

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. 4216
Order No. R-3836

APPLICATION OF TAMARACK PETROLEUM
COMPANY, INC., FOR APPROVAL OF THE
NORTHEAST PEARL-QUEEN UNIT AGREE-
MENT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 10, 1969, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 12th day of September, 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., seeks approval of the Northeast Pearl-Queen Unit Agreement covering 920 acres, more or less, of State and Fee lands described as follows:

LEA COUNTY, NEW MEXICO
TOWNSHIP 19 SOUTH, RANGE 35 EAST, NMPM
Section 15: E/2 SW/4, W/2 SE/4, and
SE/4 SE/4
Section 22: E/2 NE/4
Section 23: N/2 and N/2 S/2
Section 24: NW/4 SW/4, W/2 NW/4, and
NE/4 NW/4

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

CASE No. 4216
Order No. R-3836

IT IS THEREFORE ORDERED:

(1) That the Northeast Pearl-Queen Unit Agreement is hereby approved.

(2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

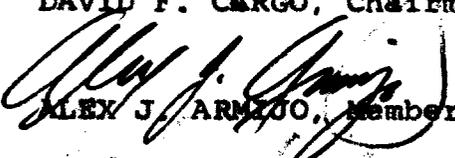
(4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.

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

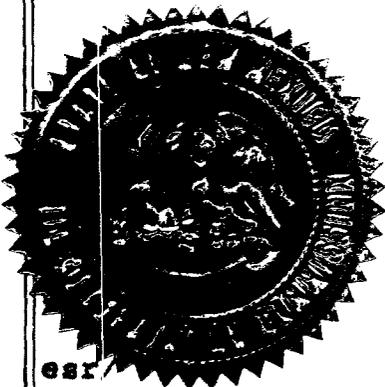
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman

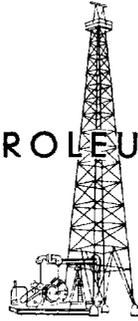

ALEX J. ARMILLO, Member

A. L. PORTER, Jr., Secretary-Director



1969 AUG 20 PM 4 2

TAMARACK PETROLEUM COMPANY, INC.



910 BANK OF THE SOUTHWEST BLDG.
MIDLAND, TEXAS 79701

August 19, 1969

TELEPHONE: MUTUAL 3-5474

Case 4216

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico 87501

Attention: Mr. D. S. Nutter

Gentlemen:

Please consider this our request for hearing to approve, both Unitization and Secondary Recovery by water flooding the Unit Area, our Northeast Pearl Queen Unit, Pearl Queen Field, Lea County. It is requested that these hearings be placed on your docket for September 10, 1969.

The following described land constitutes the Unit Area:

TOWNSHIP 19 SOUTH, RANGE 35 EAST, N. M. P. M.

Section 15	E/2 of SW/4, W/2 of SE/4, SE/4 of SE/4
Section 22	E/2 of NE/4
Section 23	N/2, N/2 of S/2
Section 24	N/2 of NW/4, SW/4 of NW/4, NW/4 of SW/4

The Unit Area contains 920 acres, more or less, of which 520 acres are State land and 400 acres are Patented land.

DOCKET MAILED

Date 8/28/69

New Mexico Oil Conservation Commission
August 19, 1969
Page - 2 -

As required by Rule 701-B of the Rules and Regulations of the New Mexico Oil Conservation Commission, the following material is submitted with the application:

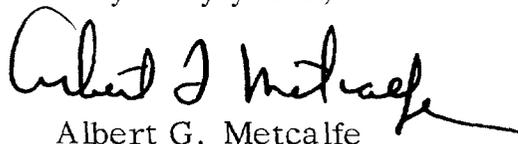
1. Plat showing the unit area and the location of the proposed injection wells.
2. Logs of proposed injection wells.
3. Diagrammatic sketch of proposed injection wells.

The "Unitized Formation" is the Queen Sand zone, more specifically defined as occurring between 4,517 feet and 5,078 feet on the Schlumberger Gamma Ray-Sonic log dated December 17, 1961 for the Tamarack - Texaco Moran No. 2 well.

It is anticipated that a total volume of 2,000 barrels per day will be injected in the Unit Area. This water will be supplied by the existing system furnishing water to the Shell Oil Company - East Pearl Queen Unit, the Gulf Oil Corporation - West Pearl Queen Unit and the Tamarack - South Pearl Queen Unit.

If any additional information is required in connection with this application, please advise.

