELL NO.		COMPANY GULF OIL CORPORATION			
		WELL LEA STATE "BF" # 2			
		FIELD PEARL QUEEN			
		COUNTY LEA		STATE NEW MEXICO	
		LOCATION: 1980' FSL & 2180' FEL.			
		Other Services			
		SEC 23 TWP. 19-S RGE 35-E			
Permanent Datum		GROUND LEVEL		Elev. 3747	
Log Measured from		K.B.		11' ft. Above Permanent Datum	
Drilling Measured from		K.B.		GA 3747	
Date		11/19/52			
Run No.		ONE			
Total Depth Driller		5100			
Total Depth Logger		5065			
Casing Driller		170			
Casing Logger					
Footage Logged		4959			
Mud Type		SALT GEL.			
Density Visc.		10.2 36			
Max Temp. (°F)		98°F			
Direction		UP			
Rec. To Rec. Spacing		1'			
Trans. To Rec. Spcg.		4'			
Logging Instrument		TLA4-53-22-5351			
Equip. No.		EL-25			
Recorded By		CAREY			
Witnessed By		MR. MUSSETT			
BORE HOLE RECORD					
Bit Size	From	To	Csg. Size	Csg. Wt.	From
12 1/4	SURF.	170	8 5/8		SURF.
7 7/8	170	5100			170
CASING RECORD					

Reproduced By



X Sand  
VII Sand

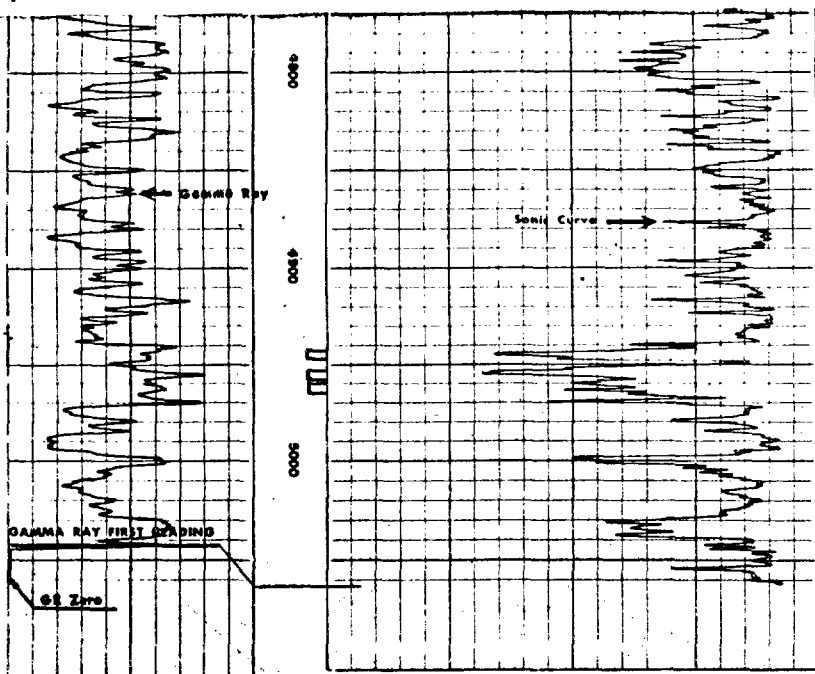
**SCHLUMBERGER**

**Sonic Log**  
ANALOG RECORDING SYSTEM

COUNTY FIELD or LOCATION WELL STATE COMPANY	COMPANY <u>EARLE J. COLTON</u>	Other Surveys
	WELL <u>ELXALO-HAMON</u>	Location of Well <u>130' FROM N.E.</u> <u>2310' FROM E.W.</u>
	STATE <u>LEA</u>	
	FIELD <u>PEARL QUEEN</u>	
	LOCATION SEC <u>23 19S-35E</u>	
	COUNTY <u>LEA</u>	Elevation: K.B. <u>3293</u> D.F. <u></u> or G.L. <u>3280</u>
	STATE <u>NEW MEXICO</u>	