Very truly yours,

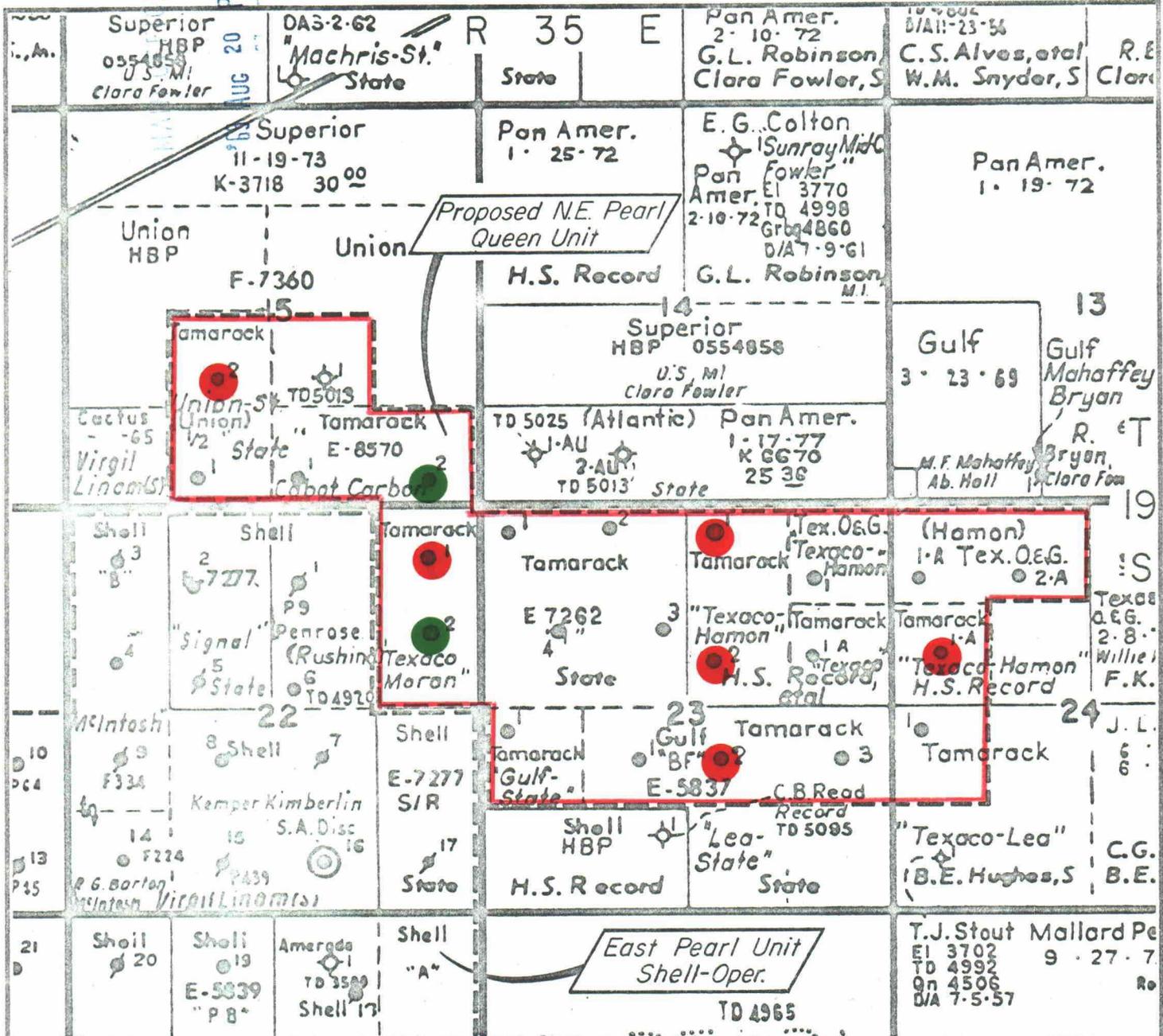

Albert G. Metcalfe

AGM:wat

cc: State Engineer Office
State of New Mexico
Santa Fe, New Mexico 87501

ENCLOSURES

E 000 PH 4 23



LEGEND

- Current Injection Well
- Proposed Injection Well



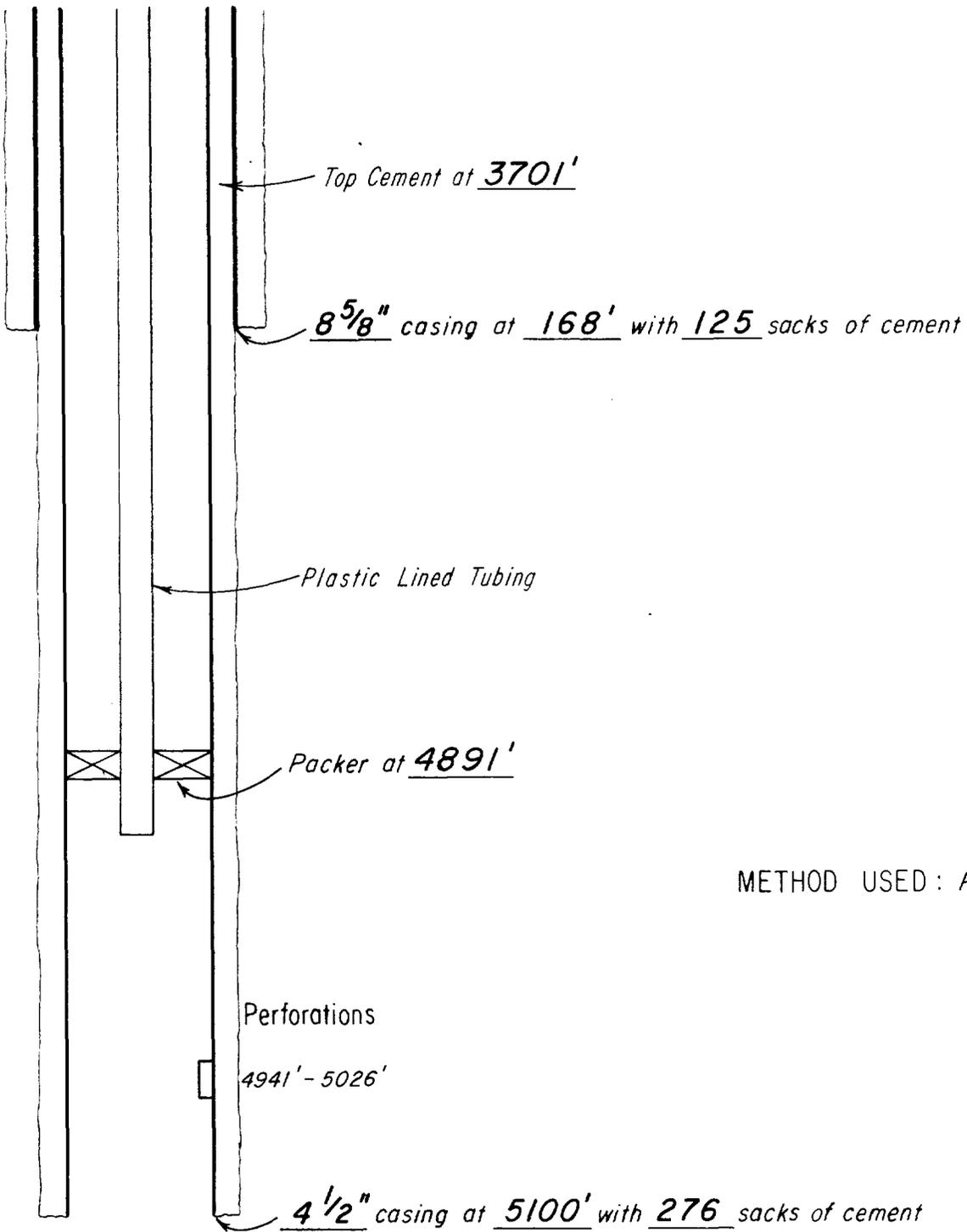
SCALE: 1" = 1,000'

PROPOSED N. E. PEARL QUEEN UNIT

FIELD	PEARL QUEEN	COUNTY	LEA	STATE	NEW MEX.
Engineer	R. C. W.	Date	8-1-69	Drwn. By	Del
Files				PEARL QUEEN	
CONSULTING ENGINEERS				BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.	
1100 V&J TOWER				MIDLAND, TEXAS	
FIGURE NO.				1	

Case 4216

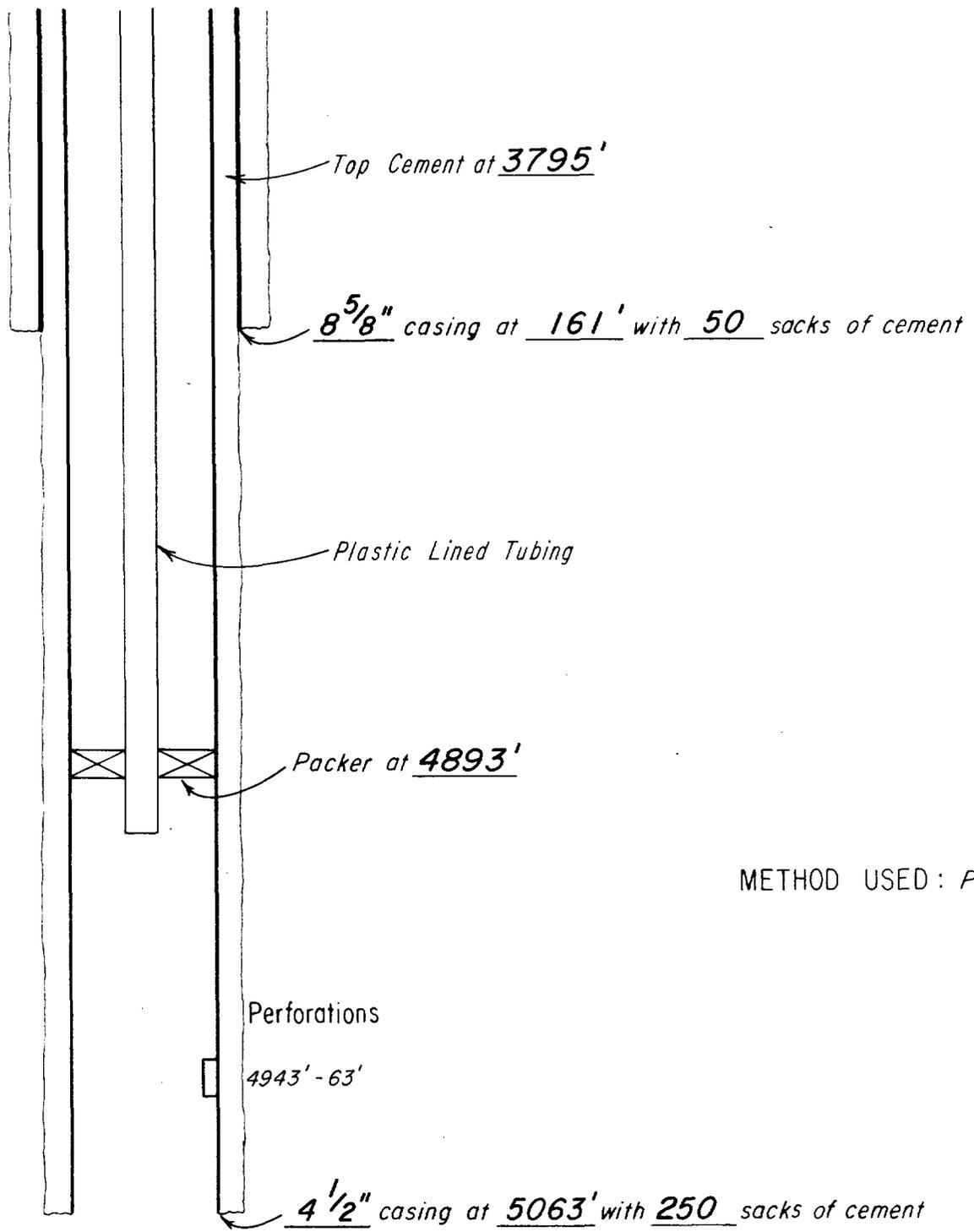
Case 4216



METHOD USED : Pump & Plug

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	DeI	
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.				FILE		PEARL QUEEN, N. E.
CONSULTING ENGINEERS				1100 V&J TOWER MIDLAND, TEXAS		FIGURE NO.