Log Depths Measured From KB 13 Ft above RL

RUN No.	<u>ONE</u>		
Date	<u>5-17-62</u>		
First Reading	<u>5063</u>		
Last Reading	<u>0</u>		
Feet Measured	<u>5063</u>		
Csg. Schlum.			
Csg. Driller	<u>165</u>		
Depth Reached	<u>5067</u>		
Bottom Driller	<u>5065</u>		
Mud Nat.	<u>SALT</u>		
Dens.	Visc.	<u>10</u>	<u>28</u>
Mud Resist.	<u>055</u>	<u>72</u>	<u>F</u>
Res. BHT	<u>042</u>	<u>95</u>	<u>F</u>
pH	<u></u>	<u></u>	<u>F</u>
Wtr. Loss	<u>CC 30 min</u>	<u>CC 30 min</u>	<u>CC 30 min</u>
Rml	<u>036</u>	<u>95</u>	<u>F</u>
Bit Size	<u>7 7/8"</u>		
Spacing:			
1 3 R. 1 R.	<u>1000</u>	<u>To 5063</u>	<u>To</u>
1 3 R. 3 R.	<u>400</u>	<u>To 1000</u>	<u>To</u>
Opr. Rig Time	<u>3 HOURS</u>		
Truck No.	<u>2526-HORBS</u>		
Recorded By	<u>WILSON</u>		
Witness	<u>JOHN</u>		



LEA N.M.

2

**SCHLUMBERGER**

WIRELINE LOGGING

COUNTY LEA FIELD & LOCATION PEARL QUEEN WELL TEXACO HAMMON # 2 COMPANY EARL G. COLTON	COMPANY	EARL G. COLTON	Other Surveys
	WELL	TEXACO HAMMON # 2	Location of Well
	FIELD	PEARL QUEEN	1980' FROM N/L 2310' FROM E/L
	LOCATION	SEC. 23-19S-15E	
	COUNTY	LEA	Elevation: K.B.: 3787 D.F.: or G.L.: 3774
STATE	NEW MEXICO		

Log Depths Measured From		KB	13 Ft. above GL
RUN No.	ONE		
Date	7-9-62		
First Reading	5097		
Last Reading	0		
Feet Measured	5097		
Csg. Schlum.			
Csg. Driller	179		
Depth Reached	5104		
Bottom Driller	5103		
Mud Nat.	SALT-GEI-OIL		
Dens. Vic.	9.2	36	
Mud Resist.	0.45	81	°F
" Res. BHT			°F
" pH			°F
" Wtr. Loss	20	CC 30 min	°F
" Rmf			°F
Bit Size	7 7/8"		
Spacing			
T. R. L. Re	CSG.	To TD	To
T. R. L. Re		To	To
Op. Rpt. Time	3 HOURS		
Truck No.	3701-HOBBS		
Recorded By	OWEN		
Witness	THUR		

LEA NEW MEXICO

Reproduced By  
West Texas Electrical Log Service

Dallas 2, Texas

★ **STRUCTURMAPS, LTD.**   
REFERENCE W4991G

12

COMPLETION RECORD

SPUD DATE

COMP DATE

DST RECORD

SPONTANEOUS-POTENTIAL  
millivolts

- +

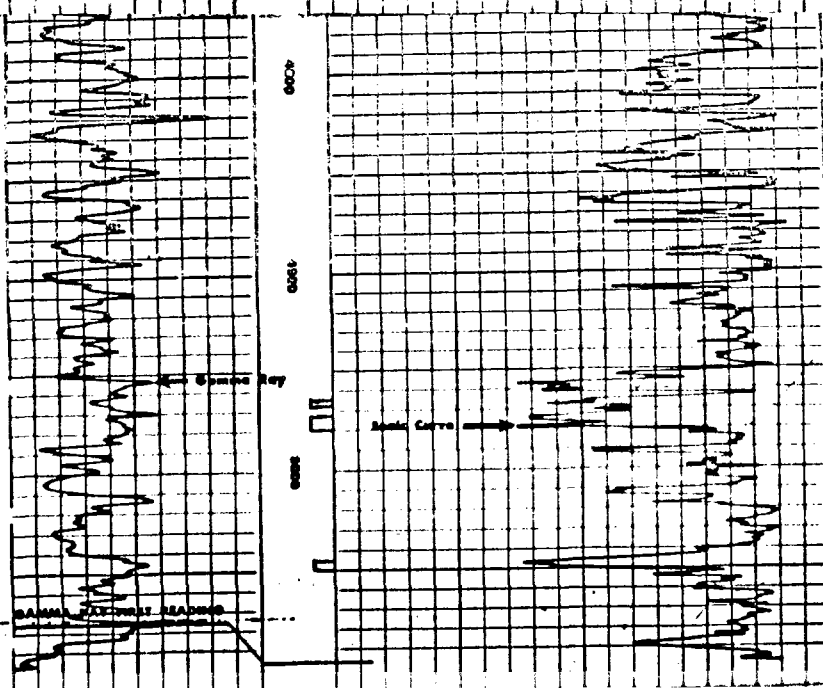
GAMMA RAY

G API UNITS 125  
125 250

INTERVAL TRANSIT TIME

micro-seconds per foot  
← Increase  
7.3R, 1.4

100 70 40



V Sand  
VII Sand

LEA, N.M.