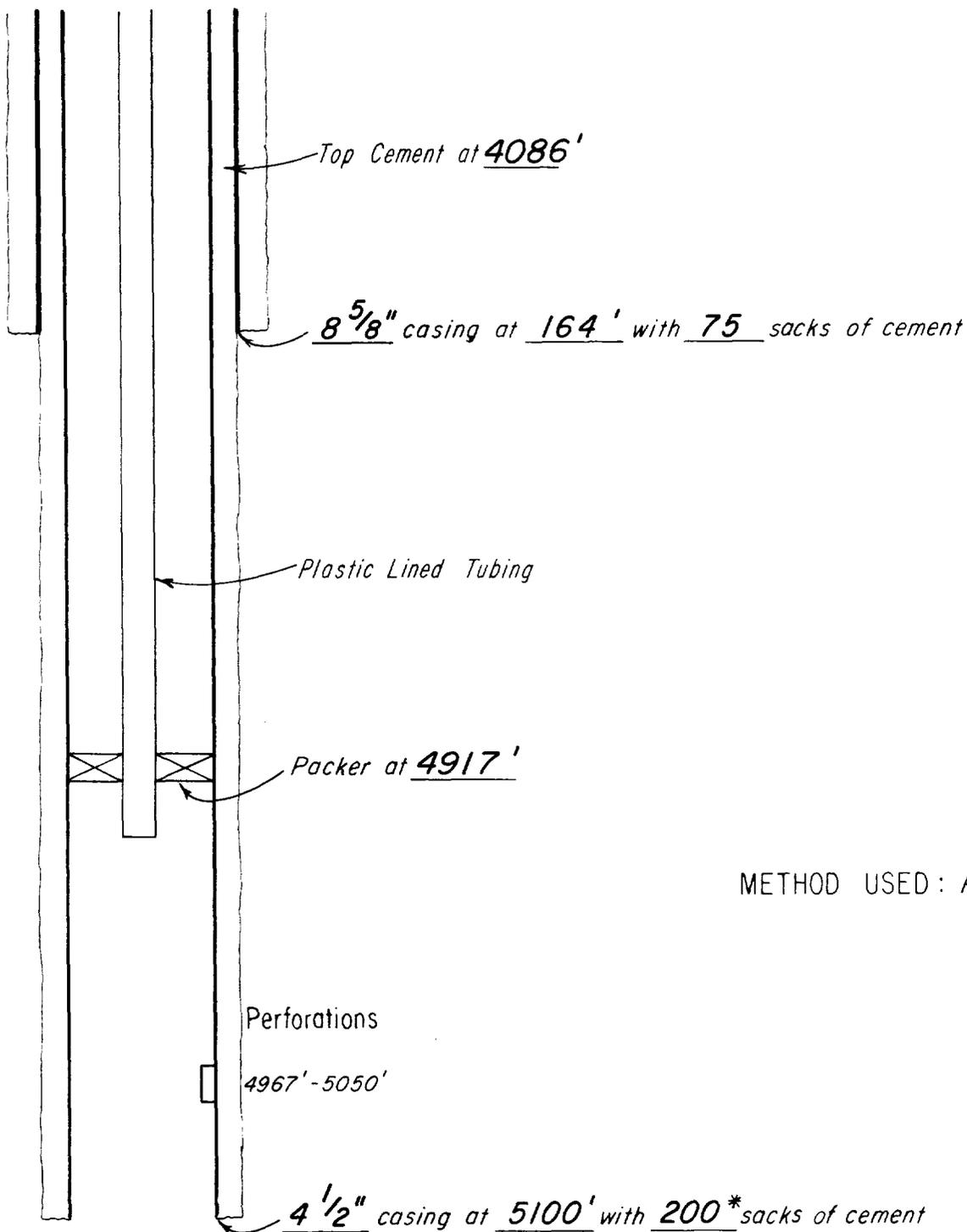


METHOD USED : Pump & Plug

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	DeI
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.				FIGURE NO.	
CONSULTING ENGINEERS				1100 V&J TOWER MIDLAND, TEXAS	

Case 4316



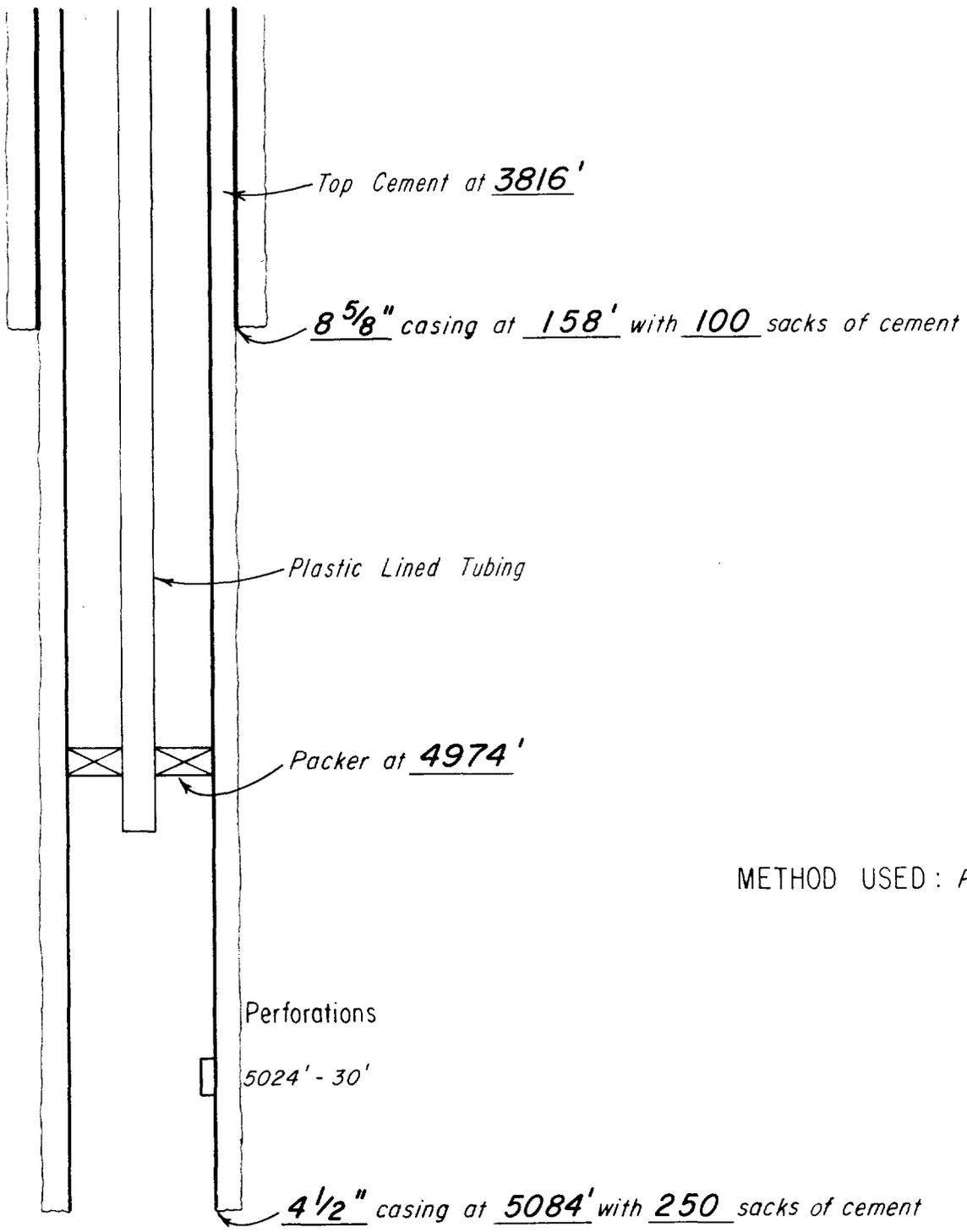
METHOD USED : Pump & Plug

* 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
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.				FIGURE NO.	
CONSULTING ENGINEERS				1100 V&J TOWER MIDLAND, TEXAS	

Handwritten signature or initials

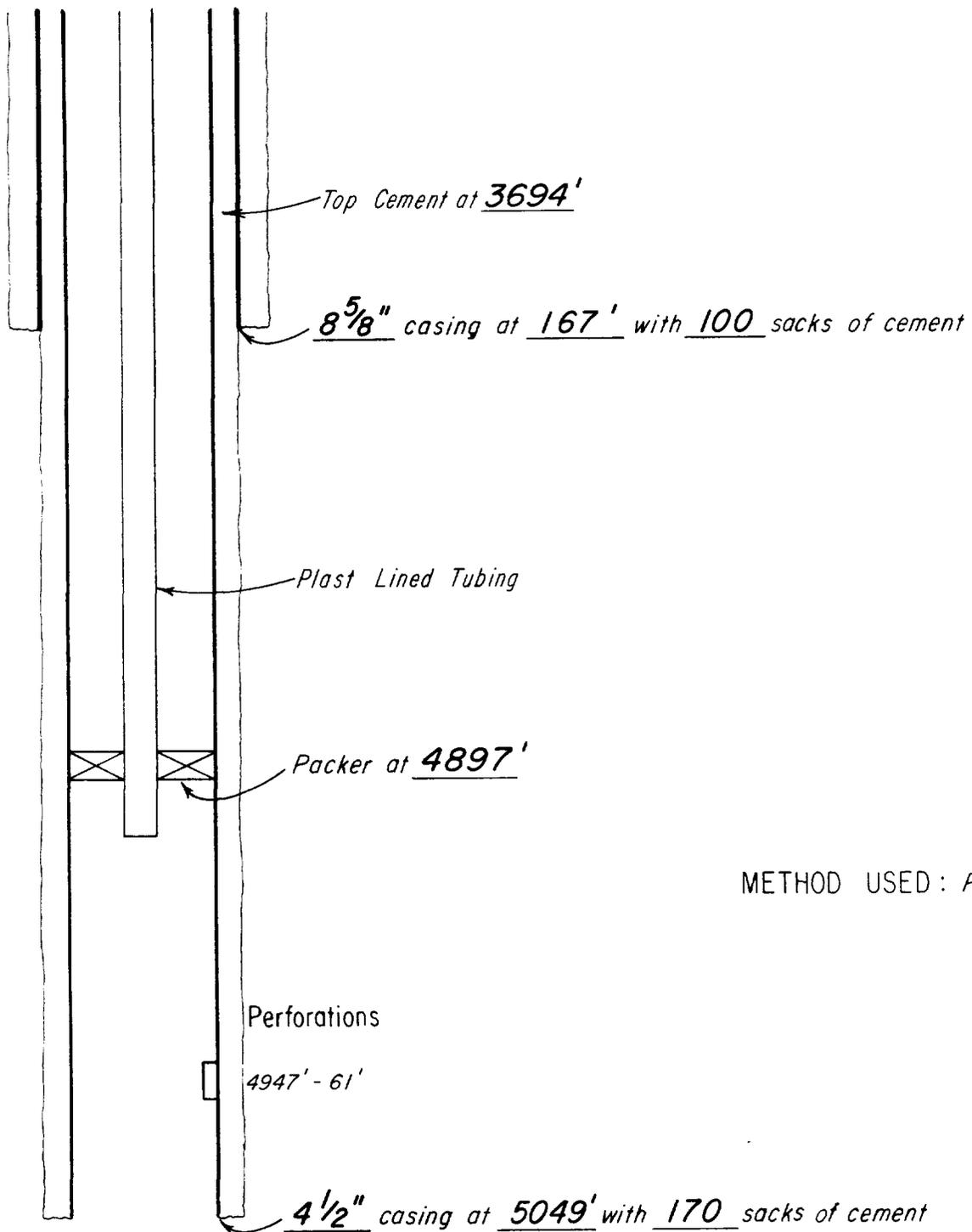


METHOD USED : Pump & Plug

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
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC. CONSULTING ENGINEERS				FIGURE NO.	

1100 V & J TOWER MIDLAND, TEXAS

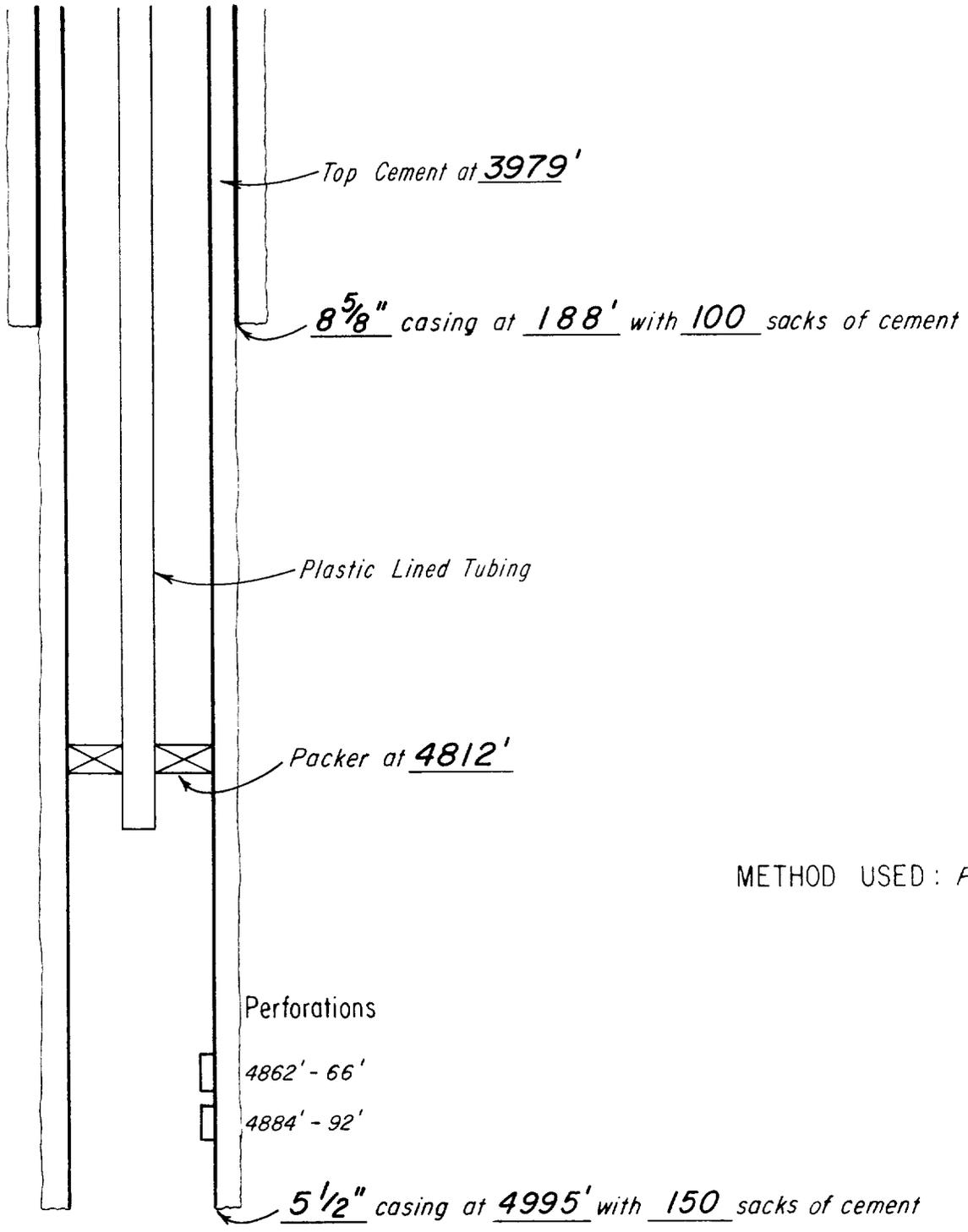


METHOD USED : Pump & Plug

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
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC.				FIGURE NO.	
CONSULTING ENGINEERS				1100 V&J TOWER MIDLAND, TEXAS	

Page 4216



METHOD USED : *Pump & Plug*

**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	File PEARL QUEEN, N. E.
BAILEY, SIPES, WILLIAMSON & RUNYAN, INC. CONSULTING ENGINEERS			FIGURE NO.