<b>SCHLUMBERGER</b>		<b>SOUND LOG</b>	
COUNTY LEA FIELD OF LOCATION WELL STATE LEA	COMPANY EARL C. HANSON		Other Surveys
	WELL SEXALD-HANSON		Location of Well
	STATE LEA		1670' FROM N/1
	FIELD PEASE CULLIN		660' FROM W/1
	LOCATION SEC. 24 19S-35E		
COUNTY LEA		Elevation: K.B.: 3750	
STATE NEW MEXICO		O.F.: 2750	
		or G.L.: 2728	
Log Depths Measured From KB 11 Ft. above CL			
RUN No.	ONE		
Date	4-11-62		
First Reading	5083		
Last Reading	0		
Feet Measured	5083		
Csg. Schlum.			
Csg. Driller	8 5/8" x 160'		
Depth Reached	5090		
Bottom Driller	5085		
Mud Mat.	SALT		
Dens. Visc.	10.7 38		
Mud Resist.			
Res. BHT			
pH	6		
Wtr. Loss	4 CC 30 min		
Rmf			
Bit Size	7 7/8"		
Spacing:			
T.R. R.	0 To 1155	To	To
T.R. R.	1155 To 5083	To	To
Op. Rig Time	4 HOURS		
Truck No.	2526 HOBBS		
Recorded By	WILSON		
Witness	JOHN		

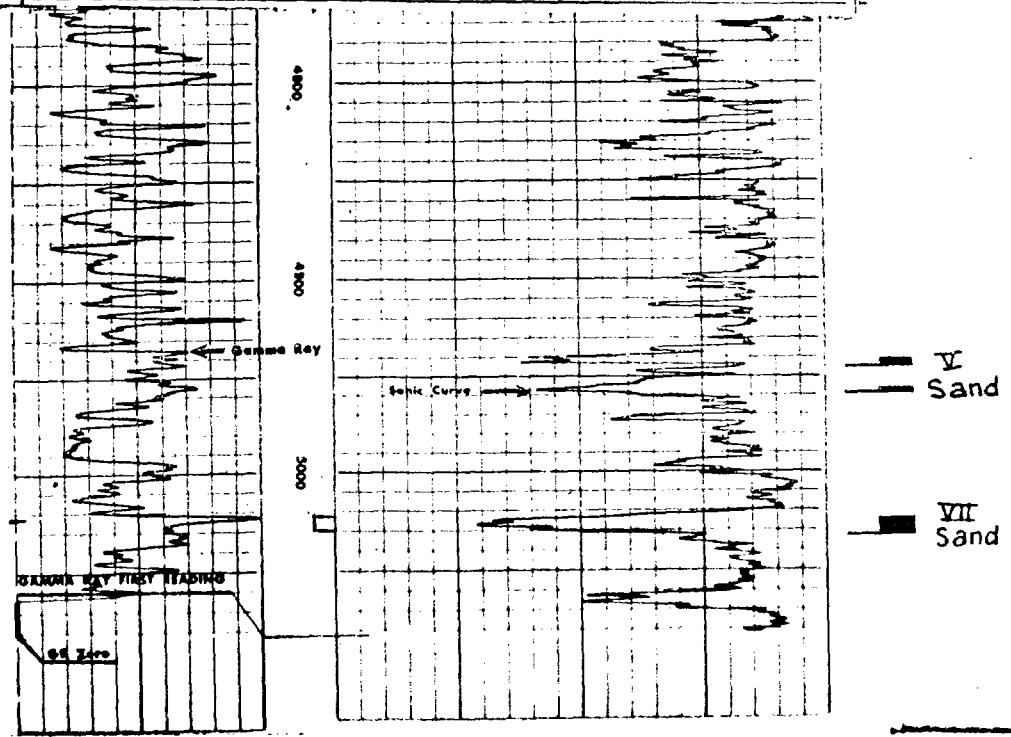
Reproduced By  
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Dallas 2, Texas  
**STRUCTURMAPS, LTD.**  
**REFERENCE W3079H** **ELSI**