1100 V&J TOWER MIDLAND, TEXAS

Case #216

PAN GEO ATLAS CORP.



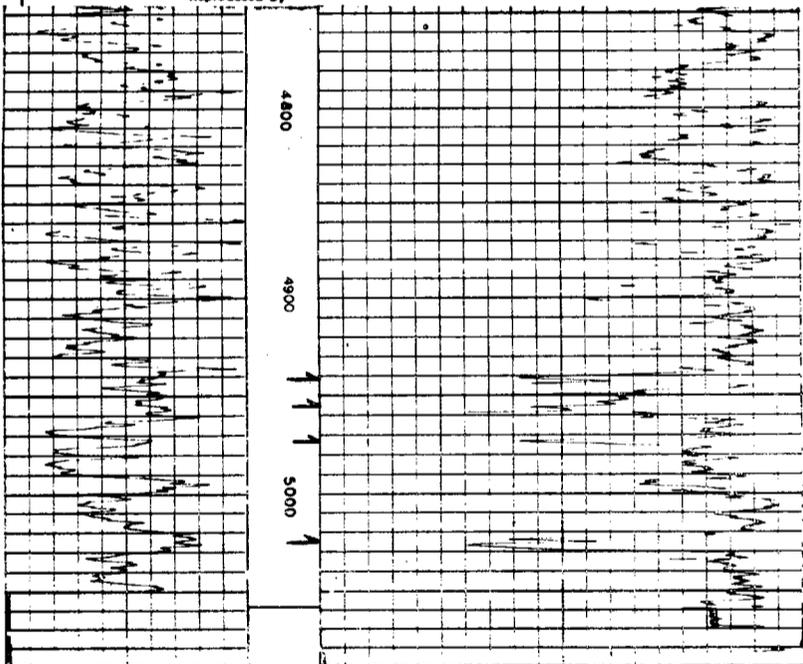
Acoustic-Gamma Log

LEA, N. M.

FILE NO.	COMPANY GULF OIL CORPORATION		
	WELL LEA STATE "RF" #		
	FIELD PEARL MIFAN		
	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	Elevations: KB 375.8
Log Measured from	K.B.	11' Ft. Above Permanent Datum	DF 375.7
Drilling Measured from	K.B.		GL 374.7
Date	11/19/62		
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	TLA4-53-22-63N1		
Equip. No.	EL-25		
Recorded By	CAREY		
Witnessed By	MR. MUSSETT		

BORE HOLE RECORD			CASING RECORD			
Bit Size	From	To	Csg. Size	Csg. Wt.	From	To
12 1/4	SURF.	170	8 5/8		SURF.	170
7 7/8	170	5100				

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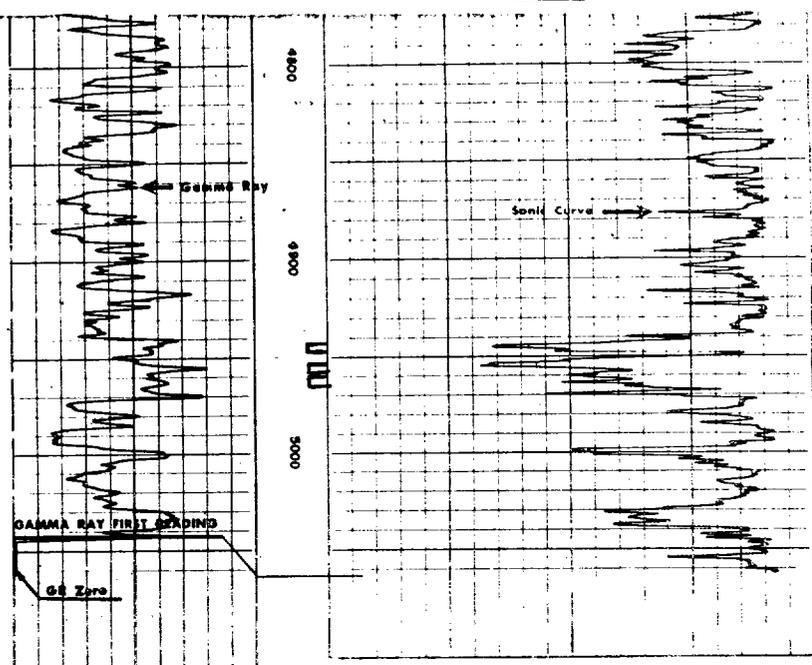
Case 4216

LEA, N.M.



COUNTY LEA FIELD or LOCATION PEARL QUEEN WELL TEXACO-HAMON STATE TEXAS COMPANY EARL G. COLTON	COMPANY EARL G. COLTON	Location of Well
	WELL TEXACO-HAMON	330' FROM N71
	STATE TX	2100' FROM E71
	FIELD PEARL QUEEN	
	LOCATION SEC 23 19s 25E	
COUNTY LEA	Elevation: K.B. 3793	
STATE NEW MEXICO	D.F.	
	or G.L. 3280	

Log Depths Measured From		KB	13 Ft. above GL
RUN No.	ONE		
Date	3-17-62		
First Reading	5063		
Last Reading	0		
Feet Measured	5063		
Csg. Schlum.			
Csg. Driller	165		
Depth Reached	5067		
Bottom Driller	5065		
Mud Nat.	SALL		
Dens.	Visc. 10	1.18	
Mud Resist.	.055	@ 72 °F	@ °F
Res. BHT	042	@ 95 °F	@ °F
pH		@ °F	@ °F
Wtr. Loss		CC 30 min	CC 30 min
Rmf	.036	@ 95 °F	@ °F
Bit Size	7 7/8"		
Spacing:			
T J R. 1 R.	3000	To 5063	To
T J R. 3 R.	400	To 3000	To
Opr. Rig Time	3 1/2	HOURS	
Truck No.	2526	HOBBS	
Recorded By	WILSON		
Witness	JOHN		



Case 4216

SCHLUMBERGER		SOUND LOG	
COUNTY LEA FIELD or LOCATION PEARL QUEEN WELL TEXACO HAMMON # 2 COMPANY EARL G. COLTON	COMPANY EARL G. COLTON	Other Surveys	
	WELL TEXACO HAMMON # 2	Location of Well 1980' FROM N/L 2310' FROM E/L	
	FIELD PEARL QUEEN		
	LOCATION SEC. 23-19S-35E		
	COUNTY LEA	Elevations 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 Mat.	SALT-GEL-OIL		
Dens. Visc.	9.2 36		
Mud Resist.	.045 81 *F	*F	*F
" Res. BHT	" *F	*F	*F
" PH	" *F	*F	*F
" Wtr. Loss	20 CC 30 min	CC 30 min	CC 30 min
" Rwt	" *F	*F	*F
Bit Size	7 7/8"		
Spacing:			
T. R. I. R.	CSG. To TD	To	To
T. R. R.	To	To	To
Oper. Rig Time	3 HOURS		
Truck No.	3701-HOBBS		
Recorded by	OWEN		
Witness	TRINK		

LEA NEW MEXICO

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Dallas 2, Texas

★ **STRUCTURMAPS, LTD.** 
REFERENCE W4991G

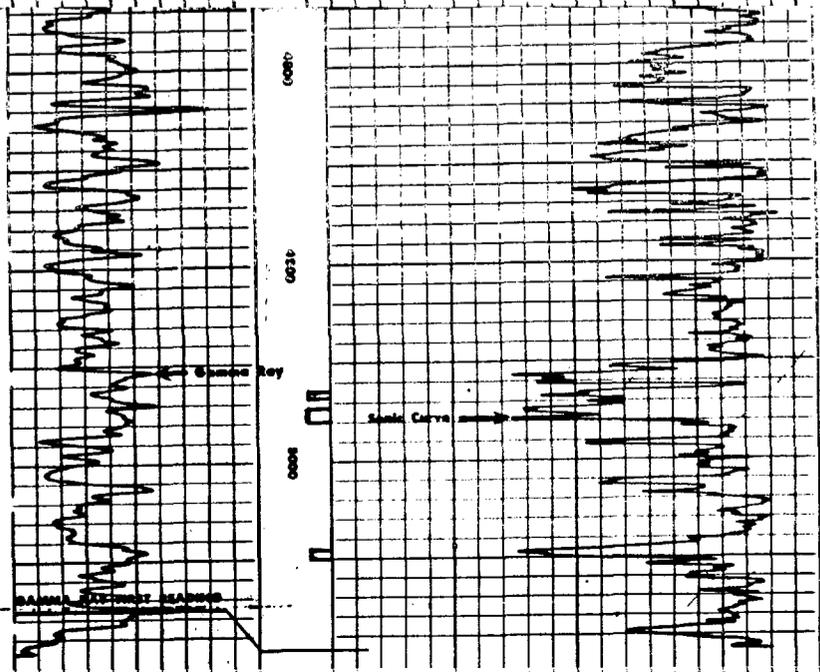
12 COMPLETION RECORD

SPUD DATE _____

COMP DATE _____

DST RECORD _____

SPONTANEOUS-POTENTIAL millivolts	DEPTHS	INTERVAL TRANSIT TIME microseconds per foot	
		100	70 40
GAMMA RAY			
0 API UNITS 25			
125 250			



Case 4216

LEA, N.M.

SCHLUMBERGER		SONIC LOG	
COUNTY LEA FIELD or LOCATION PEARL QUEEN WELL TEXACO-HAMON STATE COMPANY EARL COLTON	COMPANY EARL COLTON		Other Surveys
	WELL TEXACO-HAMON		Location of Well
	STATE A.I.		1650' FROM N/L
	FIELD PEARL QUEEN		660' FROM W/L
	LOCATION SEC 24 19S-35E		
COUNTY LEA		Elevation: K.B.: 3751	
STATE NEW MEXICO		D.F.: 3750	
		or G.L.: 2738	
Log Depths Measured From KB 1) Ft. above GL			
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.	@ °F @ °F @ °F @ °F		
Res. BHT	@ °F @ °F @ °F @ °F		
pH	6 @ °F @ °F @ °F @ °F		
Wtr. Loss	4 CC 30 min CC 30 min CC 30 min		
Rmf	@ °F @ °F @ °F @ °F		
Bit Size	7 7/8"		
Spacing:			
T R. 3R.	0 To 3155 To To		
T R. R.	3155 To 5083 To To		
Opr. Rig time	4 HOURS		
Truck No.	2526 HOBBS		
Recorded By	WILSON		
Witness	JOHN		

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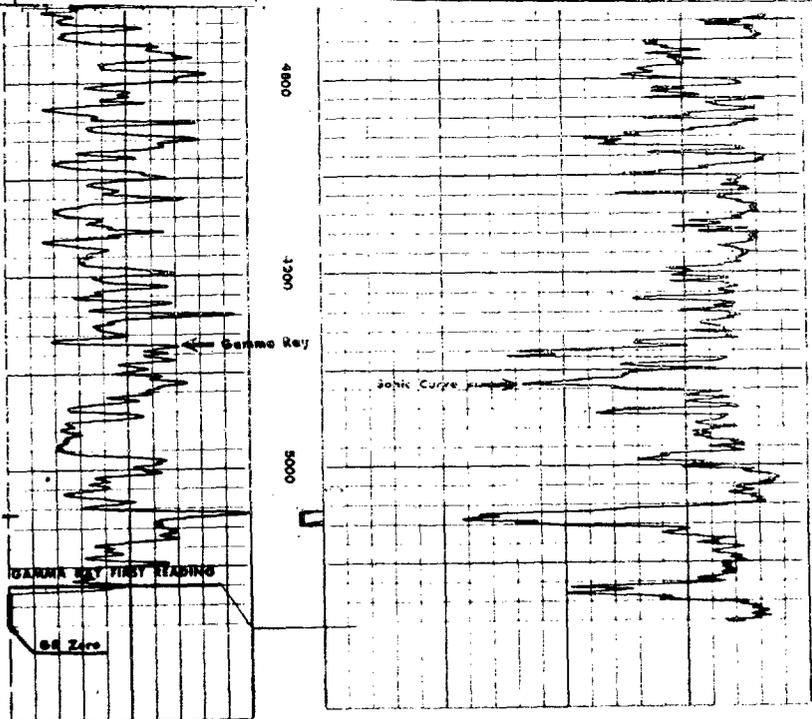
STRUCTURMAPS, LTD.