12 COMPLETION RECORD

SPUD DATE \_\_\_\_\_

COMP DATE \_\_\_\_\_

DST RECORD \_\_\_\_\_



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**SCHLUMBERGER**

**SUN 10 1963**

COUNTY <u>LEA</u> FIELD or LOCATION <u>PEARL QUEEN</u> WELL <u>TEXACO RUSHING</u> COMPANY <u>EARL J. COLTON</u>	COMPANY <u>EARL G. COLTON</u> WELL <u>PEARL QUEEN</u> FIELD <u>PEARL QUEEN</u> LOCATION SEC. <u>22 19S-35E</u> COUNTY <u>LEA</u> STATE <u>NEW MEXICO</u>	Other Surveys NONE Location of Well 660' FROM NGE/L Elevation: K.B., <u>3291</u> D.P., <u>3290</u> or G.L., <u>3278</u>
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Log Depths Measured From	KB	13 Ft. above GL
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RUN No.	ONE		
Date	10-26-61		
First Reading	5050		
Last Reading	0		
Feet Measured	5050		
Csg. Schlum.			
Csg. Driller	180		
Depth Reached	5054		
Bottom Driller	5050		
Mud Nat.	SALT		
Dens. / Visc.	10.2	4.1	
Mud Resist.	.06	.75	"F"
Res. BHT		"F"	"F"
pH	4.5	"F"	"F"
Wtr. Loss	4	CC 30 min	CC 30 min
Rmf		"F"	"F"
Bit Size	5"		
Spacing:			
T.R. 2 R.	180	To 4400	To
T.R. 1 R.	4400	To 5050	To
Opr. Rig Time	3 HOURS		
Truck No.	2526-HOBBS		
Recorded By	WILSON		
Witness	JOHN		