REFERENCE W3079H

12 COMPLETION RECORD

SPUD DATE
COMP DATE
DST RECORD





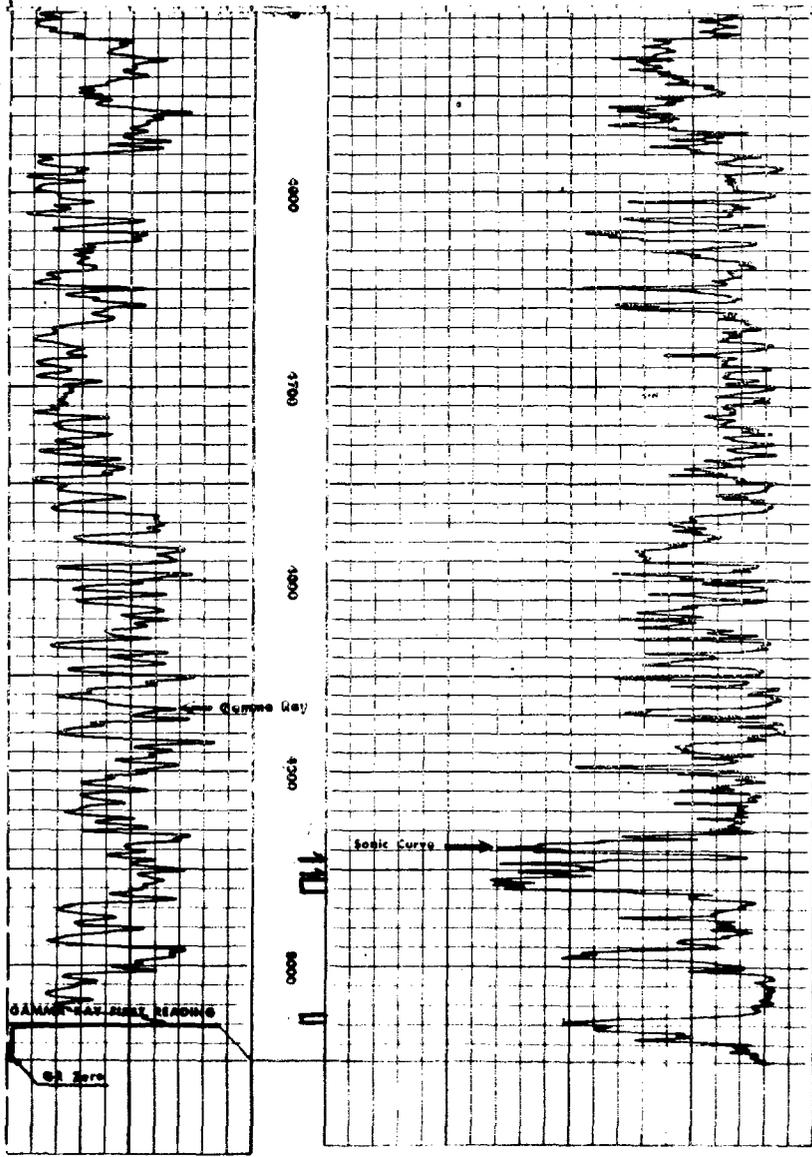
COUNTY LEA FIELD or LOCATION PEARL QUEEN WELL TEXACO RUSHING COMPANY EARL G. COLTON	COMPANY EARL G. COLTON	Other Surveys NONE
	WELL <i>Moran</i> TEXACO RUSHING	Location of Well 660' FROM N&E/L
	FIELD PEARL QUEEN	
	LOCATION SEC. 22 19S-35E	
	COUNTY LEA	Elevation: K.B., 3791 D.F., 3790 or G.L., 3778
STATE NEW MEXICO		

Log Depths Measured From		KB	13 Ft. above G.L.
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.	SAL		
Dens. Visc.	16.2 @ 41		
Mud Resist.	.06 @ 75 °F		
" Res. BHT	@ °F		
" pH	4.5 @ °F		
" Wtr. Loss	4 CC 30 min		
" Rmf	@ °F		
Bit Size	5"		
Spacing:			
T.R. I.R.	180 To 4400	To	To
T.R. I.R.	4400 To 5050	To	To
Oper. Rig Time	3 HOURS		
Truck No.	2526-HOBBS		
Recorded By	WILSON		
Witness	JOHN		

LEA NEW Mexico

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 REFERENCE W1655L

COMPLETION RECORD



SCHLUMBERGER WELL SURVEYING CORPORATION
DALLAS, TEXAS

Schlumberger

COUNTY OF LOCATION OF WELL COUNTY OF LOCATION OF WELL COMPANY OF LOCATION OF WELL	COMPANY EARL COLTON	Other Surveys
	WELL UNION STATE 2	Location of Well 1550 - 100M - 15 550 - 100M - 15
	FIELD PEARL QUEEN	
	LOCATION SEC. 15-19-35E	
	COUNTY LEA	Elevation: K.B.: 3779 D.F.: or G.L.: 3768
	STATE NEW MEXICO	

Log Depths Measured From KB 11 Ft. above GL

RUN No.	ONE		
Date	5-2-61		
First Reading	4966		
Last Reading	0		
Feet Measured	4466		
Csg. Schlum.	190		
Csg. Driller	190		
Depth Reached	4972		
Bottom Driller	4966		
Mud Mat.	SALT GEL STARCH		
Dens.	10.4	35	
Visc.	052	77	"F"
Mud Resist.	043	96	"F"
Res. BHT	5.5		"F"
pH	10.4	CC 30 min	"F"
Wir. Loss	046	76	"F"
Rmf			
Bit Size	2 7/8"		
Spacing:			
T. I. R. 2 R.	SURE	To 4400	To
T. I. R. 1 R.	4400	To FR	To
Opr. Rig Time	3 HOURS		
Truck No.	2527	10BBS	
Recorded By	SCHAEFFER		
Witness	COLTON		

LEA NEW MEXICO

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 Dallas 2, Texas

REFERENCE W12301.



COMPLETION RECORD

8