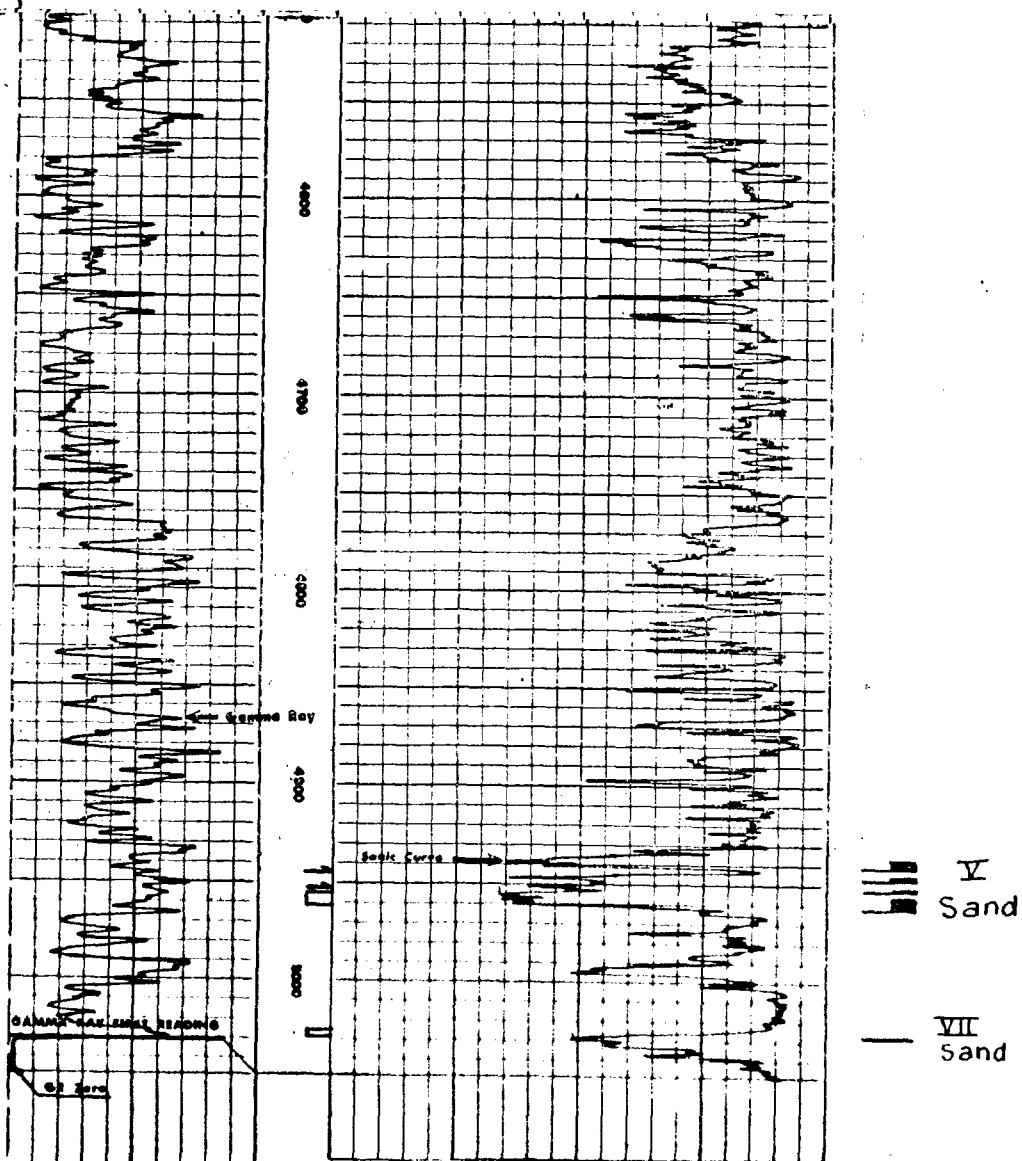
LEA New Mexico

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West Texas Electrical Log Service

Dallas 2, Texas  
**\* STRUCTURMAPS, LTD. \***  
 REFERENCE W1655L **ELSI**

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COMPLETION RECORD







BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4142  
Order No. R-3772

APPLICATION OF TAMARACK PETROLEUM  
COMPANY, INC., FOR SALT WATER  
DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 21, 1969,  
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 28th day of May, 1969, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

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

(2) That the applicant, Tamarack Petroleum Company, Inc.,  
is the owner and operator of the Cabot 15 State Well No. 2,  
located in Unit P of Section 15, Township 19 South, Range 35  
East, NMPM, Pearl-Queen Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to  
dispose of produced salt water into the Queen formation, with  
injection into the perforated interval from approximately  
4946 feet to 4963 feet.

(4) That the injection should be accomplished through  
2 3/8-inch plastic-lined tubing installed in a packer set at  
approximately 4900 feet; that the casing-tubing annulus should  
be filled with an inert fluid; and that a pressure gauge should

-2-

CASE No. 4142

Order No. R-3772

be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

(5) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Tamarack Petroleum Company, Inc., is hereby authorized to utilize its Cabot 15 State Well No. 2, located in Unit P of Section 15, Township 19 South, Range 35 East, NMPM, Pearl-Queen Pool, Lea County, New Mexico, to dispose of produced salt water into the Queen formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 4900 feet, with injection into the perforated interval from approximately 4946 feet to 4963 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

(2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

ALEX J. ARMIJO, Member

S E A L

esr/

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

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4085  
Order No. R-3718

APPLICATION OF TAMARACK PETROLEUM  
CORPORATION, INC., FOR SALT WATER  
DISPOSAL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 26, 1969,  
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 1st day of April, 1969, the Commission, a  
quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, and being fully advised  
in the premises,

FINDS:

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

(2) That the applicant, Tamarack Petroleum Corporation, Inc.,  
is the owner and operator of the Cabot 23 State Well No. 2, located  
in Unit C of Section 23, Township 19 South, Range 35 East, NMPM,  
Pearl-Queen Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to  
dispose of produced salt water into the Queen formation, with  
injection into the perforated interval from approximately  
4948 feet to 5043 feet.

(4) That the injection should be accomplished through  
2 3/8-inch plastic-lined tubing installed in a packer set at  
approximately 4900 feet; that the casing-tubing annulus should  
be filled with an inert fluid; and that a pressure gauge should

be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

(5) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Tamarack Petroleum Corporation, Inc., is hereby authorized to utilize its Cabot 23 State Well No. 2, located in Unit C of Section 23, Township 19 South, Range 35 East, NMPM, Pearl-Queen Pool, Lea County, New Mexico, to dispose of produced salt water into the Queen formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 4900 feet, with injection into the perforated interval from approximately 4948 feet to 5043 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

(2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

ALEX J. ARMIJO, Member

S E A L

esr/

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